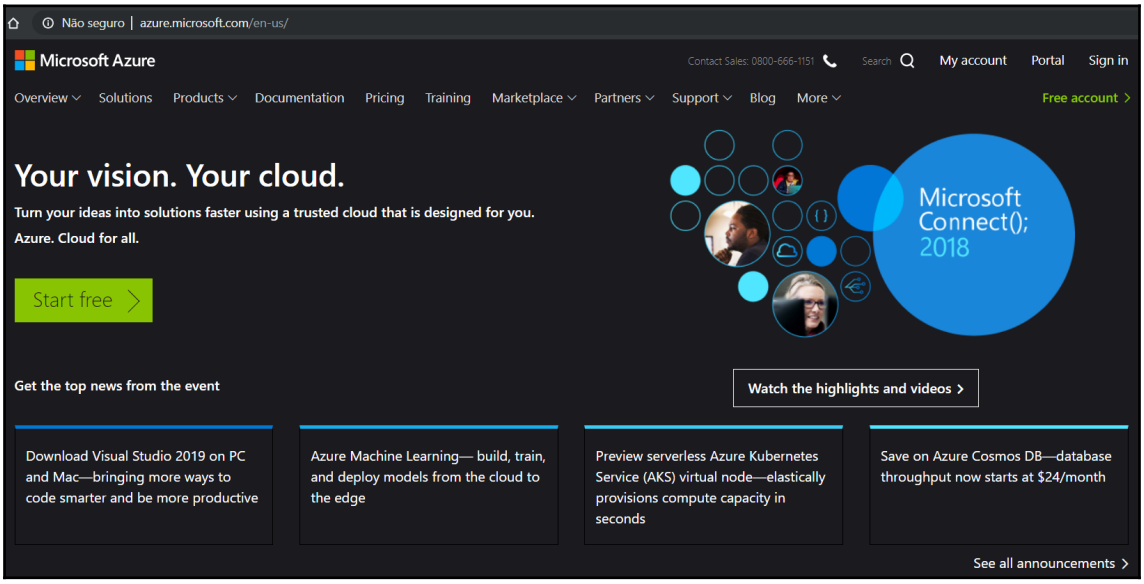
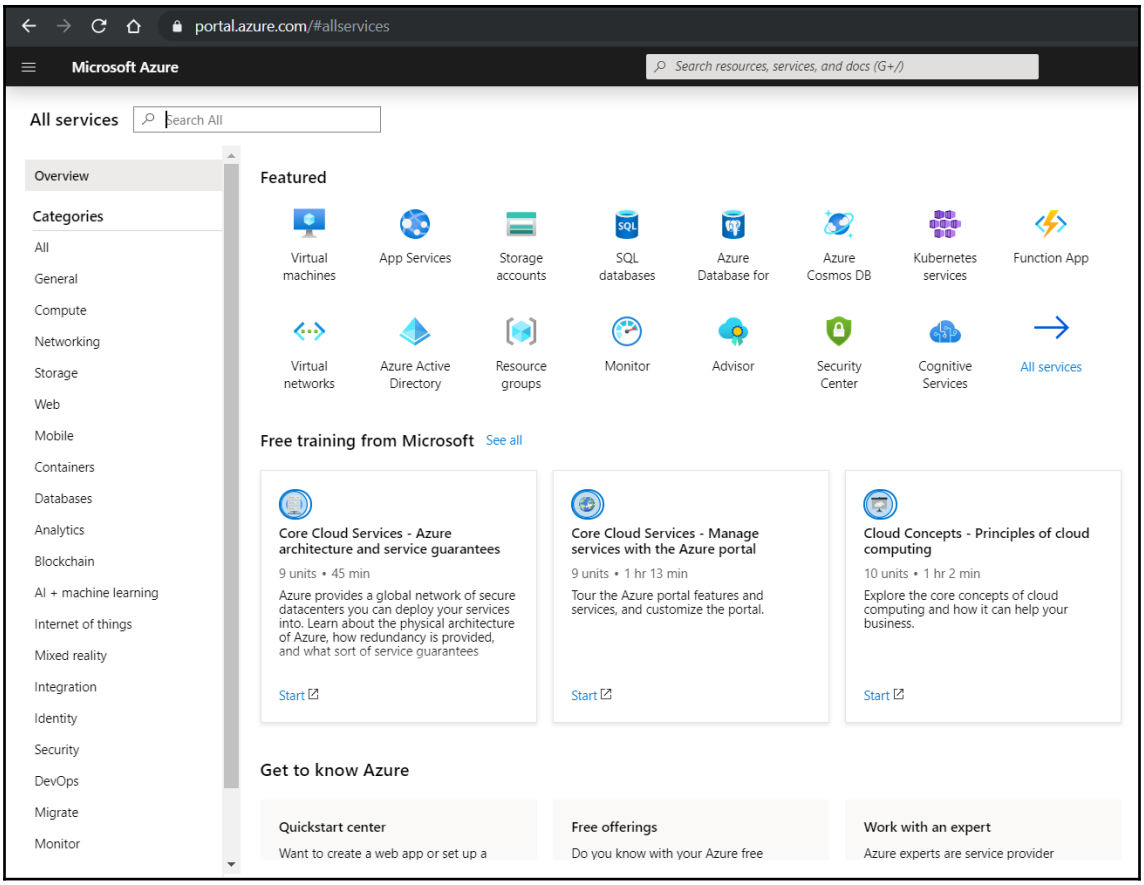
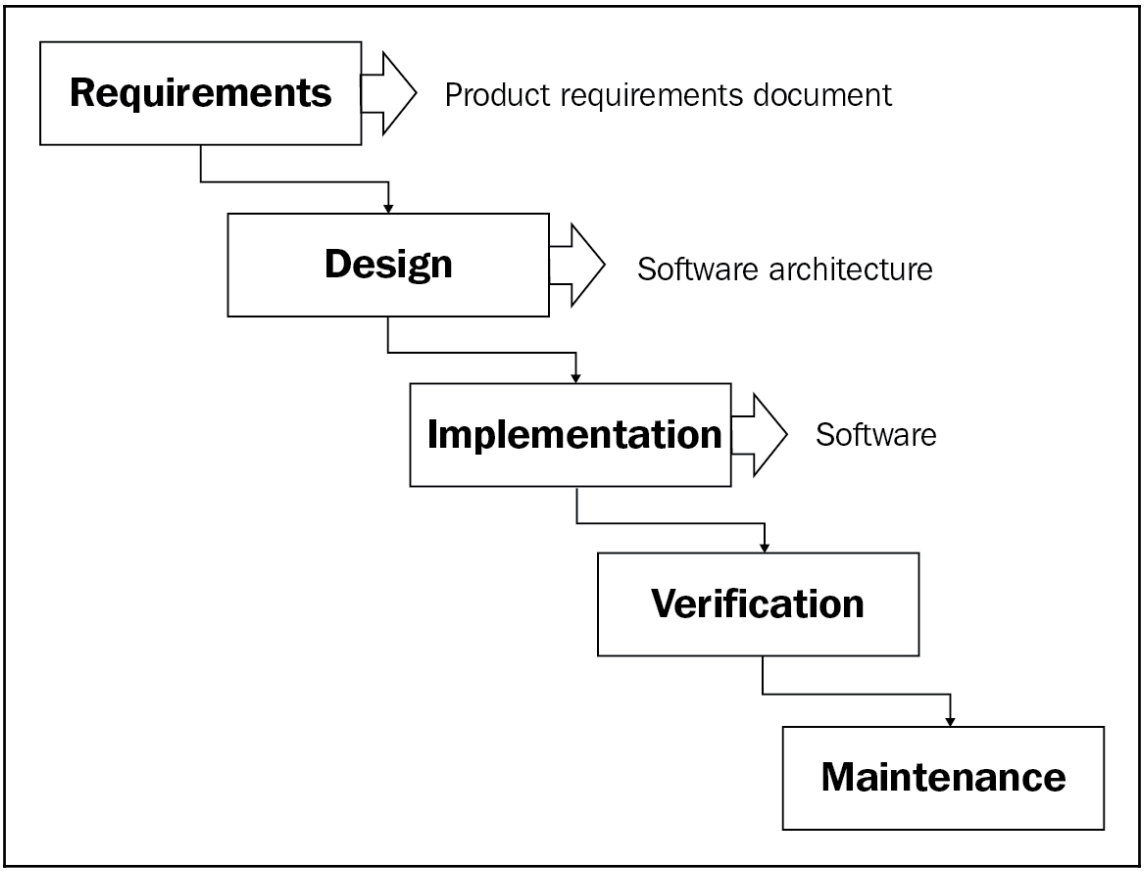
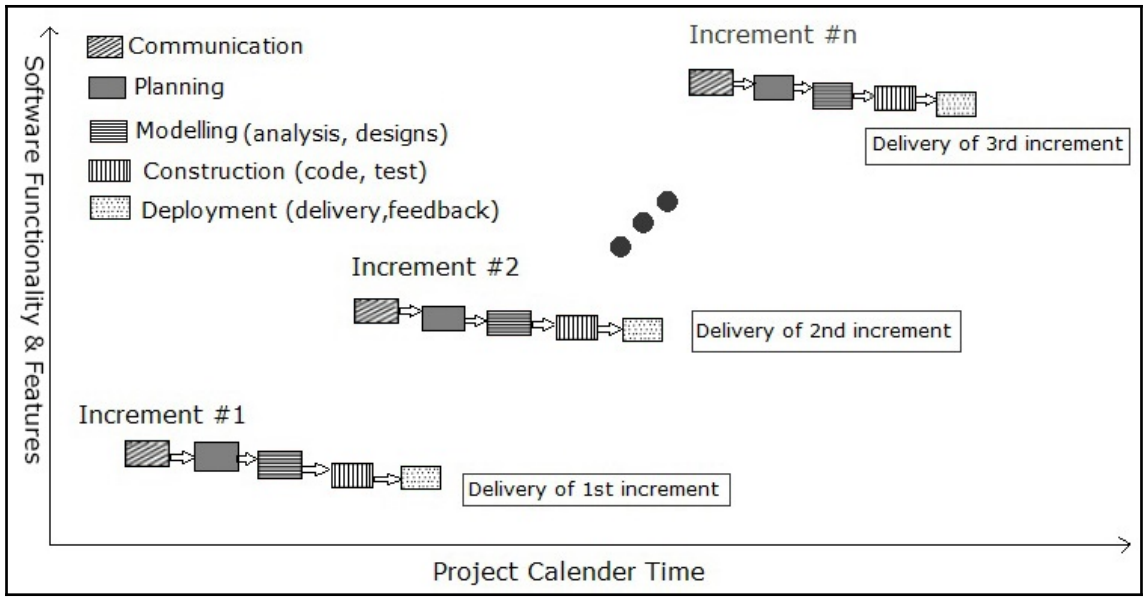
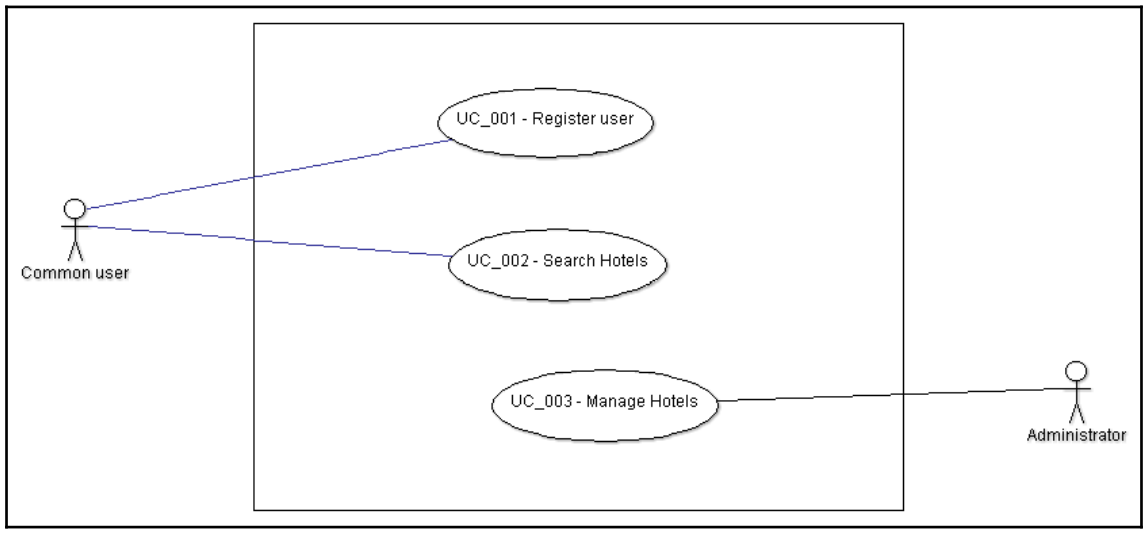
Chapter 1: Understanding the Importance of Software Architecture



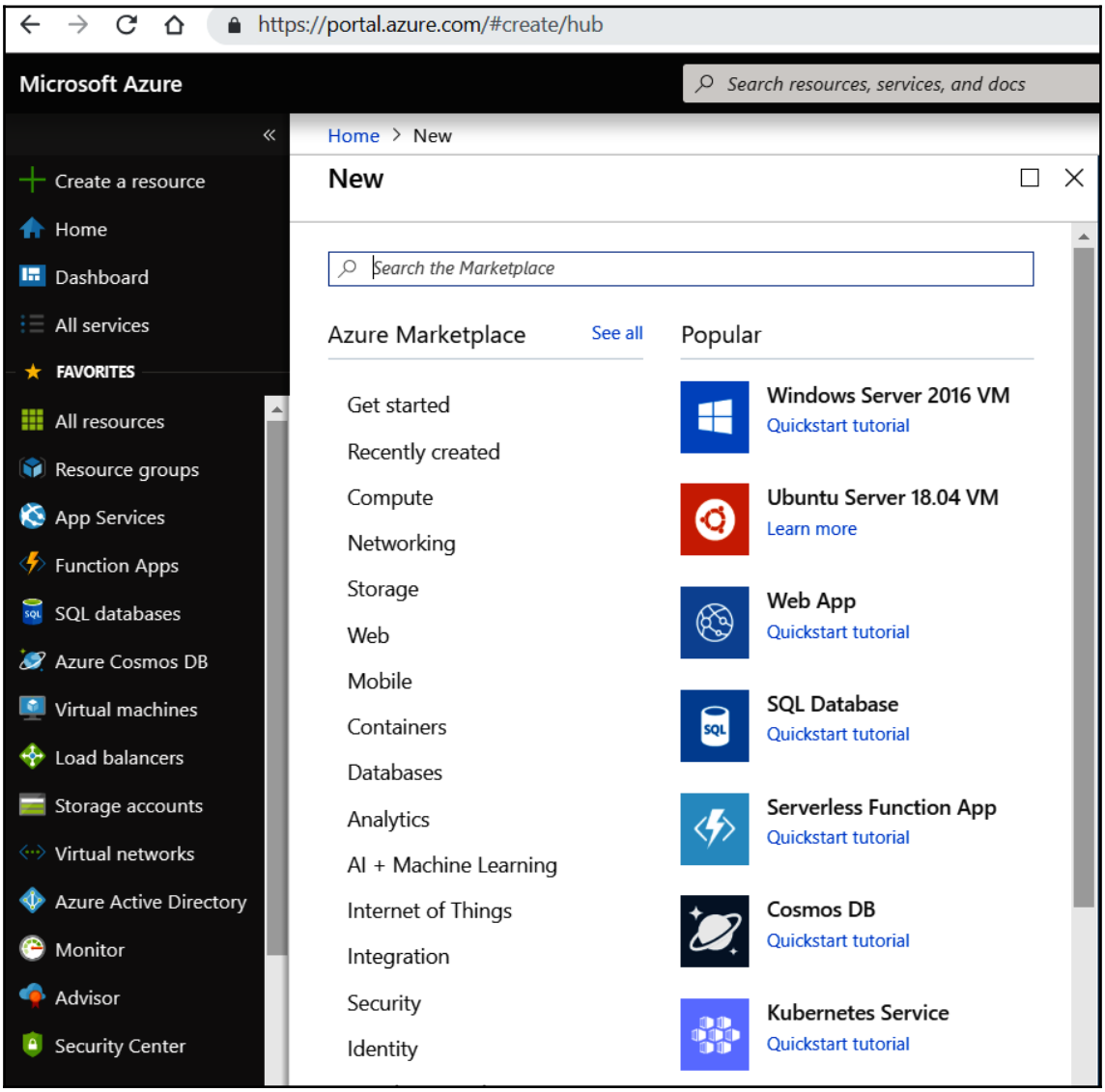

portal.azure.com/#allservices
Microsoft Azure
Search resources, services, and docs (G+/)
All services
Search All
Overview
Categories
All
General
Compute
Networking
Storage
Web
Mobile
Containers
Databases
Analytics
Blockchain
AI + machine learning
Internet of things
Mixed reality
Integration
Identity
Security
DevOps
Migrate
Monitor
Featured
Virtual machines
App Services
Storage accounts
SQL databases
Azure Database for
Azure Cosmos DB
Kubernetes services
Function App
Virtual networks
Azure Active Directory
Resource groups
Monitor
Advisor
Security Center
Cognitive Services
All services
Free training from Microsoft
See all
Core Cloud Services - Azure architecture and service guarantees
9 units • 45 min
Azure provides a global network of secure datacenters you can deploy your services into. Learn about the physical architecture of Azure, how redundancy is provided, and what sort of service guarantees
Start
Core Cloud Services - Manage services with the Azure portal
9 units • 1 hr 13 min
Tour the Azure portal features and services, and customize the portal.
Start
Cloud Concepts - Principles of cloud computing
10 units • 1 hr 2 min
Explore the core concepts of cloud computing and how it can help your business.
Start
Get to know Azure
Quickstart center
Want to create a web app or set up a
Free offerings
Do you know with your Azure free
Work with an expert
Azure experts are service provider

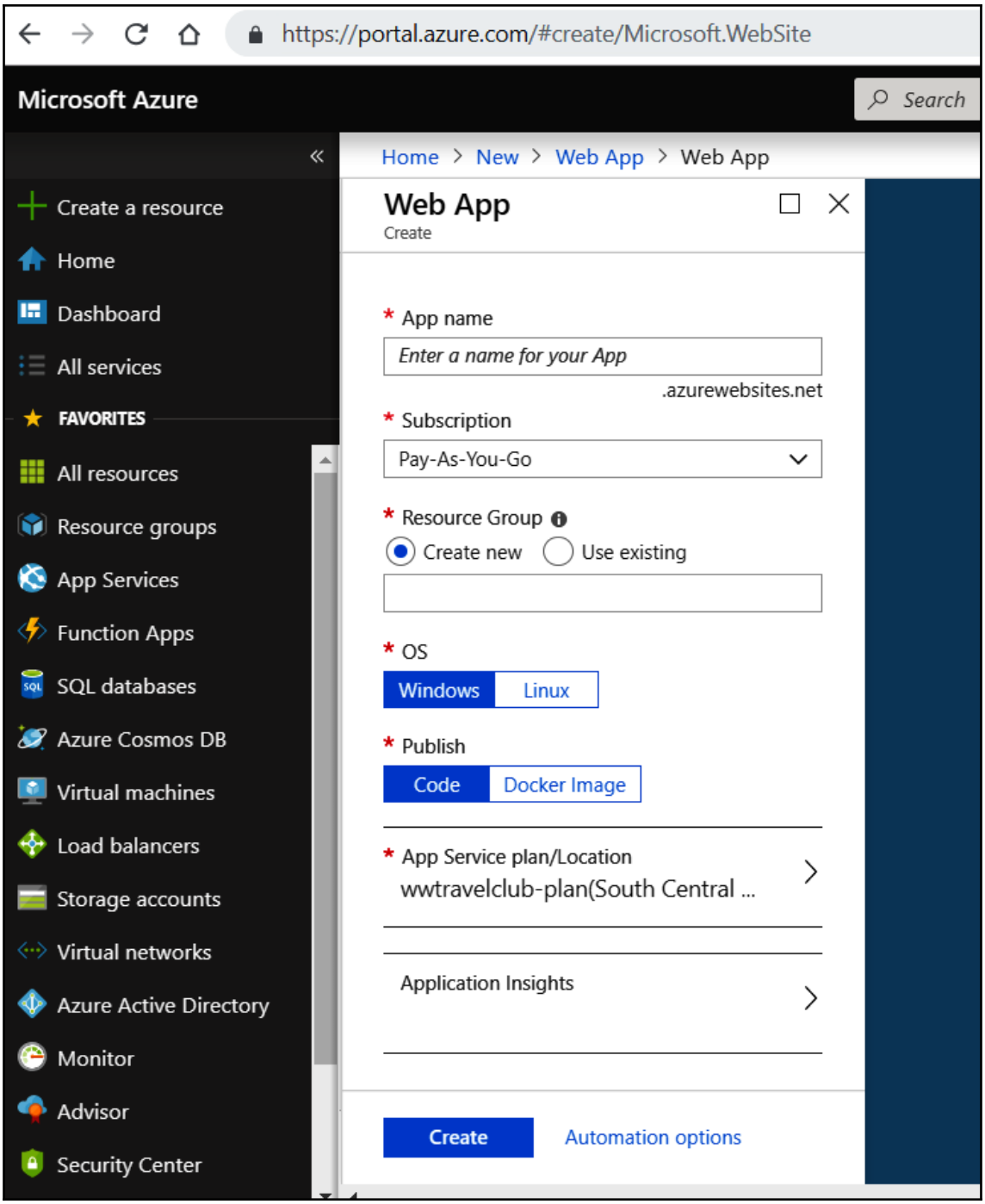

Requirements
Product requirements document
Design
Software architecture
Implementation
Software
Verification
Maintenance

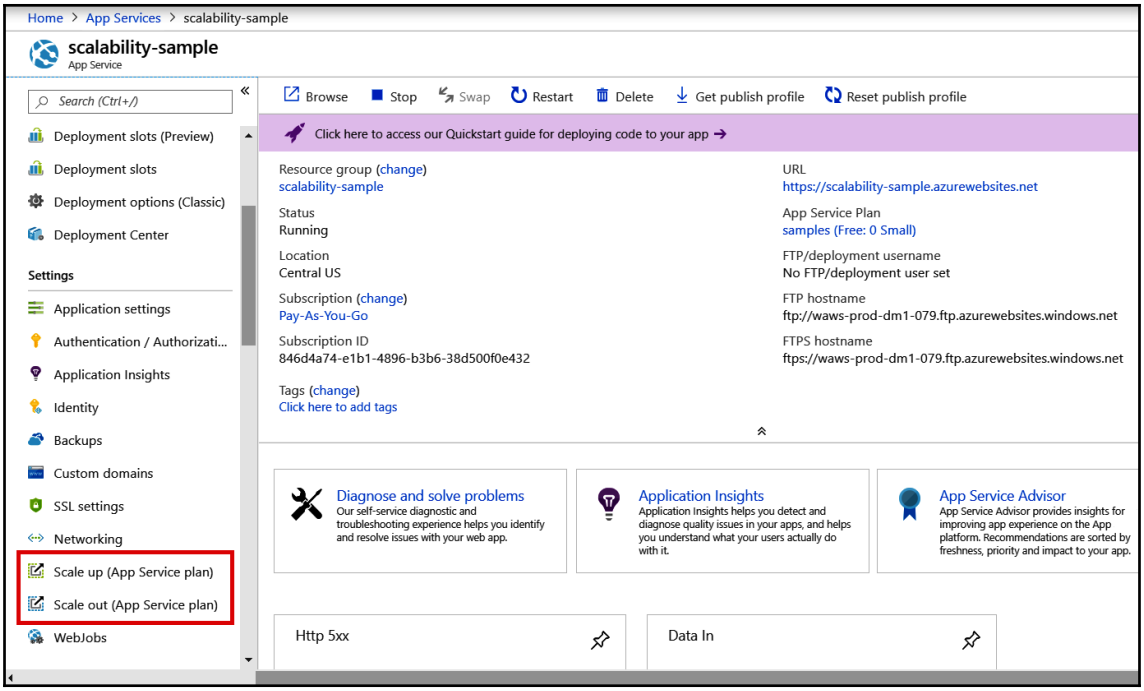

Communication
Planning
Modelling (analysis, designs)
Construction (code, test)
Deployment (delivery,feedback)
Increment #n
Delivery of 3rd increment
Increment #2
Delivery of 2nd increment
Increment #1
Delivery of 1st increment
Software Functionality & Features
Project Calender Time

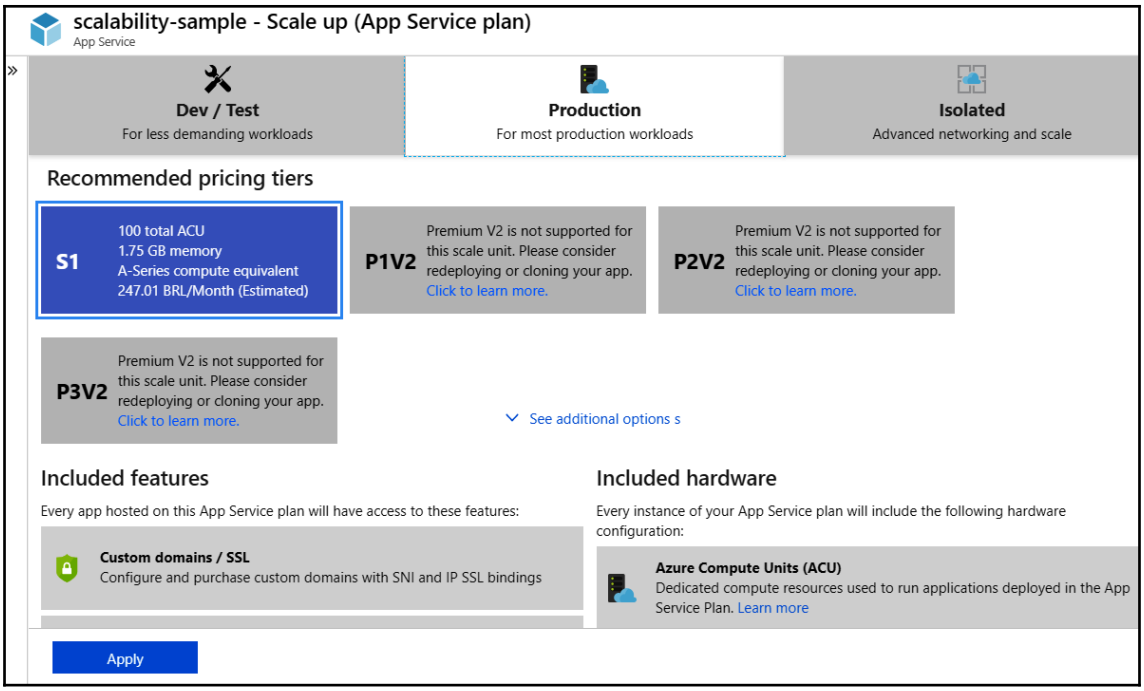

UC_001 - Register user
UC_002 - Search Hotels
UC_003 - Manage Hotels
Common user
Administrator

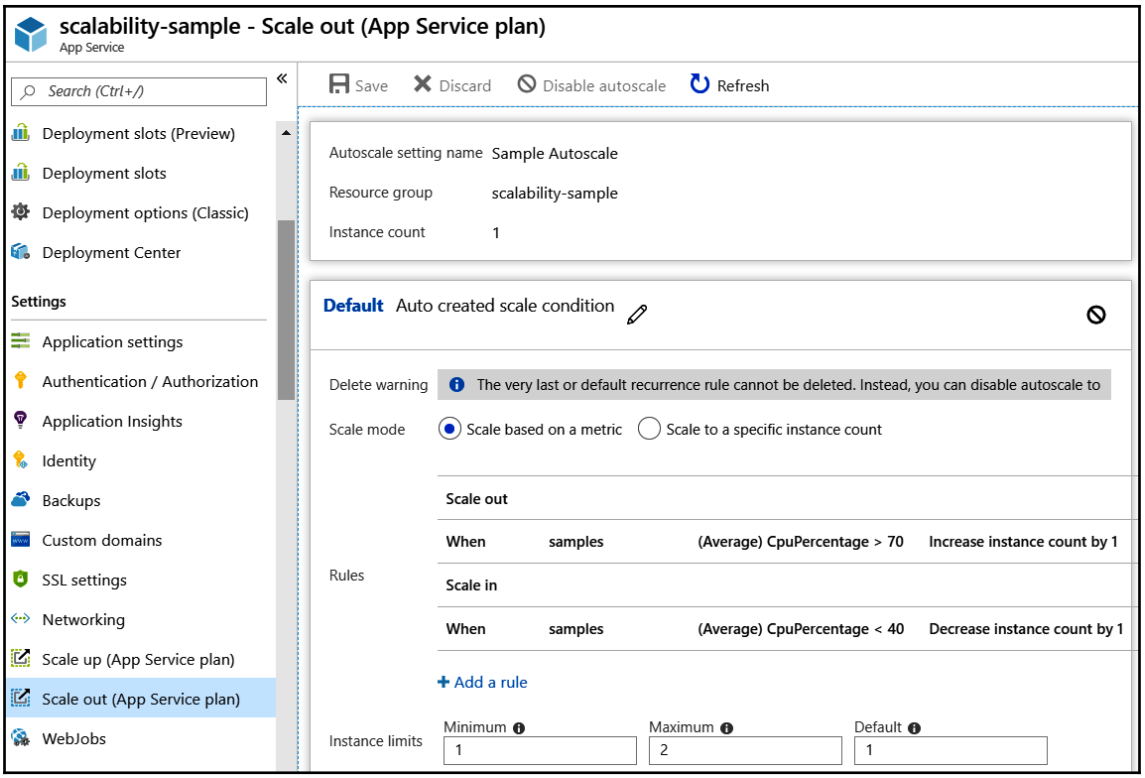
Chapter 2: Functional and Nonfunctional Requirements

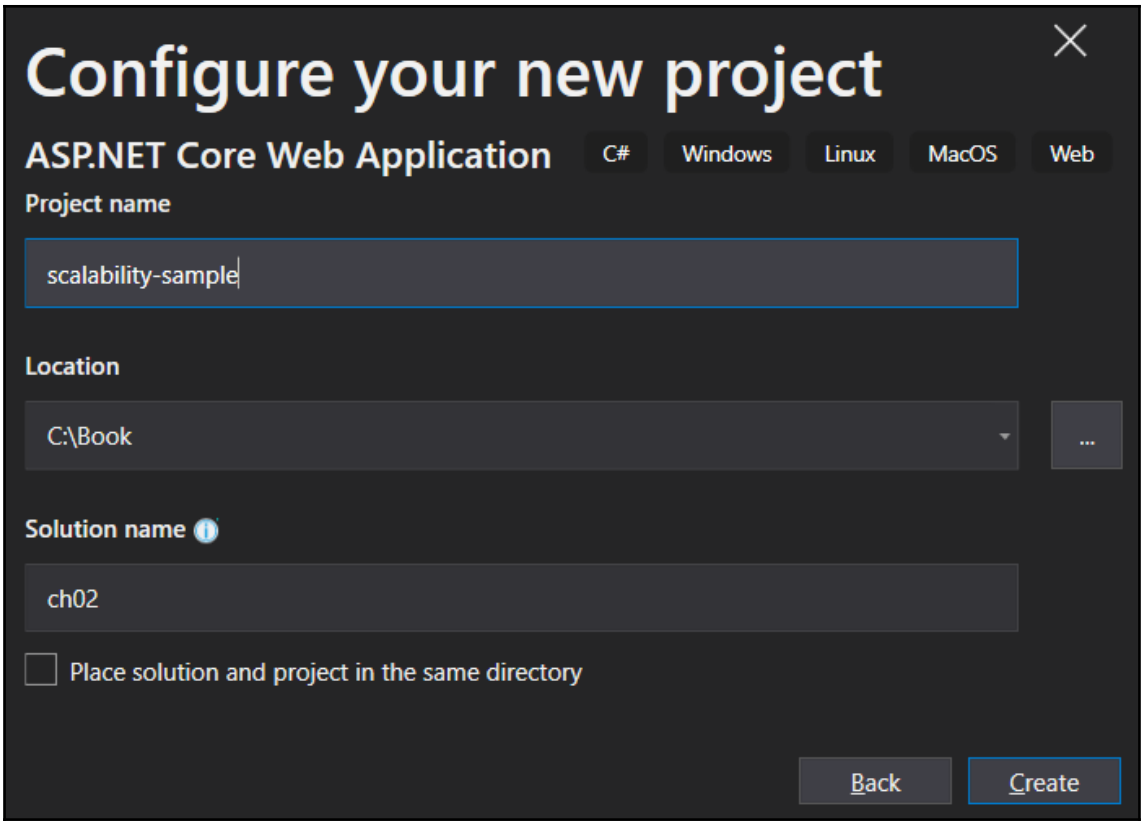


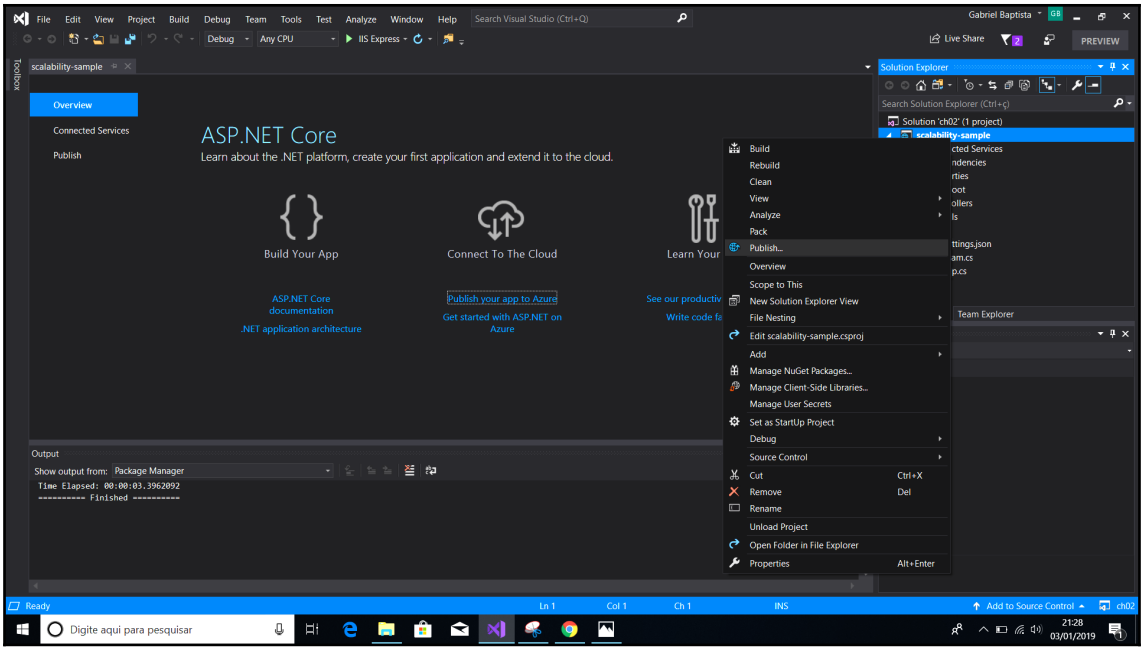

https://portal.azure.com/#create/Microsoft.WebSite
Microsoft Azure
Search
Home > New > Web App > Web App
Web App
Create
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
* App name
Enter a name for your App
.azurewebsites.net
* Subscription
Pay-As-You-Go
* Resource Group
Create new
Use existing
* OS
Windows
Linux
* Publish
Code
Docker Image
* App Service plan/Location
wwtravelclub-plan(South Central ...
Application Insights
Create
Automation options

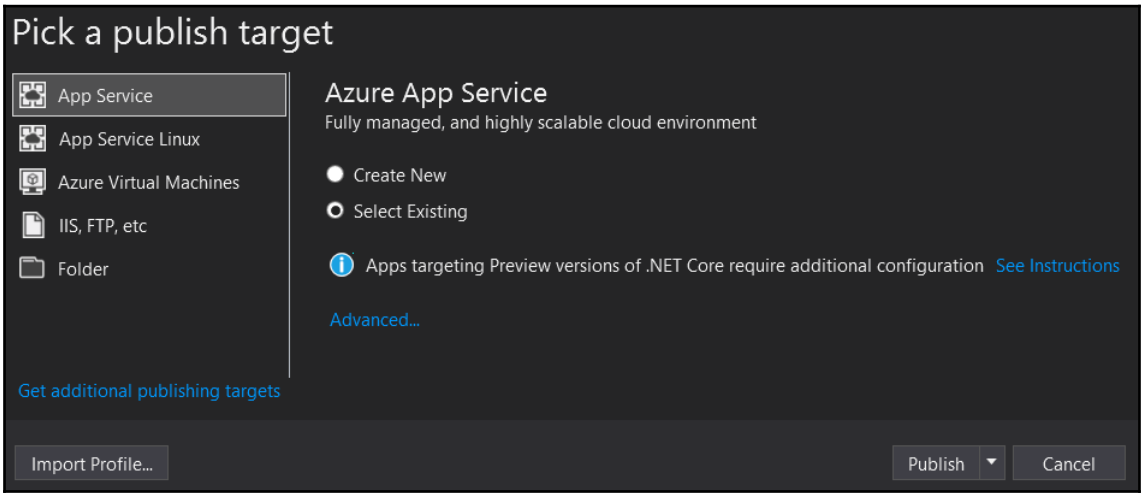

Home > App Services > scalability-sample
scalability-sample
App Service
Search (Ctrl+/)
Deployment slots (Preview)
Deployment slots
Deployment options (Classic)
Deployment Center
Settings
Application settings
Authentication / Authorizati...
Application Insights
Identity
Backups
Custom domains
SSL settings
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Browse
Stop
Swap
Restart
Delete
Get publish profile
Reset publish profile
Click here to access our Quickstart guide for deploying code to your app
Resource group (change)
scalability-sample
Status
Running
Location
Central US
Subscription (change)
Pay-As-You-Go
Subscription ID
846d4a74-e1b1-4896-b3b6-38d500f0e432
Tags (change)
Click here to add tags
URL
https://scalability-sample.azurewebsites.net
App Service Plan
samples (Free: 0 Small)
FTP/deployment username
No FTP/deployment user set
FTP hostname
ftp://waws-prod-dm1-079.ftp.azurewebsites.windows.net
FTPS hostname
ftps://waws-prod-dm1-079.ftp.azurewebsites.windows.net
Diagnose and solve problems
Our self-service diagnostic and troubleshooting experience helps you identify and resolve issues with your web app.
Application Insights
Application Insights helps you detect and diagnose quality issues in your apps, and helps you understand what your users actually do with it.
App Service Advisor
App Service Advisor provides insights for improving app experience on the App platform. Recommendations are sorted by freshness, priority and impact to your app.
Http 5xx
Data In

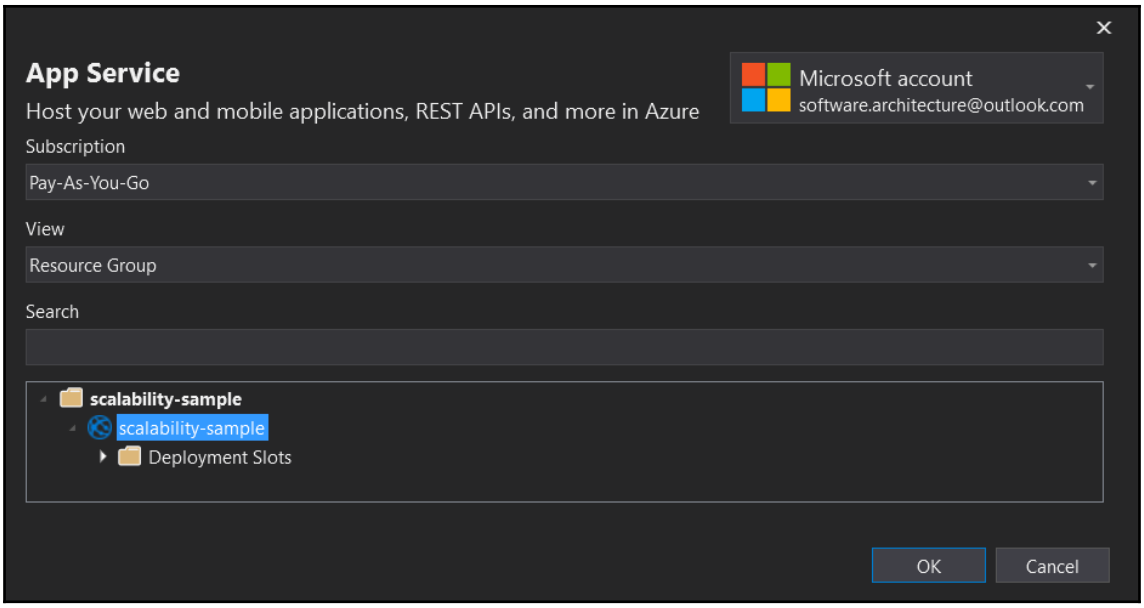

scalability-sample - Scale up (App Service plan)
App Service
Dev / Test
For less demanding workloads
Production
For most production workloads
Isolated
Advanced networking and scale
Recommended pricing tiers
S1
100 total ACU
1.75 GB memory
A-Series compute equivalent
247.01 BRL/Month (Estimated)
P1V2
Premium V2 is not supported for this scale unit. Please consider redeploying or cloning your app.
Click to learn more.
P2V2
Premium V2 is not supported for this scale unit. Please consider redeploying or cloning your app.
Click to learn more.
P3V2
Premium V2 is not supported for this scale unit. Please consider redeploying or cloning your app.
Click to learn more.
See additional options s
Included features
Every app hosted on this App Service plan will have access to these features:
Custom domains / SSL
Configure and purchase custom domains with SNI and IP SSL bindings
Included hardware
Every instance of your App Service plan will include the following hardware configuration:
Azure Compute Units (ACU)
Dedicated compute resources used to run applications deployed in the App Service Plan. Learn more
Apply

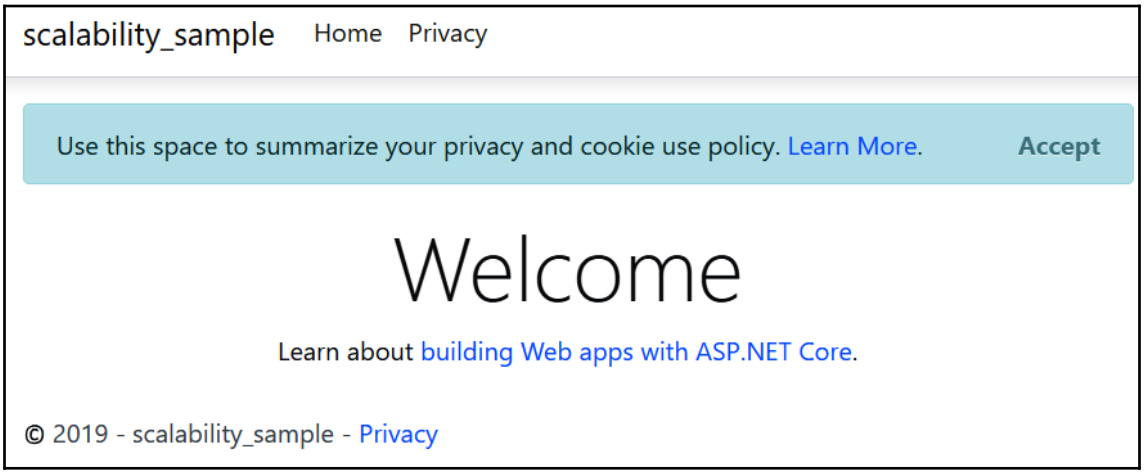

scalability-sample - Scale out (App Service plan)
App Service
Search (Ctrl+/)
Deployment slots (Preview)
Deployment slots
Deployment options (Classic)
Deployment Center
Settings
Application settings
Authentication / Authorization
Application Insights
Identity
Backups
Custom domains
SSL settings
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Save
Discard
Disable autoscale
Refresh
Autoscale setting name Sample Autoscale
Resource group scalability-sample
Instance count 1
Default Auto created scale condition
Delete warning The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to
Scale mode Scale based on a metric Scale to a specific instance count
Rules
Scale out
When samples (Average) CpuPercentage > 70 Increase instance count by 1
Scale in
When samples (Average) CpuPercentage < 40 Decrease instance count by 1
Add a rule
Instance limits
Minimum
1
Maximum
2
Default
1

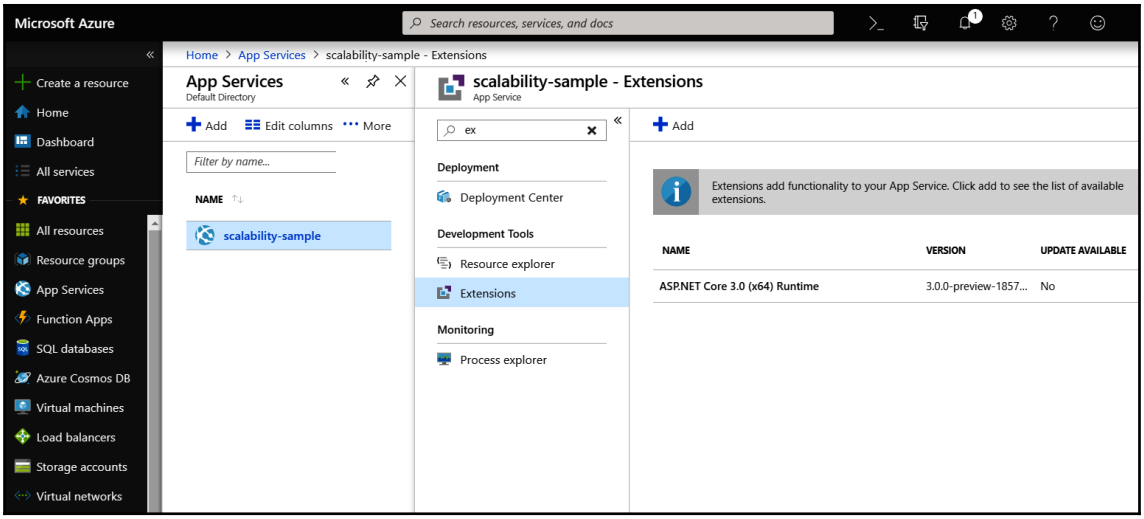

Configure your new project
ASP.NET Core Web Application
C#
Windows
Linux
MacOS
Web
Project name
scalability-sample
Location
C:\Book
...
Solution name
ch02
Place solution and project in the same directory
Back
Create

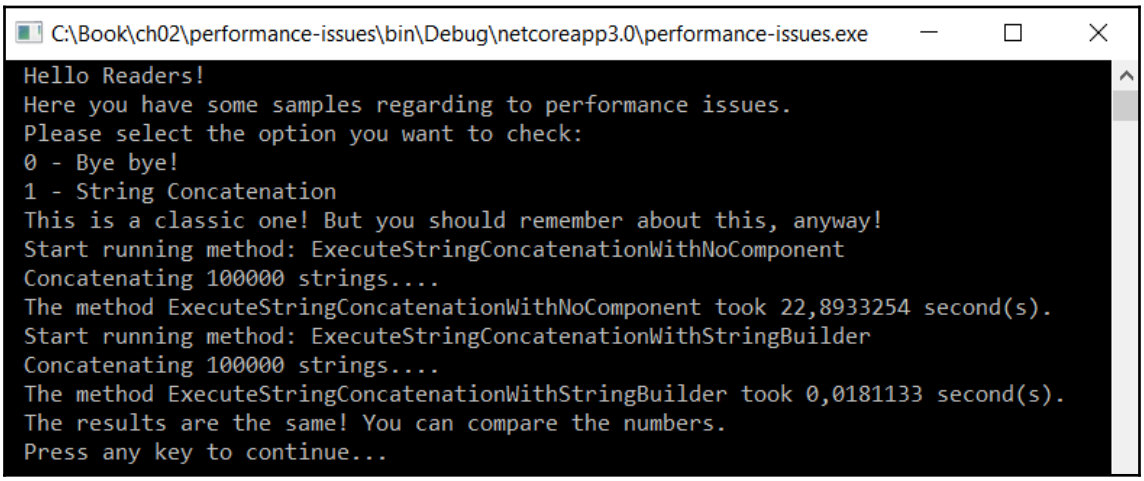

File Edit View Project Build Debug Team Tools Test Analyze Window Help
Search Visual Studio (Ctrl+Q)
Gabriel Baptista
Live Share
PREVIEW
scalability-sample
Overview
Connected Services
Publish
ASP.NET Core
Learn about the .NET platform, create your first application and extend it to the cloud.
Build Your App
Connect To The Cloud
Learn Your
ASP.NET Core documentation
.NET application architecture
Publish your app to Azure
Get started with ASP.NET on Azure
Solution Explorer
Search Solution Explorer (Ctrl+ç)
Solution 'ch02' (1 project)
scalability-sample
Build
Rebuild
Clean
View
Analyze
Pack
Publish...
Overview
Scope to This
New Solution Explorer View
File Nesting
Edit scalability-sample.csproj
Add
Manage NuGet Packages...
Manage Client-Side Libraries...
Manage User Secrets
Set as StartUp Project
Debug
Source Control
Cut Ctrl+X
Remove Del
Rename
Unload Project
Open Folder in File Explorer
Properties Alt+Enter
Team Explorer
Output
Show output from: Package Manager
Time Elapsed: 00:00:03.3962092
========== Finished ==========
Ready
Ln 1
Col 1
Ch 1
INS
Add to Source Control
ch02
Digite aqui para pesquisar
21:28
03/01/2019


Pick a publish target
App Service
App Service Linux
Azure Virtual Machines
IIS, FTP, etc
Folder
Azure App Service
Fully managed, and highly scalable cloud environment
Create New
Select Existing
Apps targeting Preview versions of .NET Core require additional configuration
See Instructions
Advanced...
Get additional publishing targets
Import Profile...
Publish
Cancel

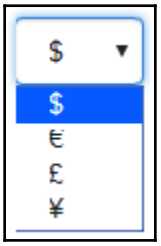

App Service
Host your web and mobile applications, REST APIs, and more in Azure
Microsoft account
software.architecture@outlook.com
Subscription
Pay-As-You-Go
View
Resource Group
Search
scalability-sample
scalability-sample
Deployment Slots
OK
Cancel

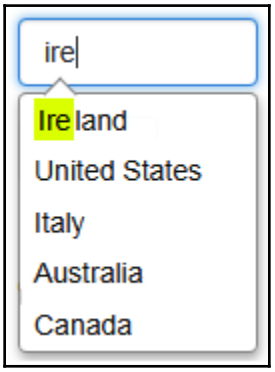

scalability_sample
Home
Privacy
Use this space to summarize your privacy and cookie use policy. Learn More.
Accept
Welcome
Learn about building Web apps with ASP.NET Core.
© 2019 - scalability_sample - Privacy


Microsoft Azure
Search resources, services, and docs
Home > App Services > scalability-sample - Extensions
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
App Services
Default Directory
Add
Edit columns
More
Filter by name...
NAME
scalability-sample
scalability-sample - Extensions
App Service
ex
Deployment
Deployment Center
Development Tools
Resource explorer
Extensions
Monitoring
Process explorer
Add
Extensions add functionality to your App Service. Click add to see the list of available extensions.
NAME
VERSION
UPDATE AVAILABLE
ASP.NET Core 3.0 (x64) Runtime
3.0.0-preview-1857...
No


C:\Book\ch02\performance-issues\bin\Debug\netcoreapp3.0\performance-issues.exe
Hello Readers!
Here you have some samples regarding to performance issues.
Please select the option you want to check:
0 - Bye bye!
1 - String Concatenation
This is a classic one! But you should remember about this, anyway!
Start running method: ExecuteStringConcatenationWithNoComponent
Concatenating 100000 strings....
The method ExecuteStringConcatenationWithNoComponent took 22,8933254 second(s).
Start running method: ExecuteStringConcatenationWithStringBuilder
Concatenating 100000 strings....
The method ExecuteStringConcatenationWithStringBuilder took 0,0181133 second(s).
The results are the same! You can compare the numbers.
Press any key to continue...

```
C:\Book\ch02\performance-issues\bin\Debug\netcoreapp3.0\performance-issues.exe
Hello Readers!
Here you have some samples regarding to performance issues.
Please select the option you want to check:
0 - Bye bye!
1 - String Concatenation
2 - Exceptions
Always remember! Exceptions take too much time to handle!
Start running method: ParseIntWithException
The method ParseIntWithException took 0,0450462 second(s) (45,0462 ms)
Start running method: ParseIntWithTryParse
The method ParseIntWithTryParse took 5,6E-06 second(s) (0,0056 ms)
The results are the same! You can compare the numbers.
Press any key to continue...
```



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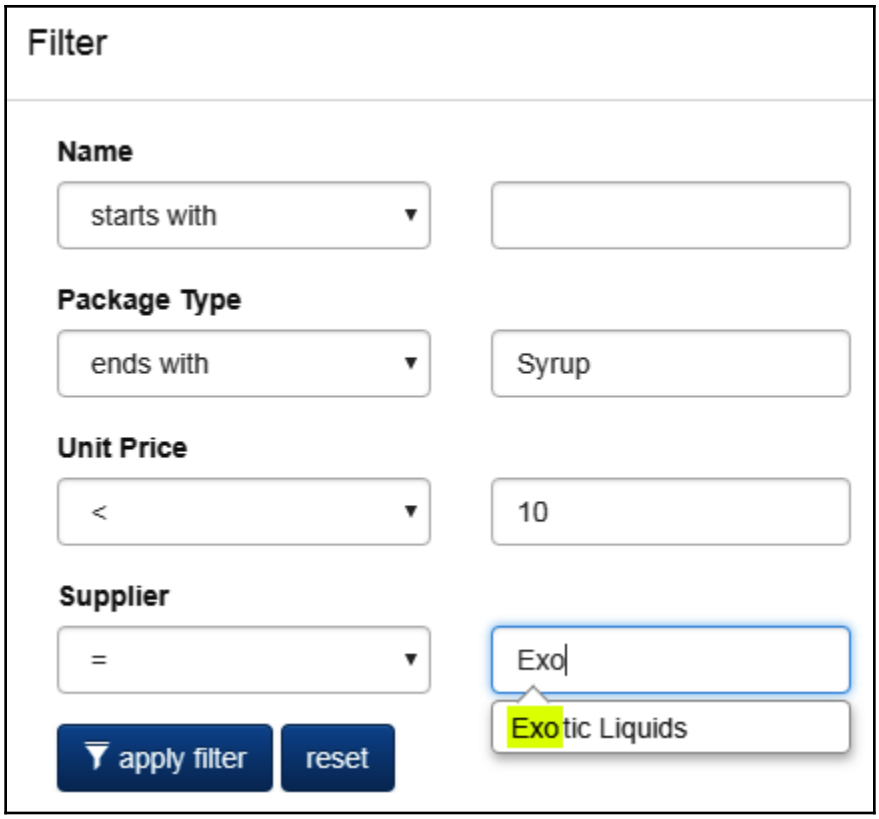
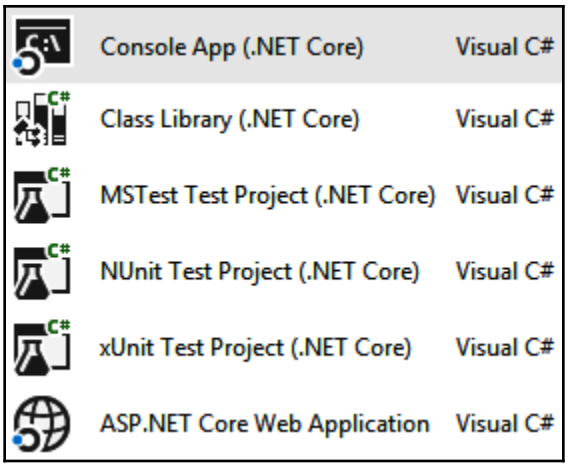
Ireland

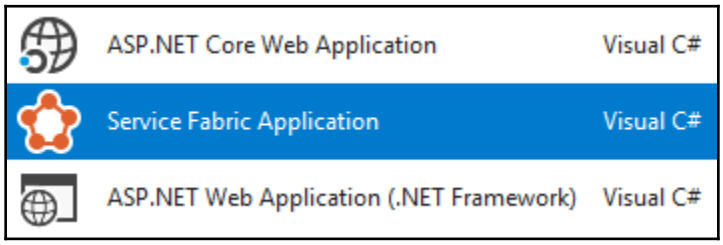

ilad
Ireland
Australia
Italy
Canada
United States


Country:
Brazil
City:
Select City
Select City
Rio de Janerio
Salvador
Submit

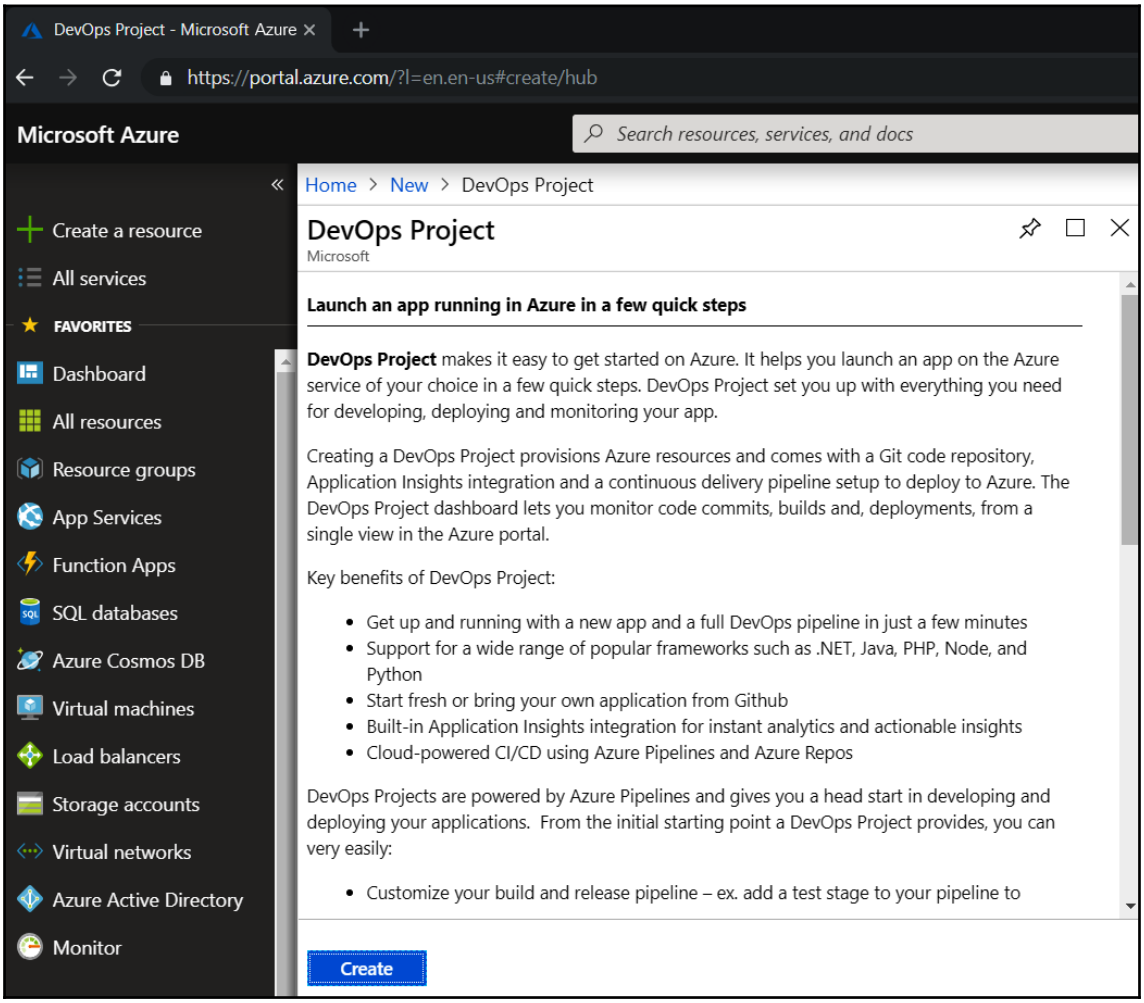

Filter
Name
starts with
Package Type
ends with
Syrup
Unit Price
<
10
Supplier
=
Exo
Exotic Liquids
apply filter
reset

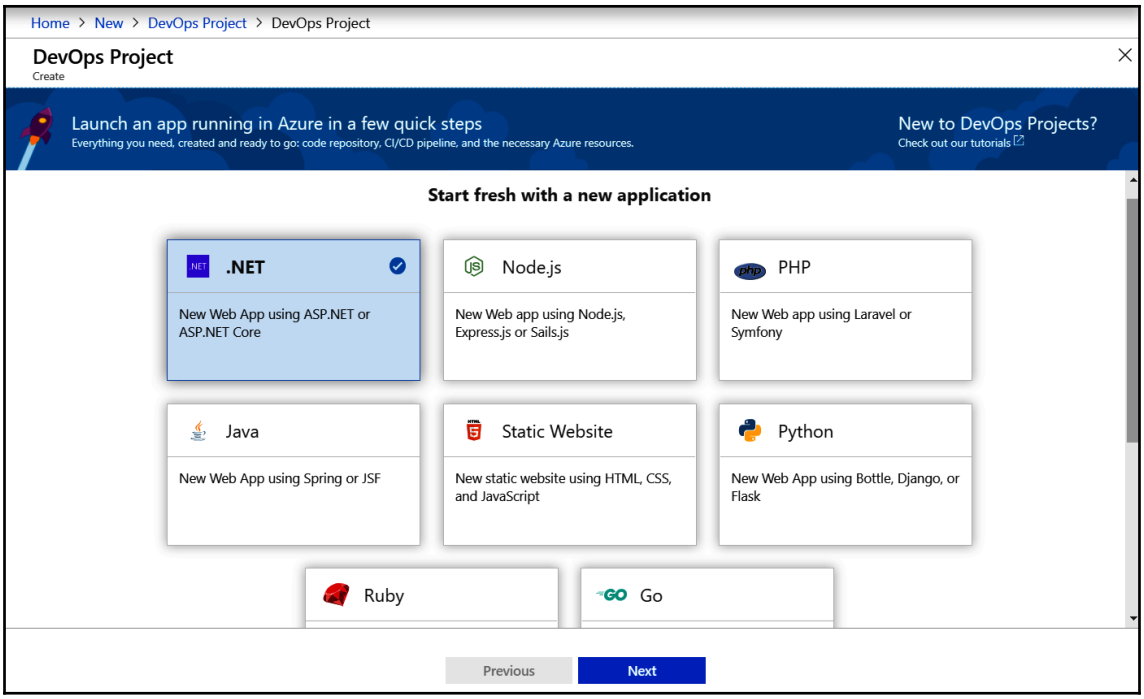

Web
.NET Core
.NET Standard
Android
Apple TV
Apple Watch
Cloud

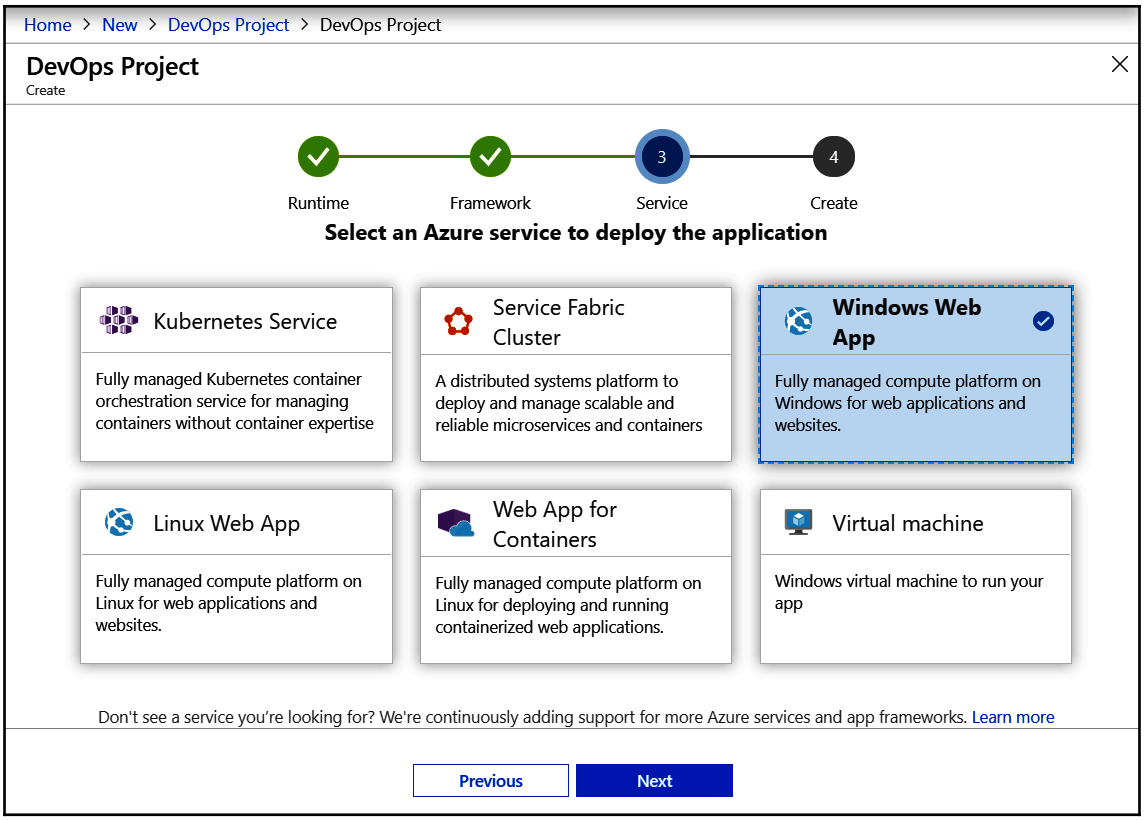

Console App (.NET Core) Visual C#
Class Library (.NET Core) Visual C#
MSTest Test Project (.NET Core) Visual C#
NUnit Test Project (.NET Core) Visual C#
xUnit Test Project (.NET Core) Visual C#
ASP.NET Core Web Application Visual C#

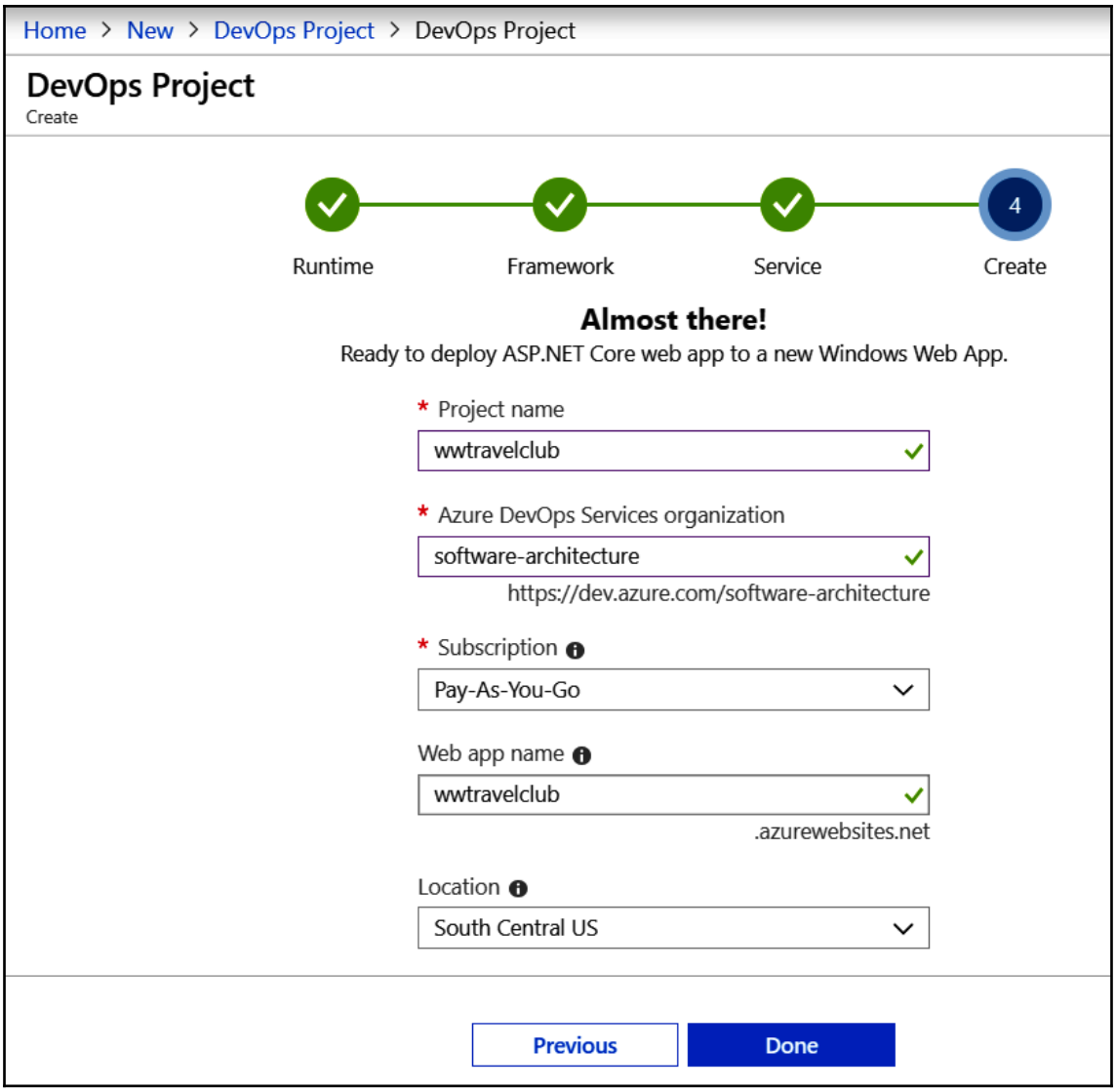

ASP.NET Core Web Application Visual C#
Service Fabric Application Visual C#
ASP.NET Web Application (.NET Framework) Visual C#

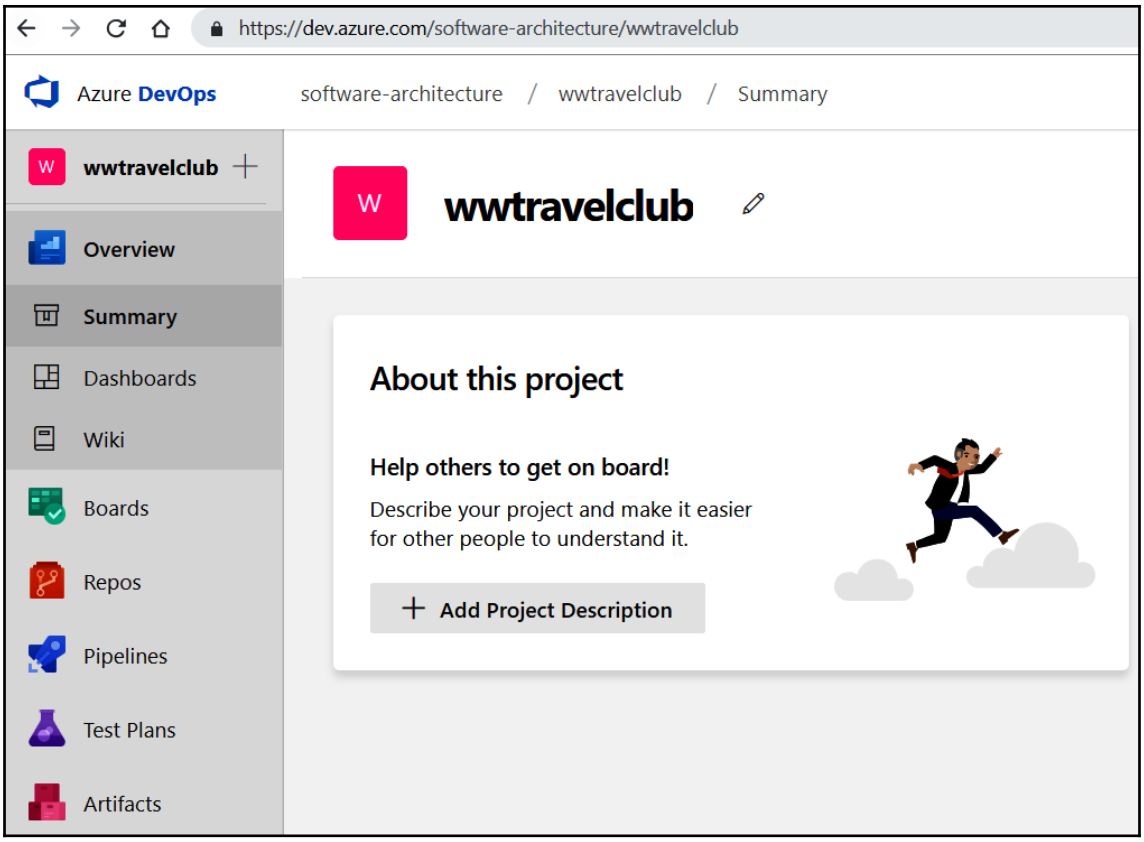
Chapter 3: Documenting Requirements with Azure DevOps

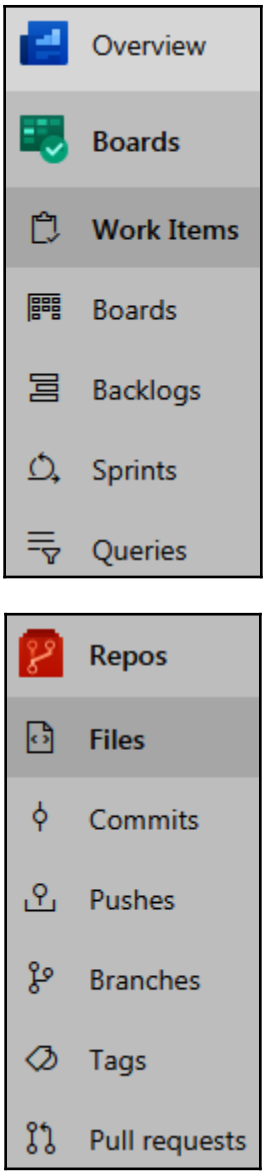


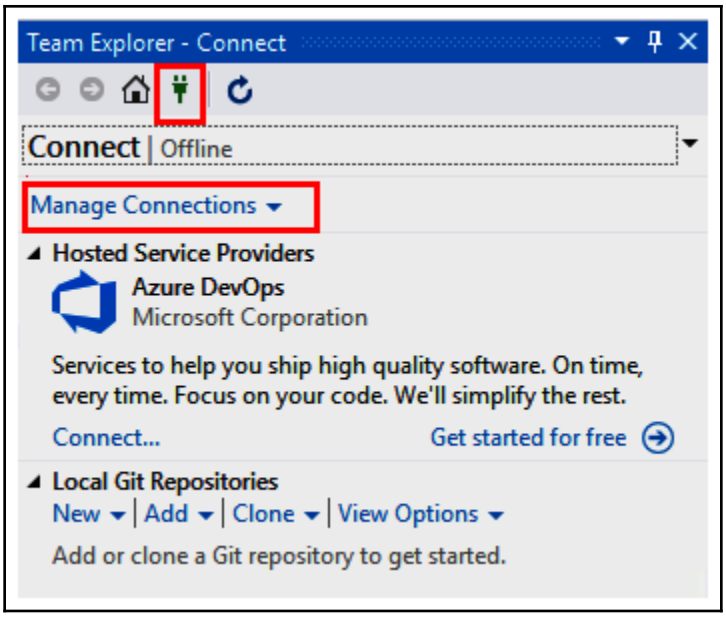

Home > New > DevOps Project > DevOps Project
DevOps Project
Create
Launch an app running in Azure in a few quick steps
Everything you need, created and ready to go: code repository, CI/CD pipeline, and the necessary Azure resources.
New to DevOps Projects?
Check out our tutorials
Start fresh with a new application
.NET
New Web App using ASP.NET or ASP.NET Core
Node.js
New Web app using Node.js, Express.js or Sails.js
PHP
New Web app using Laravel or Symfony
Java
New Web App using Spring or JSF
Static Website
New static website using HTML, CSS, and JavaScript
Python
New Web App using Bottle, Django, or Flask
Ruby
Go
Previous
Next

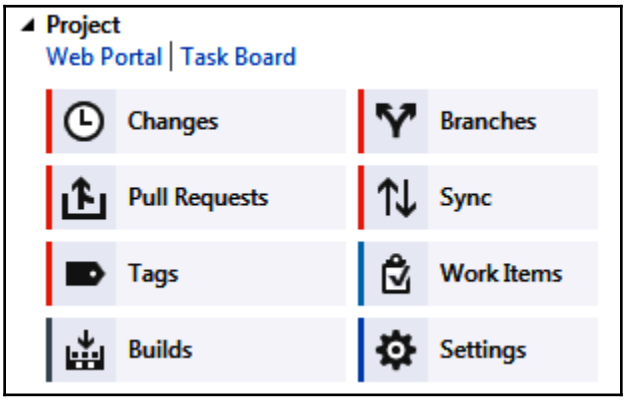

Home > New > DevOps Project > DevOps Project
DevOps Project
Create
Runtime
Framework
3
Service
4
Create
Select an Azure service to deploy the application
Kubernetes Service
Fully managed Kubernetes container orchestration service for managing containers without container expertise
Service Fabric Cluster
A distributed systems platform to deploy and manage scalable and reliable microservices and containers
Windows Web App
Fully managed compute platform on Windows for web applications and websites.
Linux Web App
Fully managed compute platform on Linux for web applications and websites.
Web App for Containers
Fully managed compute platform on Linux for deploying and running containerized web applications.
Virtual machine
Windows virtual machine to run your app
Don't see a service you're looking for? We're continuously adding support for more Azure services and app frameworks. Learn more
Previous
Next

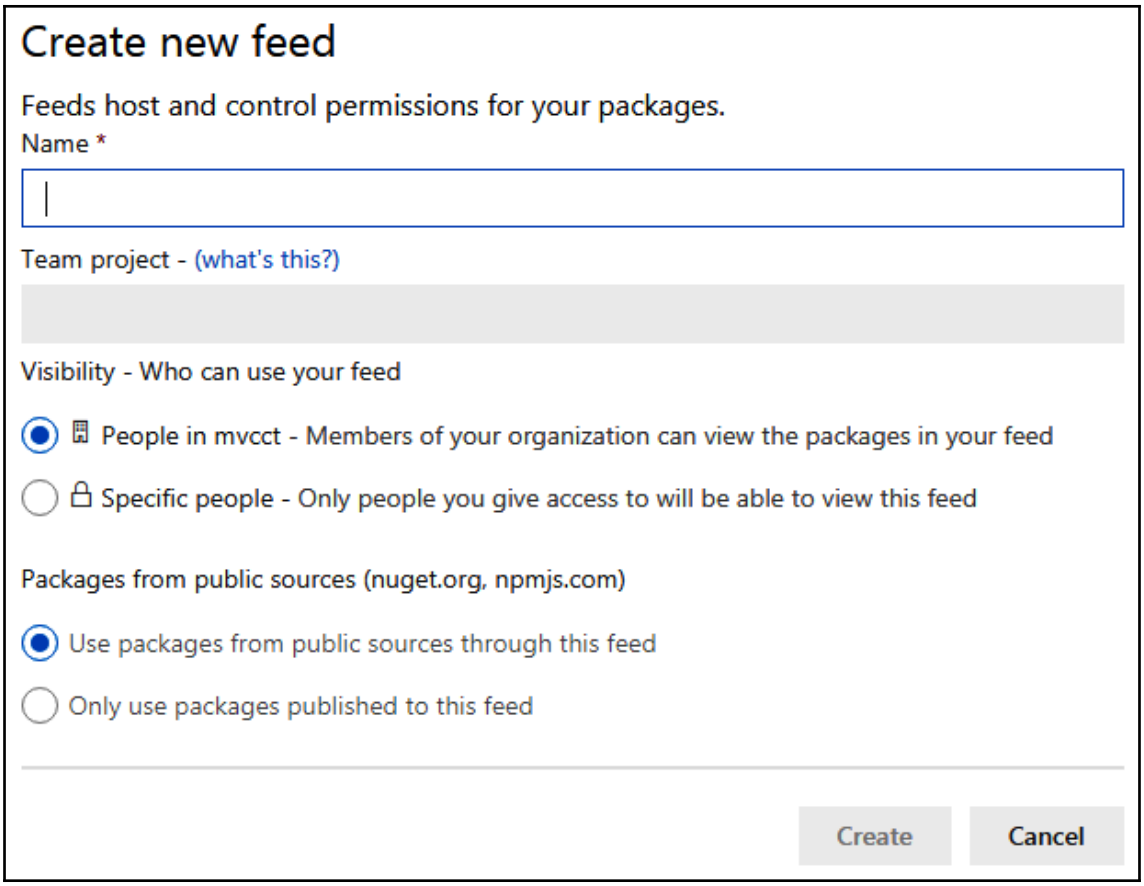

Home > New > DevOps Project > DevOps Project
DevOps Project
Create
Runtime
Framework
Service
4
Create
Almost there!
Ready to deploy ASP.NET Core web app to a new Windows Web App.
* Project name
wwtravelclub
* Azure DevOps Services organization
software-architecture
https://dev.azure.com/software-architecture
* Subscription
Pay-As-You-Go
Web app name
wwtravelclub
.azurewebsites.net
Location
South Central US
Previous
Done

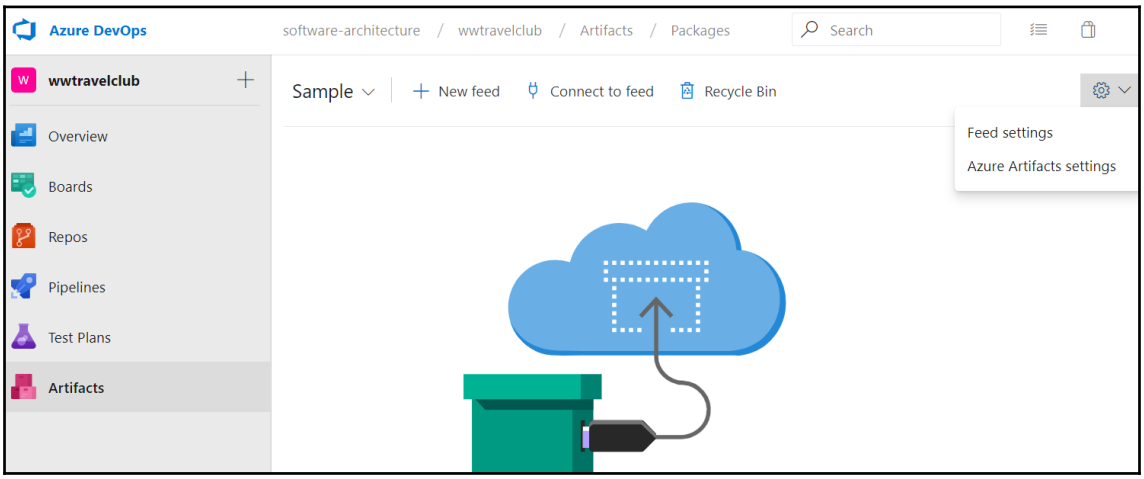

https://dev.azure.com/software-architecture/wwtravelclub
Azure DevOps
software-architecture / wwtravelclub / Summary
wwtravelclub
Overview
Summary
Dashboards
Wiki
Boards
Repos
Pipelines
Test Plans
Artifacts
wwtravelclub
About this project
Help others to get on board!
Describe your project and make it easier for other people to understand it.
Add Project Description

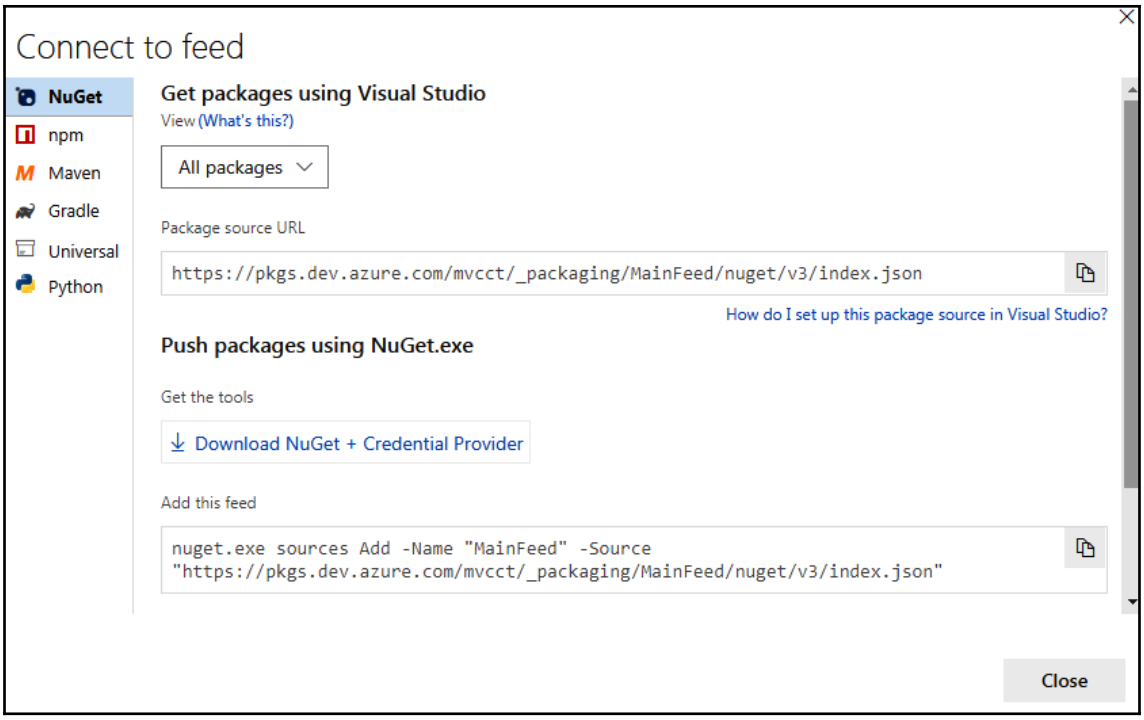

Overview
Boards
Work Items
Boards
Backlogs
Sprints
Queries
Repos
Files
Commits
Pushes
Branches
Tags
Pull requests

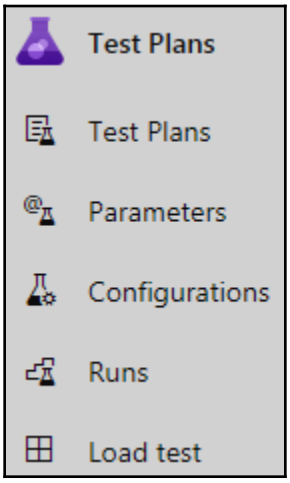

Team Explorer - Connect
Connect | Offline
Manage Connections
Hosted Service Providers
Azure DevOps
Microsoft Corporation
Services to help you ship high quality software. On time, every time. Focus on your code. We'll simplify the rest.
Connect...
Get started for free
Local Git Repositories
New | Add | Clone | View Options
Add or clone a Git repository to get started.

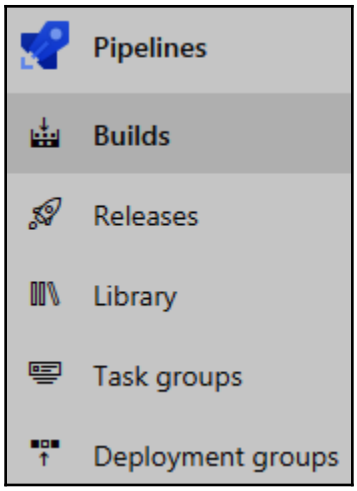

Project
Web Portal | Task Board
Changes
Branches
Pull Requests
Sync
Tags
Work Items
Builds
Settings

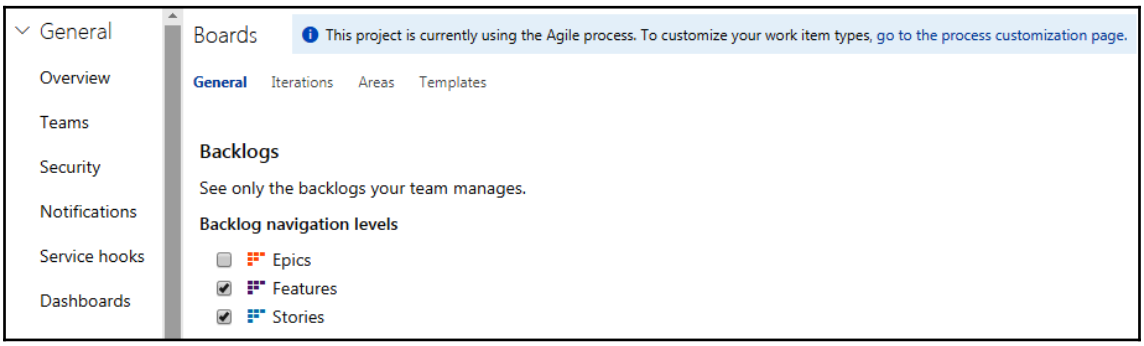

Create new feed
Feeds host and control permissions for your packages.
Name *
Team project - (what's this?)
Visibility - Who can use your feed
People in mvcct - Members of your organization can view the packages in your feed
Specific people - Only people you give access to will be able to view this feed
Packages from public sources (nuget.org, npmjs.com)
Use packages from public sources through this feed
Only use packages published to this feed
Create
Cancel

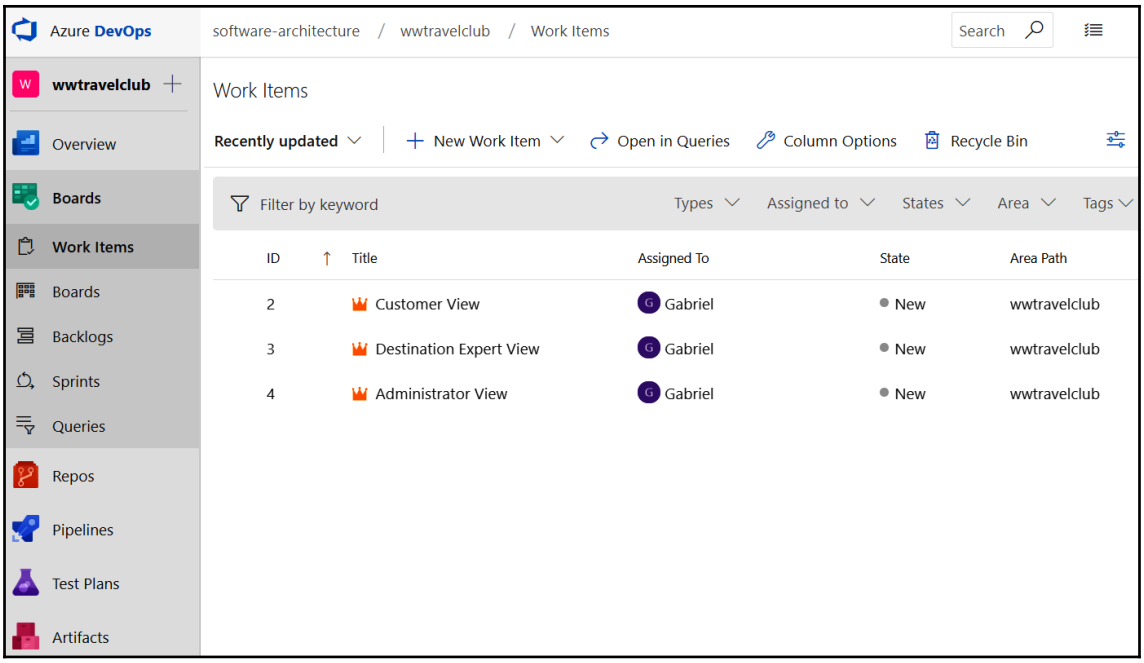

Azure DevOps
software-architecture / wwtravelclub / Artifacts / Packages
Search
wwtravelclub
Overview
Boards
Repos
Pipelines
Test Plans
Artifacts
Sample
New feed
Connect to feed
Recycle Bin
Feed settings
Azure Artifacts settings

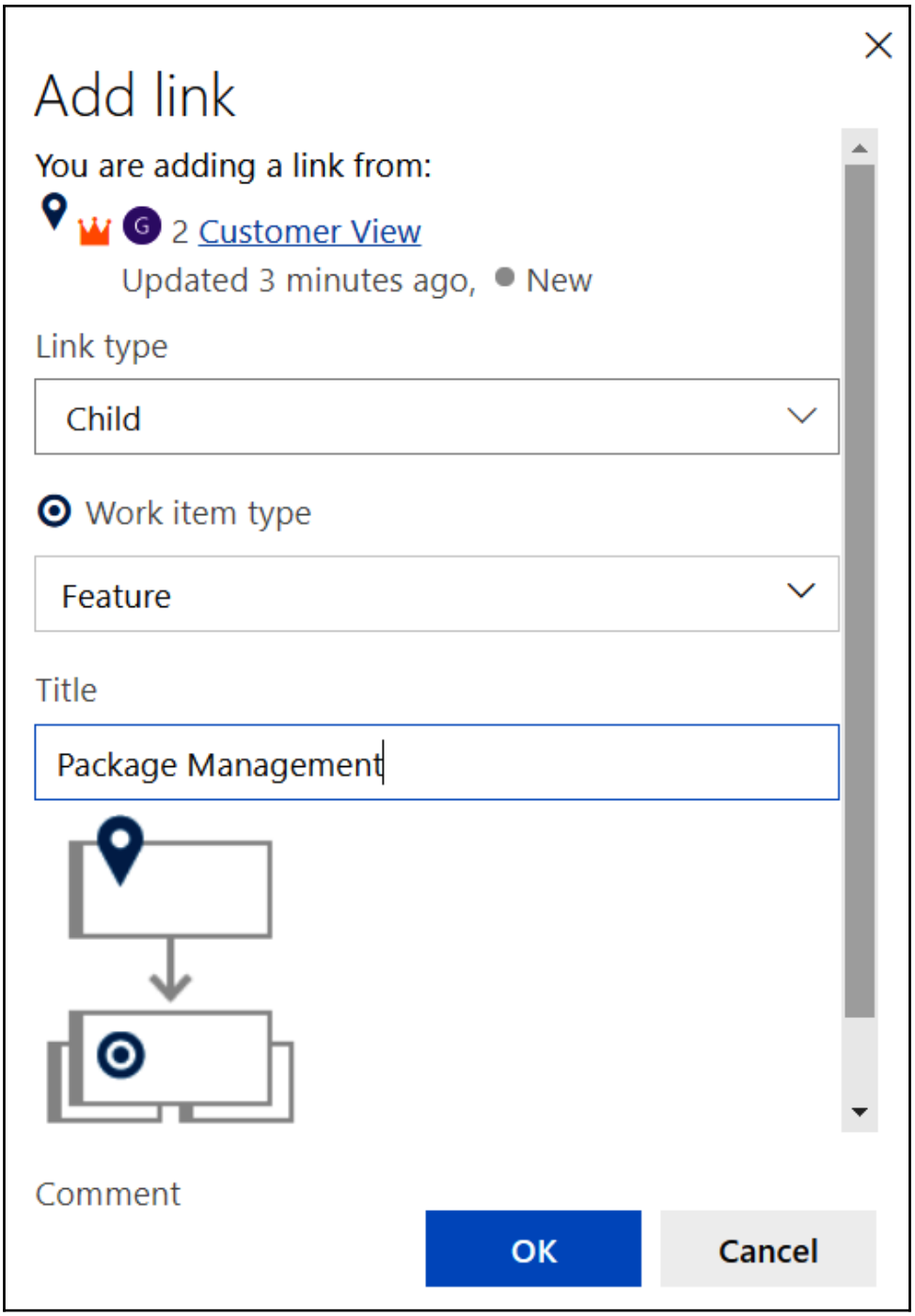

Connect to feed
NuGet
npm
Maven
Gradle
Universal
Python
Get packages using Visual Studio
View (What's this?)
All packages
Package source URL
https://pkgs.dev.azure.com/mvcct/_packaging/MainFeed/nuget/v3/index.json
How do I set up this package source in Visual Studio?
Push packages using NuGet.exe
Get the tools
Download NuGet + Credential Provider
Add this feed
nuget.exe sources Add -Name "MainFeed" -Source "https://pkgs.dev.azure.com/mvcct/_packaging/MainFeed/nuget/v3/index.json"
Close

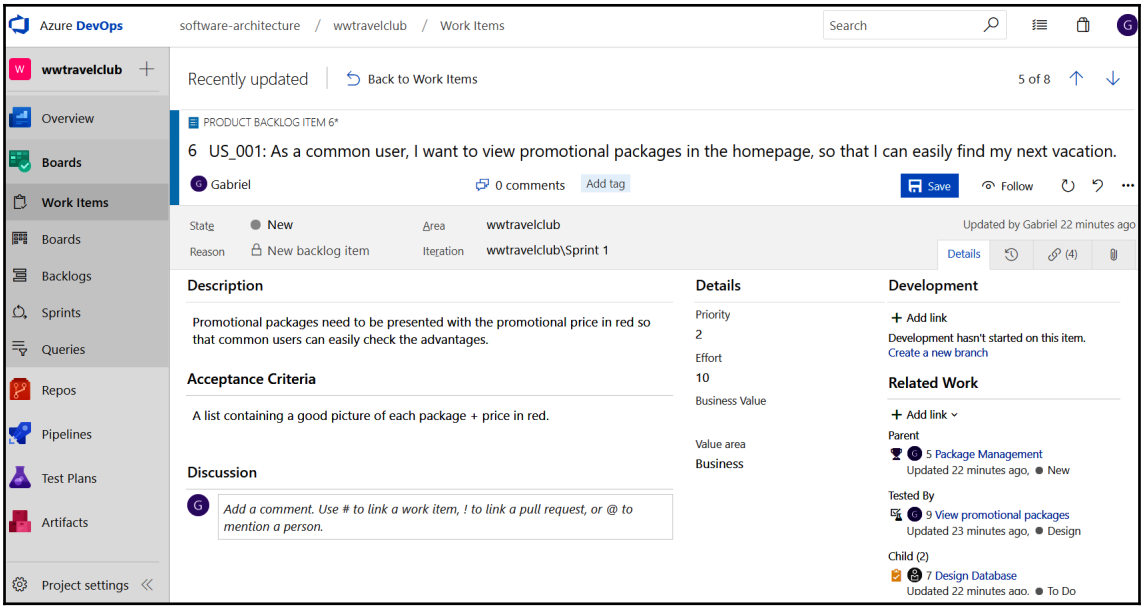

Test Plans
Test Plans
Parameters
Configurations
Runs
Load test

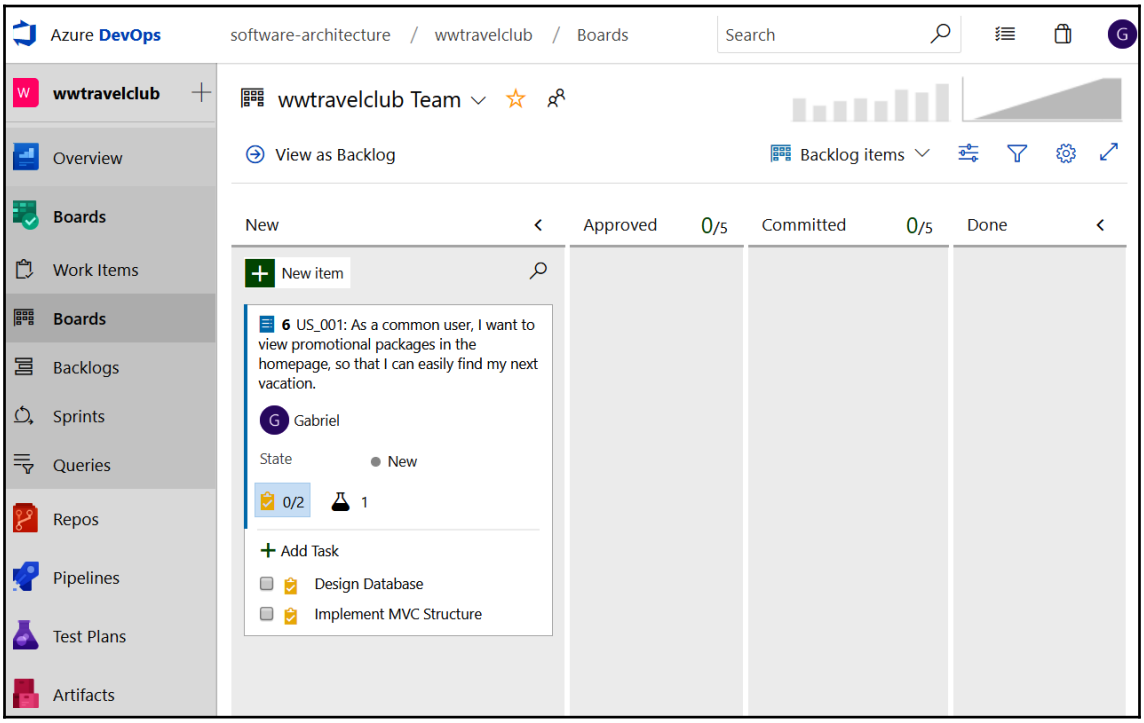

Pipelines
Builds
Releases
Library
Task groups
Deployment groups

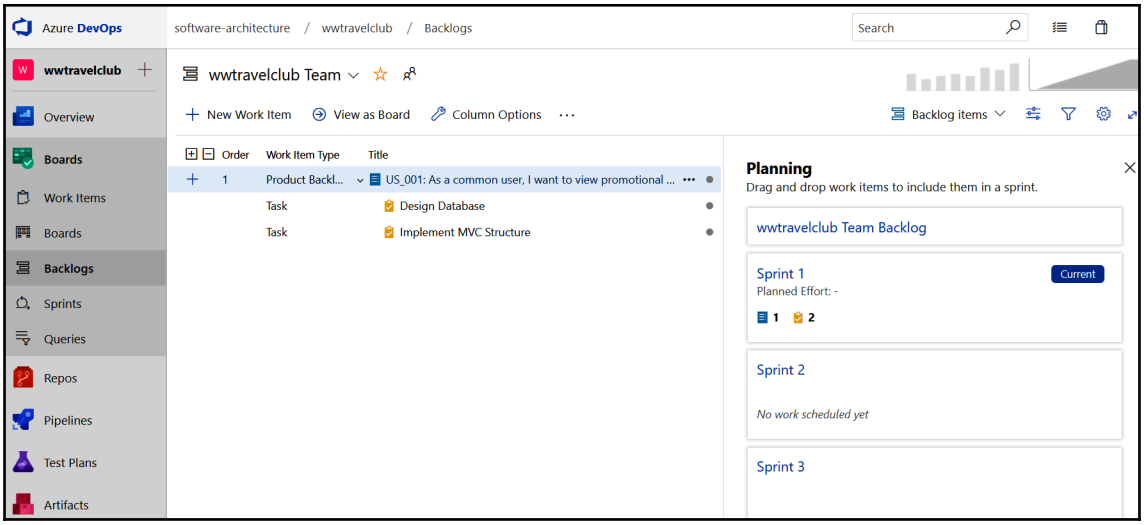

General
Overview
Teams
Security
Notifications
Service hooks
Dashboards
Boards
This project is currently using the Agile process. To customize your work item types, go to the process customization page.
General
Iterations
Areas
Templates
Backlogs
See only the backlogs your team manages.
Backlog navigation levels
Epics
Features
Stories


Azure DevOps
software-architecture / wwtravelclub / Work Items
Search
wwtravelclub
Work Items
Overview
Boards
Work Items
Boards
Backlogs
Sprints
Queries
Repos
Pipelines
Test Plans
Artifacts
Recently updated
New Work Item
Open in Queries
Column Options
Recycle Bin
Filter by keyword
Types
Assigned to
States
Area
Tags
ID
Title
Assigned To
State
Area Path
2 Customer View Gabriel New wwtravelclub
3 Destination Expert View Gabriel New wwtravelclub
4 Administrator View Gabriel New wwtravelclub

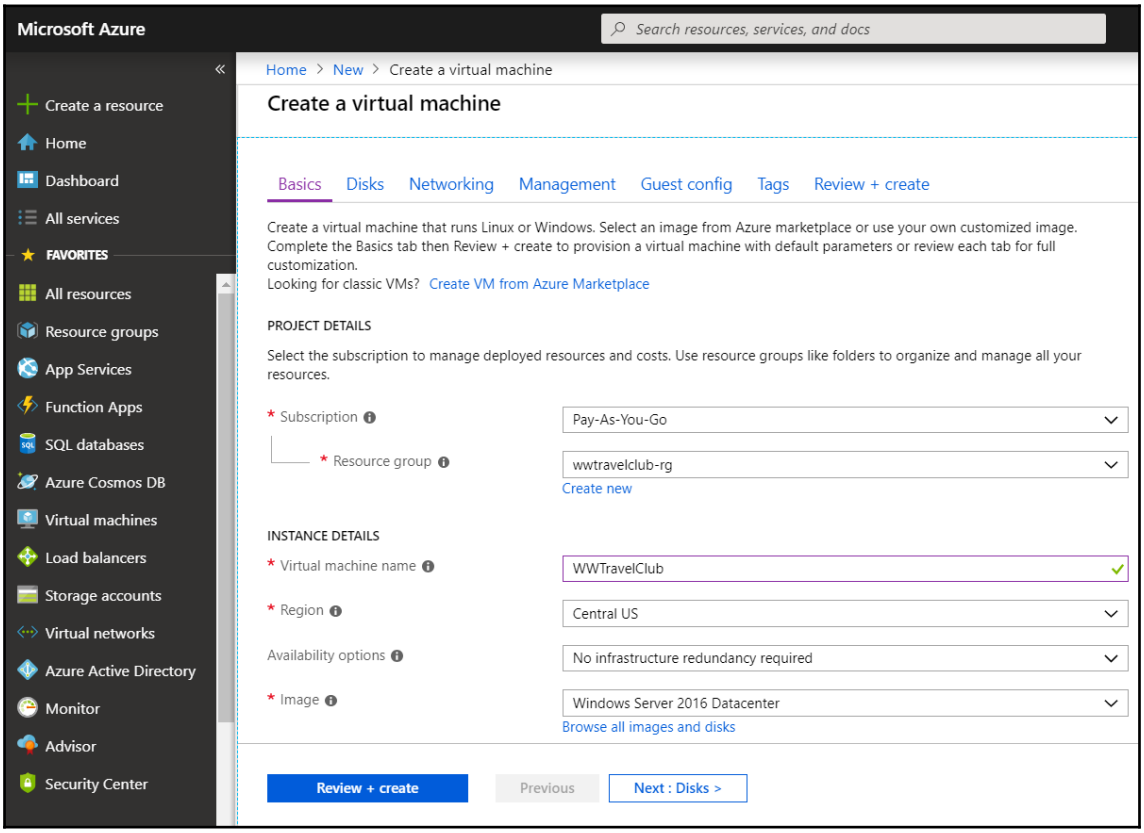

Add link
You are adding a link from:
2 Customer View
Updated 3 minutes ago, New
Link type
Child
Work item type
Feature
Title
Package Management
Comment
OK
Cancel

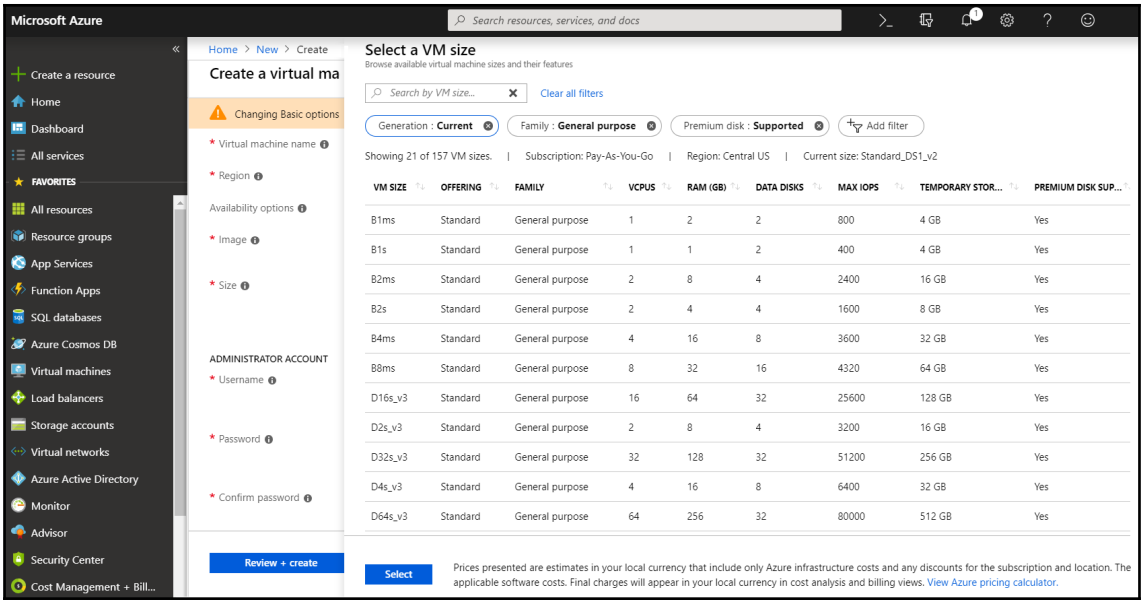

Azure DevOps
software-architecture / wwtravelclub / Work Items
Search
wwtravelclub
Overview
Boards
Work Items
Boards
Backlogs
Sprints
Queries
Repos
Pipelines
Test Plans
Artifacts
Project settings
Recently updated
Back to Work Items
5 of 8
PRODUCT BACKLOG ITEM 6*
6 US_001: As a common user, I want to view promotional packages in the homepage, so that I can easily find my next vacation.
Gabriel
0 comments
Add tag
Save
Follow
State New
Reason New backlog item
Area wwtravelclub
Iteration wwtravelclub\Sprint 1
Updated by Gabriel 22 minutes ago
Details
(4)
Description
Promotional packages need to be presented with the promotional price in red so that common users can easily check the advantages.
Acceptance Criteria
A list containing a good picture of each package + price in red.
Discussion
Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.
Details
Priority
2
Effort
10
Business Value
Value area
Business
Development
Add link
Development hasn't started on this item.
Create a new branch
Related Work
Add link
Parent
5 Package Management
Updated 22 minutes ago, New
Tested By
9 View promotional packages
Updated 23 minutes ago, Design
Child (2)
7 Design Database
Updated 22 minutes ago, To Do

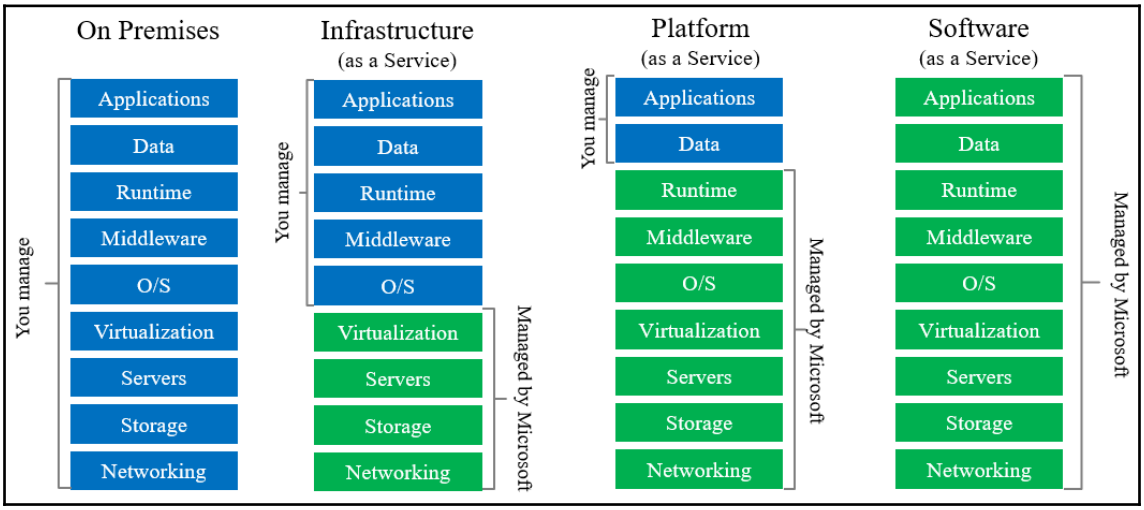

Azure DevOps
software-architecture / wwtravelclub / Boards
Search
wwtravelclub
Overview
Boards
Work Items
Boards
Backlogs
Sprints
Queries
Repos
Pipelines
Test Plans
Artifacts
wwtravelclub Team
View as Backlog
Backlog items
New
Approved 0/5
Committed 0/5
Done
New item
6 US_001: As a common user, I want to view promotional packages in the homepage, so that I can easily find my next vacation.
Gabriel
State New
0/2
1
Add Task
Design Database
Implement MVC Structure

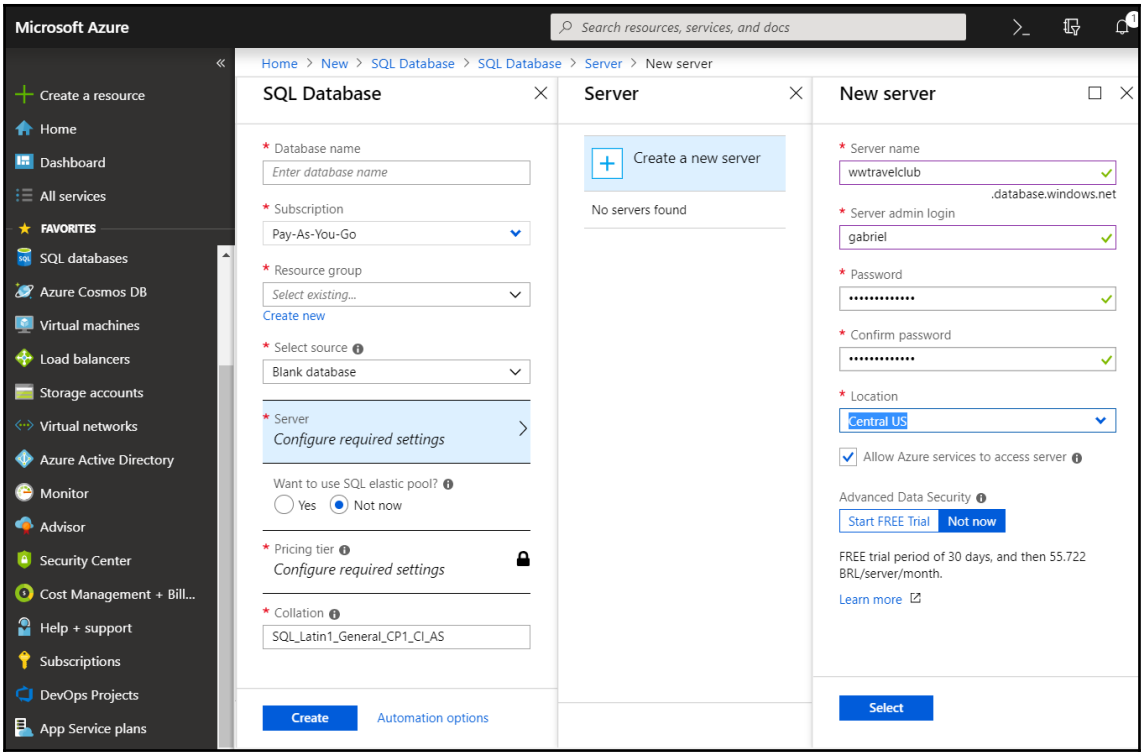

Azure DevOps
software-architecture / wwtravelclub / Backlogs
Search
wwtravelclub
wwtravelclub Team
Overview
Boards
Work Items
Boards
Backlogs
Sprints
Queries
Repos
Pipelines
Test Plans
Artifacts
New Work Item
View as Board
Column Options
Backlog items
Order
Work Item Type
Title
1
Product Backl...
US_001: As a common user, I want to view promotional ...
Task
Design Database
Task
Implement MVC Structure
Planning
Drag and drop work items to include them in a sprint.
wwtravelclub Team Backlog
Sprint 1
Current
Planned Effort: -
1
2
Sprint 2
No work scheduled yet
Sprint 3

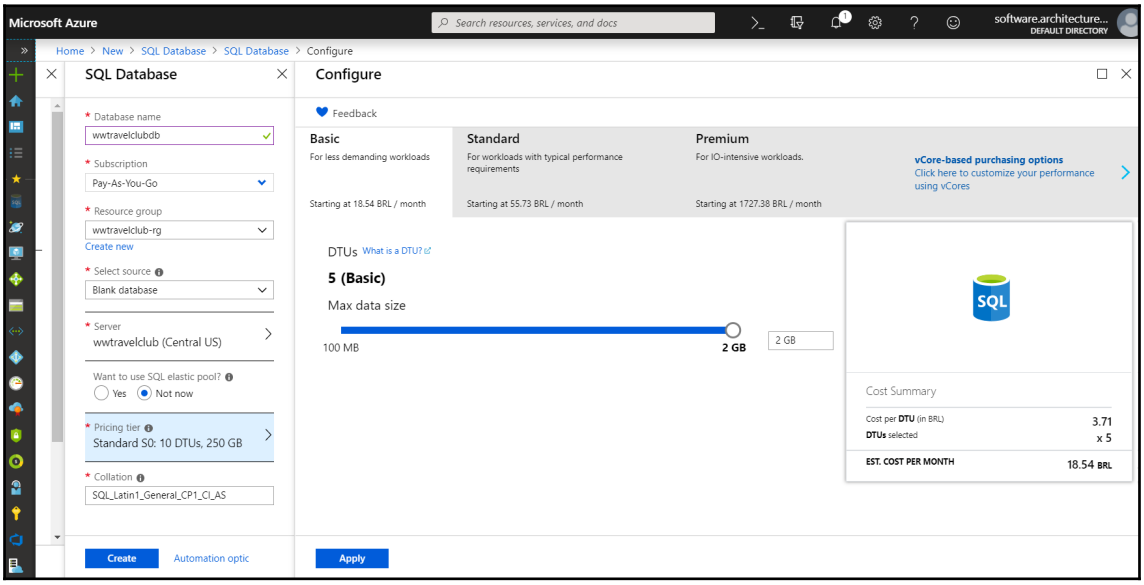
Chapter 4: Deciding the Best Cloud-Based Solution

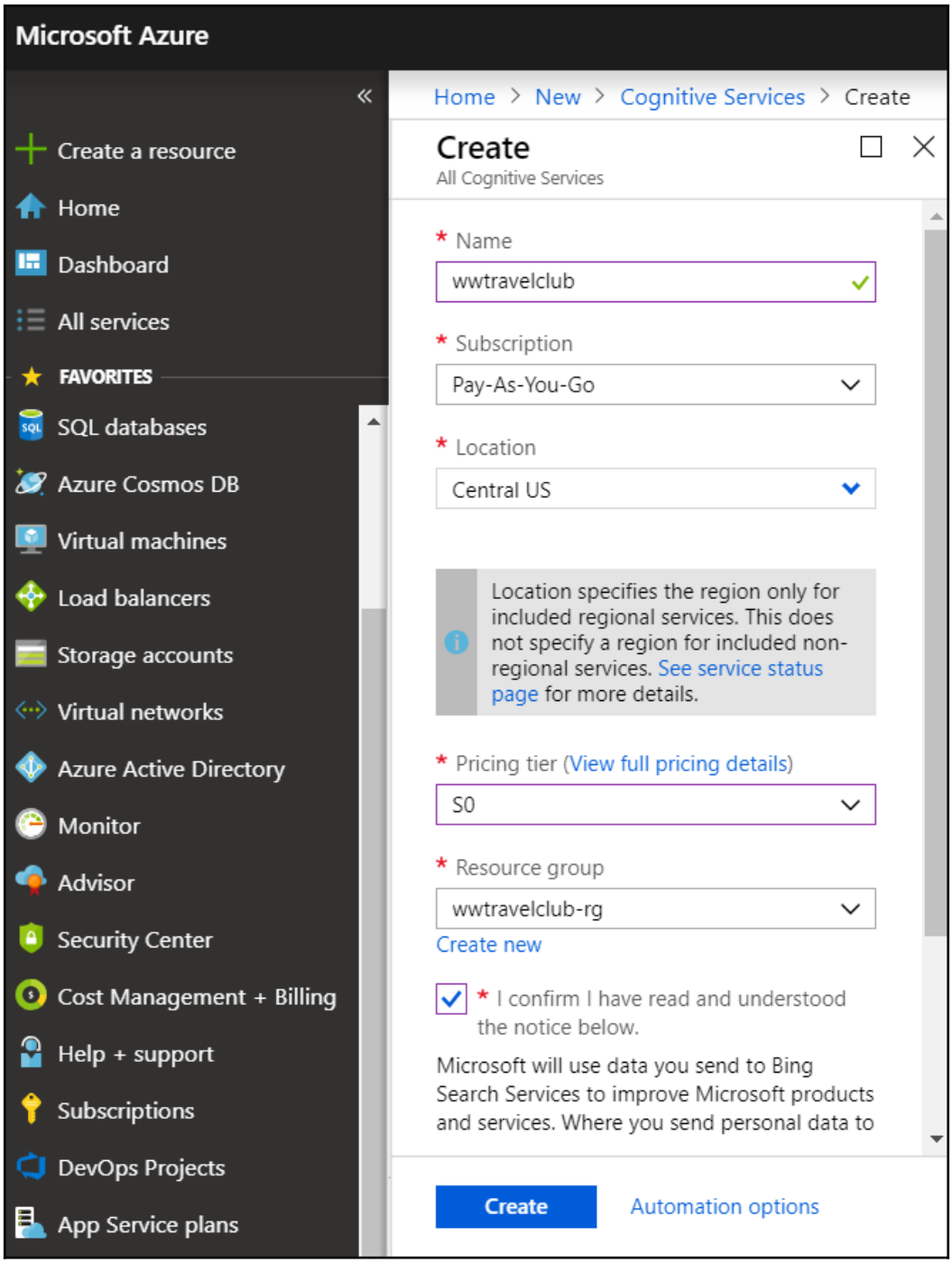


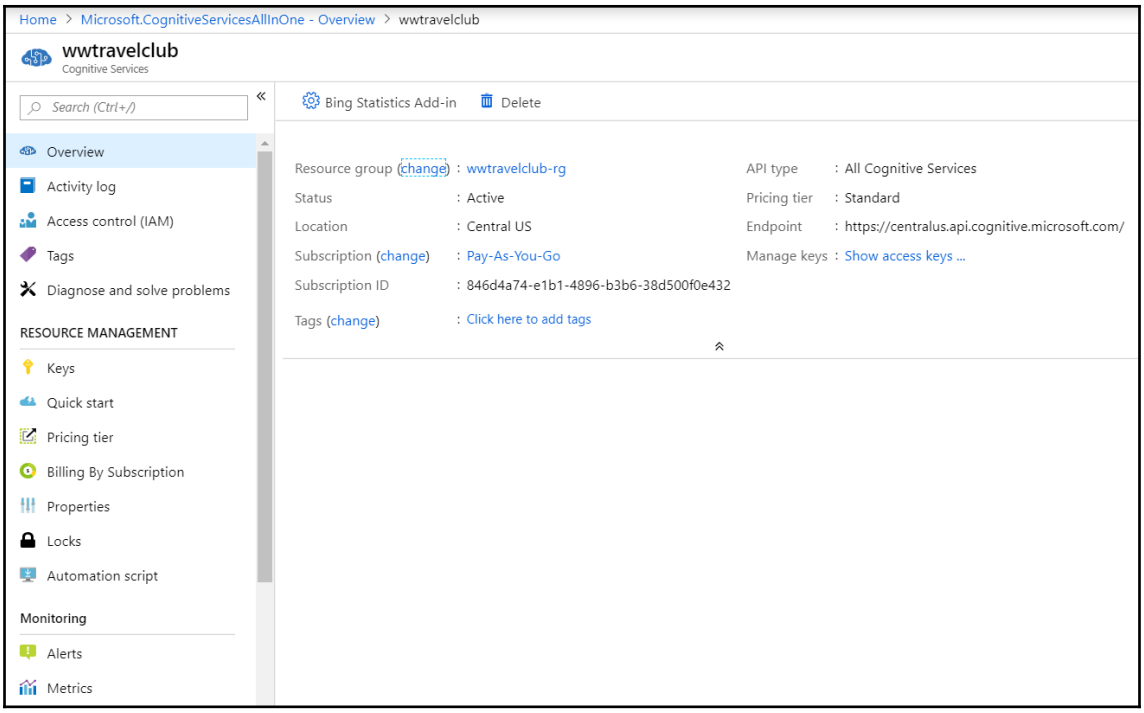

Microsoft Azure
Search resources, services, and docs
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function Apps
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Bill...
Home > New > Create
Create a virtual ma
Changing Basic options
* Virtual machine name
* Region
Availability options
* Image
* Size
ADMINISTRATOR ACCOUNT
* Username
* Password
* Confirm password
Review + create
Select a VM size
Browse available virtual machine sizes and their features
Search by VM size...
Clear all filters
Generation : Current
Family : General purpose
Premium disk : Supported
Add filter
Showing 21 of 157 VM sizes. | Subscription: Pay-As-You-Go | Region: Central US | Current size: Standard_DS1_v2
VM SIZE | OFFERING | FAMILY | VCPUS | RAM (GB) | DATA DISKS | MAX IOPS | TEMPORARY STOR... | PREMIUM DISK SUP...
B1ms Standard General purpose 1 2 2 800 4 GB Yes
B1s Standard General purpose 1 1 2 400 4 GB Yes
B2ms Standard General purpose 2 8 4 2400 16 GB Yes
B2s Standard General purpose 2 4 4 1600 8 GB Yes
B4ms Standard General purpose 4 16 8 3600 32 GB Yes
B8ms Standard General purpose 8 32 16 4320 64 GB Yes
D16s_v3 Standard General purpose 16 64 32 25600 128 GB Yes
D2s_v3 Standard General purpose 2 8 4 3200 16 GB Yes
D32s_v3 Standard General purpose 32 128 32 51200 256 GB Yes
D4s_v3 Standard General purpose 4 16 8 6400 32 GB Yes
D64s_v3 Standard General purpose 64 256 32 80000 512 GB Yes
Select
Prices presented are estimates in your local currency that include only Azure infrastructure costs and any discounts for the subscription and location. The applicable software costs. Final charges will appear in your local currency in cost analysis and billing views. View Azure pricing calculator.

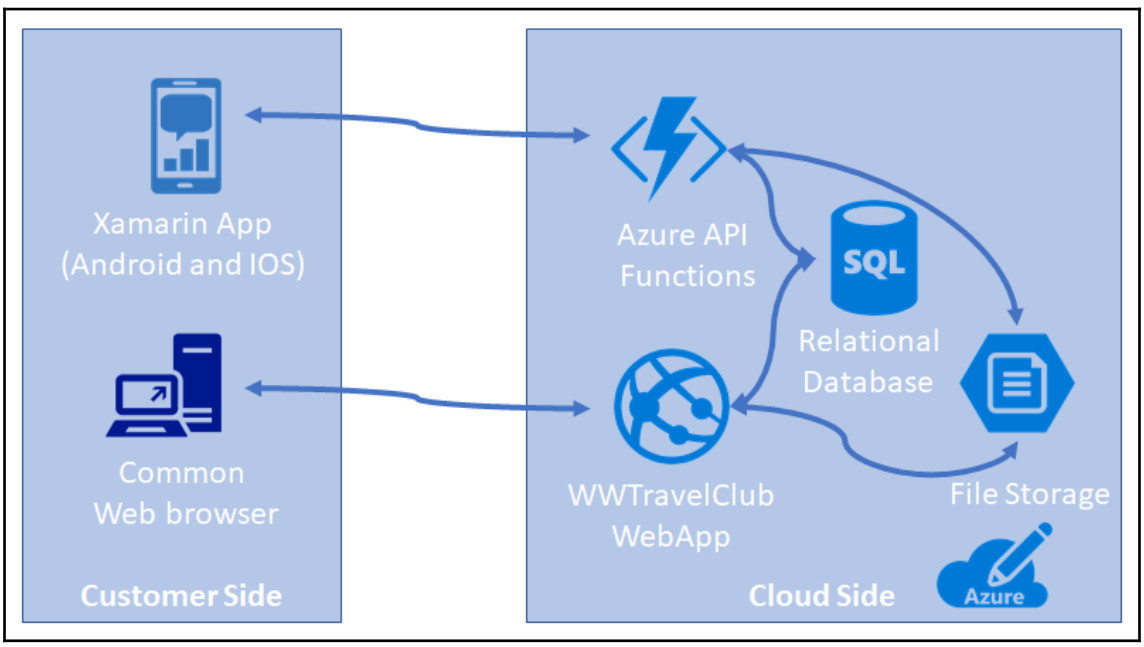

On Premises
Infrastructure (as a Service)
Platform (as a Service)
Software (as a Service)
You manage
Managed by Microsoft
Applications
Data
Runtime
Middleware
O/S
Virtualization
Servers
Storage
Networking


Microsoft Azure
Search resources, services, and docs
Home > New > SQL Database > SQL Database > Server > New server
Create a resource
Home
Dashboard
All services
FAVORITES
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Bill...
Help + support
Subscriptions
DevOps Projects
App Service plans
SQL Database
* Database name
Enter database name
* Subscription
Pay-As-You-Go
* Resource group
Select existing...
Create new
* Select source
Blank database
* Server
Configure required settings
Want to use SQL elastic pool?
Yes
Not now
* Pricing tier
Configure required settings
* Collation
SQL_Latin1_General_CP1_CI_AS
Create
Automation options
Server
Create a new server
No servers found
New server
* Server name
wwtravelclub
.database.windows.net
* Server admin login
gabriel
* Password
* Confirm password
* Location
Central US
Allow Azure services to access server
Advanced Data Security
Start FREE Trial
Not now
FREE trial period of 30 days, and then 55.722 BRL/server/month.
Learn more
Select

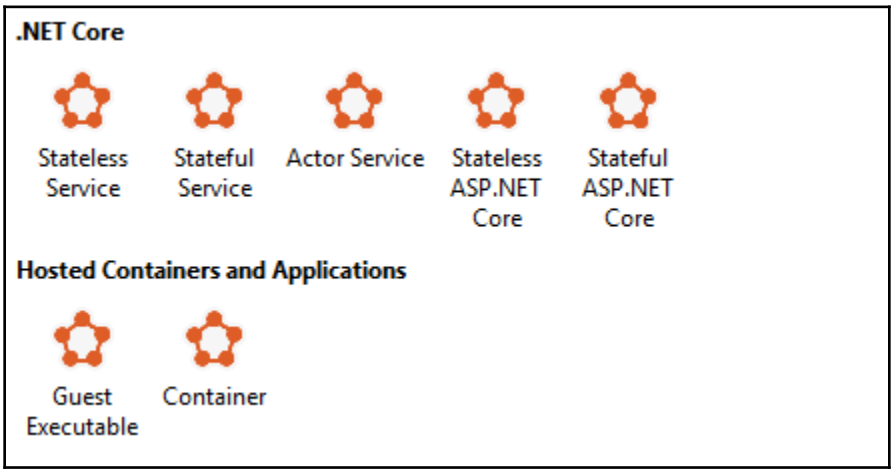

Microsoft Azure
Search resources, services, and docs
software.architecture...
DEFAULT DIRECTORY
Home > New > SQL Database > SQL Database > Configure
SQL Database
* Database name
wwtravelclubdb
* Subscription
Pay-As-You-Go
* Resource group
wwtravelclub-rg
Create new
* Select source
Blank database
* Server
wwtravelclub (Central US)
Want to use SQL elastic pool?
Yes
Not now
* Pricing tier
Standard S0: 10 DTUs, 250 GB
* Collation
SQL_Latin1_General_CP1_CI_AS
Create
Automation optic
Configure
Feedback
Basic
For less demanding workloads
Starting at 18.54 BRL / month
Standard
For workloads with typical performance requirements
Starting at 55.73 BRL / month
Premium
For IO-intensive workloads.
Starting at 1727.38 BRL / month
vCore-based purchasing options
Click here to customize your performance using vCores
DTUs
What is a DTU?
5 (Basic)
Max data size
100 MB
2 GB
2 GB
Cost Summary
Cost per DTU (in BRL)
3.71
DTUs selected
x 5
EST. COST PER MONTH
18.54 BRL
Apply

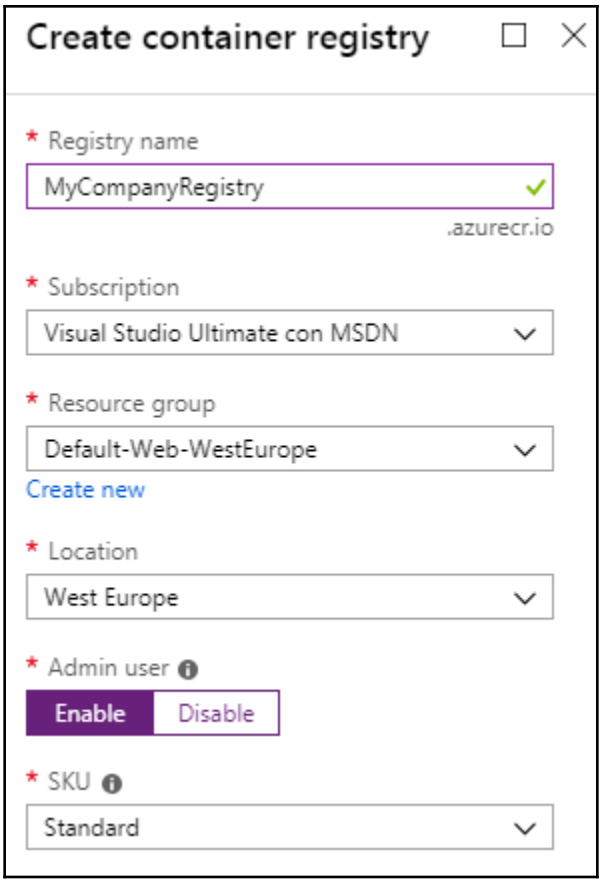

Microsoft Azure
Create a resource
Home
Dashboard
All services
FAVORITES
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billing
Help + support
Subscriptions
DevOps Projects
App Service plans
Home > New > Cognitive Services > Create
Create
All Cognitive Services
* Name
wwtravelclub
* Subscription
Pay-As-You-Go
* Location
Central US
Location specifies the region only for included regional services. This does not specify a region for included non-regional services. See service status page for more details.
* Pricing tier (View full pricing details)
S0
* Resource group
wwtravelclub-rg
Create new
* I confirm I have read and understood the notice below.
Microsoft will use data you send to Bing Search Services to improve Microsoft products and services. Where you send personal data to
Create
Automation options

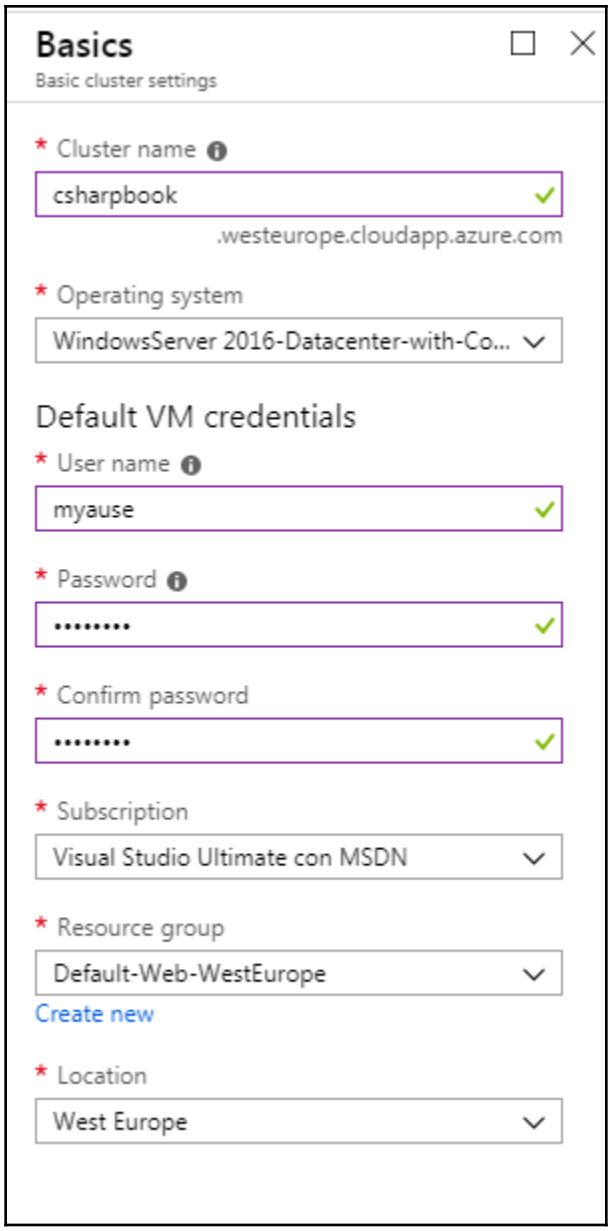

Home > Microsoft.CognitiveServicesAllInOne - Overview > wwtravelclub
wwtravelclub
Cognitive Services
Search (Ctrl+/)
Bing Statistics Add-in
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
RESOURCE MANAGEMENT
Keys
Quick start
Pricing tier
Billing By Subscription
Properties
Locks
Automation script
Monitoring
Alerts
Metrics
Resource group (change) : wwtravelclub-rg
Status : Active
Location : Central US
Subscription (change) : Pay-As-You-Go
Subscription ID : 846d4a74-e1b1-4896-b3b6-38d500f0e432
Tags (change) : Click here to add tags
API type : All Cognitive Services
Pricing tier : Standard
Endpoint : https://centralus.api.cognitive.microsoft.com/
Manage keys : Show access keys ...

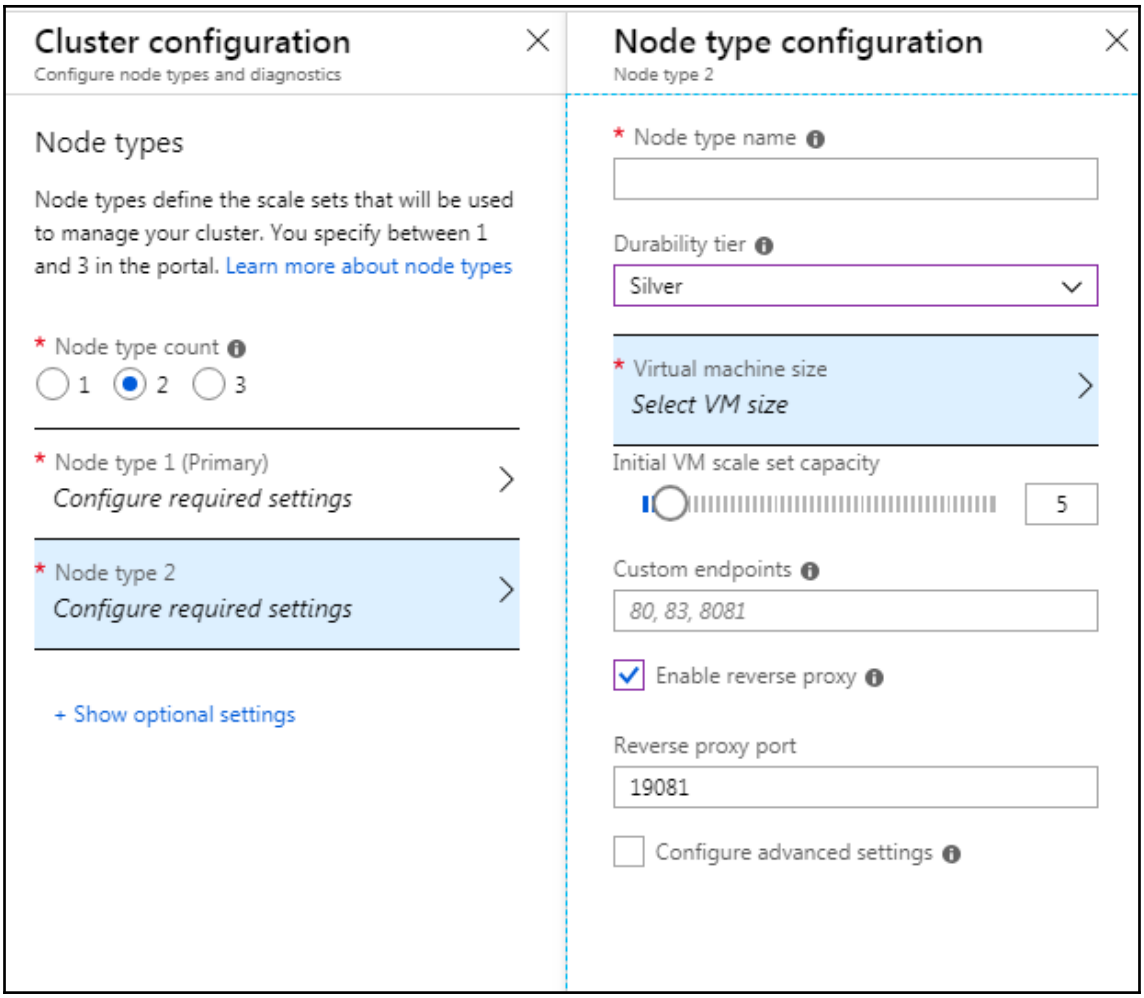

Xamarin App
(Android and IOS)
Common
Web browser
Customer Side
Azure API
Functions
SQL
Relational
Database
WWTravelClub
WebApp
File Storage
Azure
Cloud Side

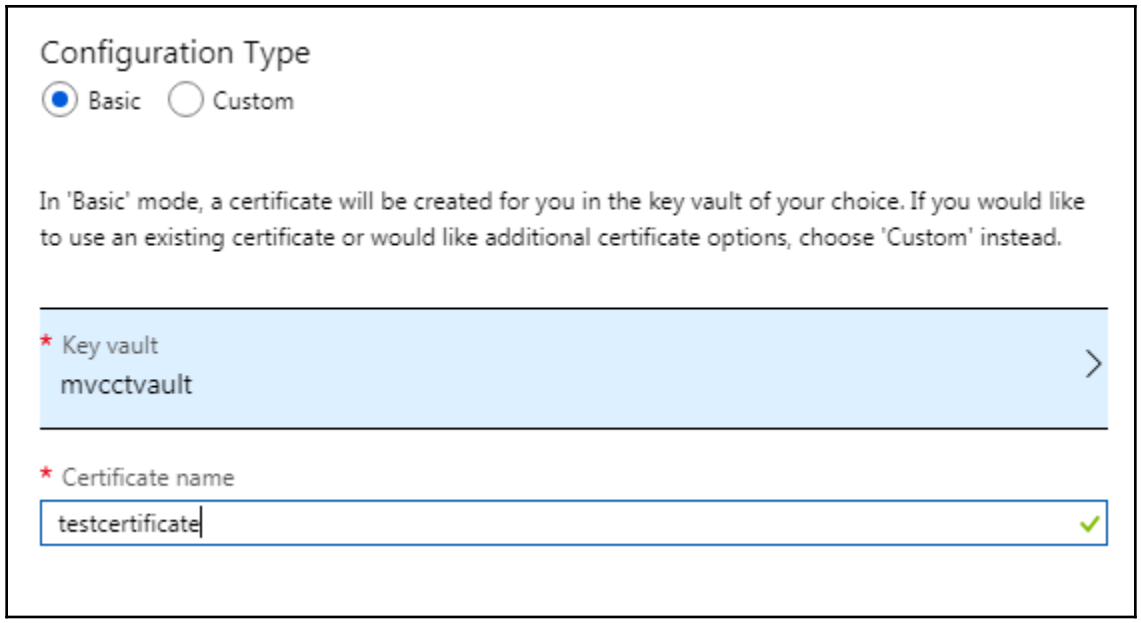
Chapter 5: Applying a Microservice Architecture to Your Enterprise Application

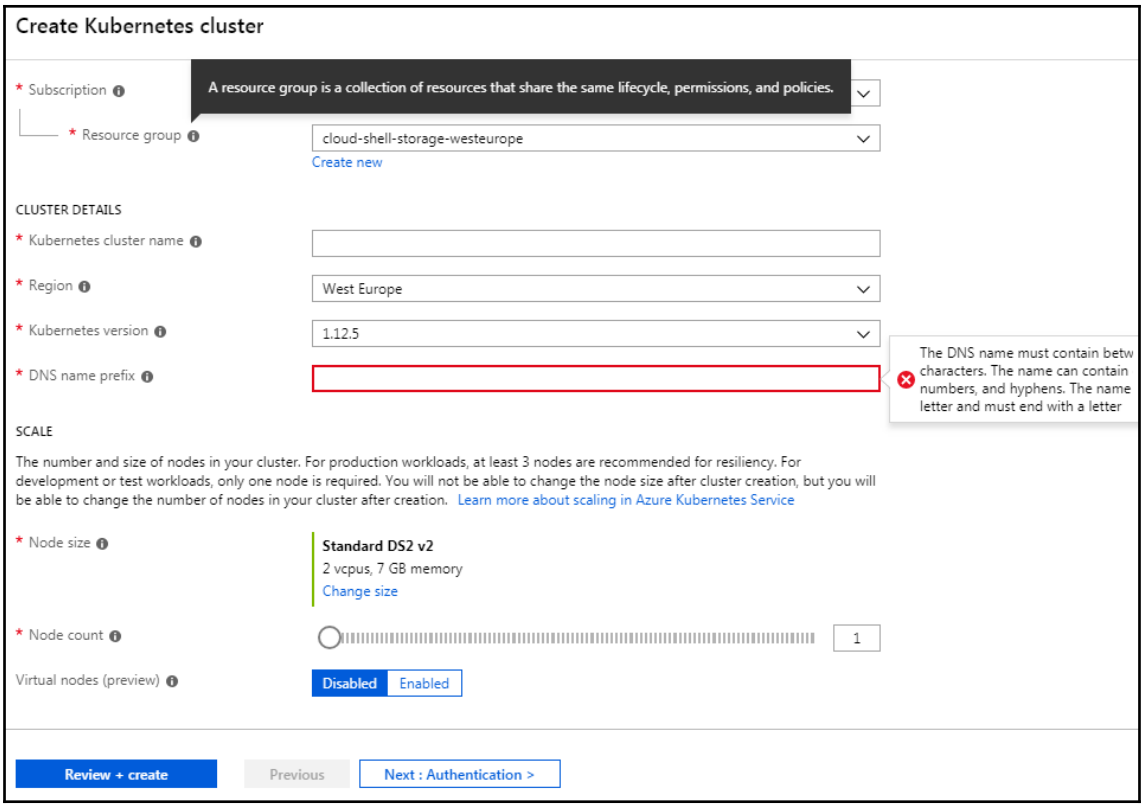



Create container registry
* Registry name
MyCompanyRegistry
.azurecr.io
* Subscription
Visual Studio Ultimate con MSDN
* Resource group
Default-Web-WestEurope
Create new
* Location
West Europe
* Admin user
Enable
Disable
* SKU
Standard

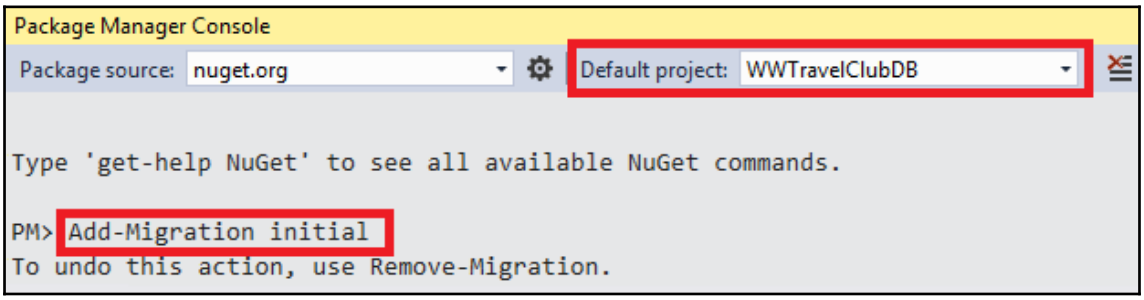

Basics
Basic cluster settings
* Cluster name
csharpbook
.westeurope.cloudapp.azure.com
* Operating system
WindowsServer 2016-Datacenter-with-Co...
Default VM credentials
* User name
myause
* Password
* Confirm password
* Subscription
Visual Studio Ultimate con MSDN
* Resource group
Default-Web-WestEurope
Create new
* Location
West Europe

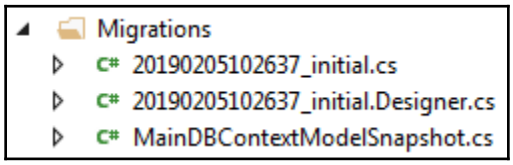

Cluster configuration
Configure node types and diagnostics
Node types
Node types define the scale sets that will be used to manage your cluster. You specify between 1 and 3 in the portal. Learn more about node types
* Node type count
1 2 3
* Node type 1 (Primary)
Configure required settings
* Node type 2
Configure required settings
+ Show optional settings
Node type configuration
Node type 2
* Node type name
Durability tier
Silver
* Virtual machine size
Select VM size
Initial VM scale set capacity
5
Custom endpoints
80, 83, 8081
Enable reverse proxy
Reverse proxy port
19081
Configure advanced settings


Configuration Type
Basic
Custom
In 'Basic' mode, a certificate will be created for you in the key vault of your choice. If you would like to use an existing certificate or would like additional certificate options, choose 'Custom' instead.
* Key vault
mvcctvault
* Certificate name
testcertificate

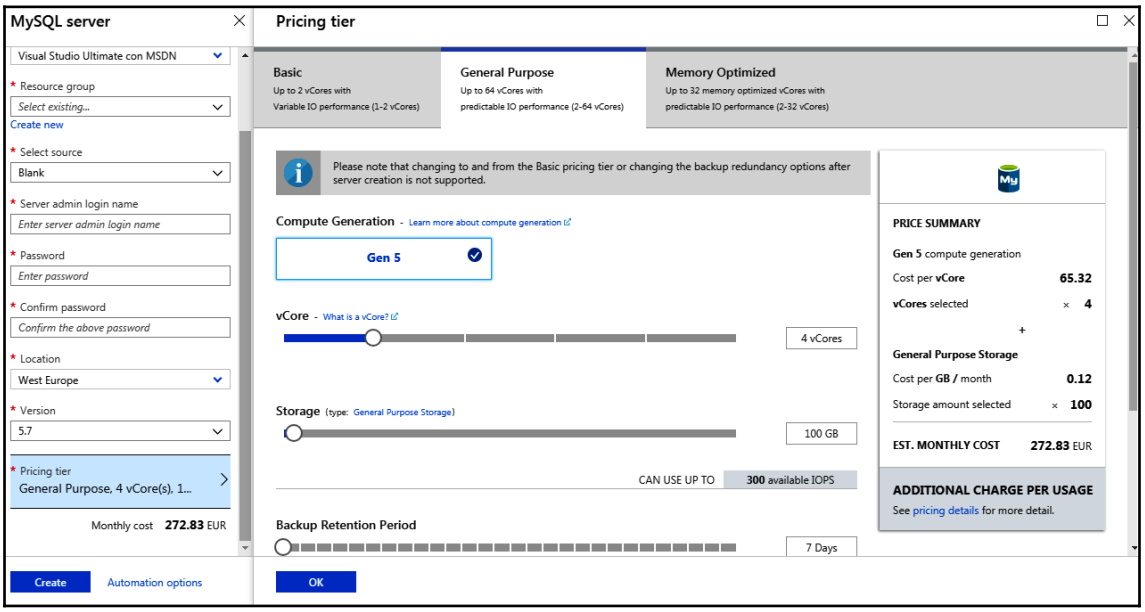

Create Kubernetes cluster
* Subscription
A resource group is a collection of resources that share the same lifecycle, permissions, and policies.
* Resource group
cloud-shell-storage-westeurope
Create new
CLUSTER DETAILS
* Kubernetes cluster name
* Region
West Europe
* Kubernetes version
1.12.5
* DNS name prefix
The DNS name must contain betw
characters. The name can contain
numbers, and hyphens. The name
letter and must end with a letter
SCALE
The number and size of nodes in your cluster. For production workloads, at least 3 nodes are recommended for resiliency. For development or test workloads, only one node is required. You will not be able to change the node size after cluster creation, but you will be able to change the number of nodes in your cluster after creation. Learn more about scaling in Azure Kubernetes Service
* Node size
Standard DS2 v2
2 vcpus, 7 GB memory
Change size
* Node count
1
Virtual nodes (preview)
Disabled
Enabled
Review + create
Previous
Next : Authentication >

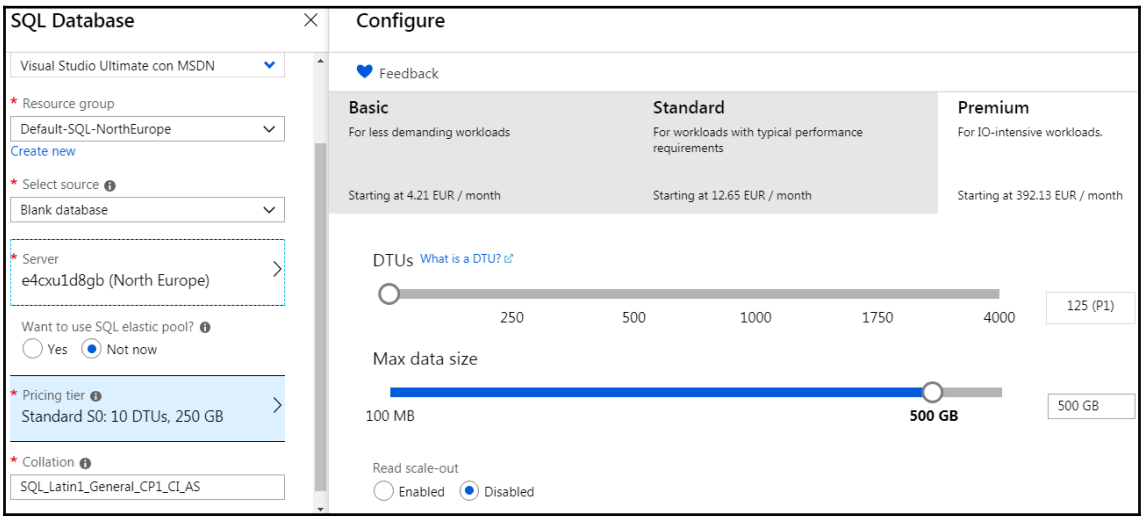
Chapter 6: Interacting with Data in C# - Entity Framework Core

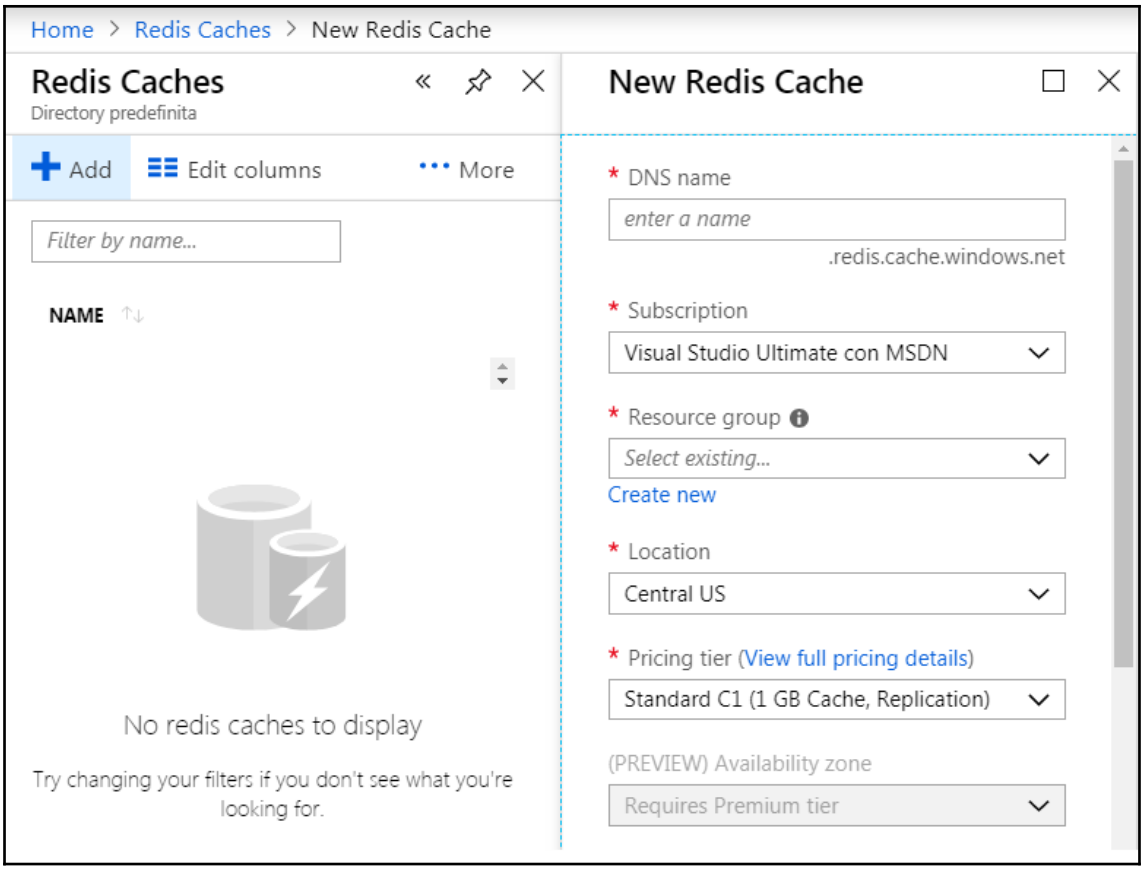


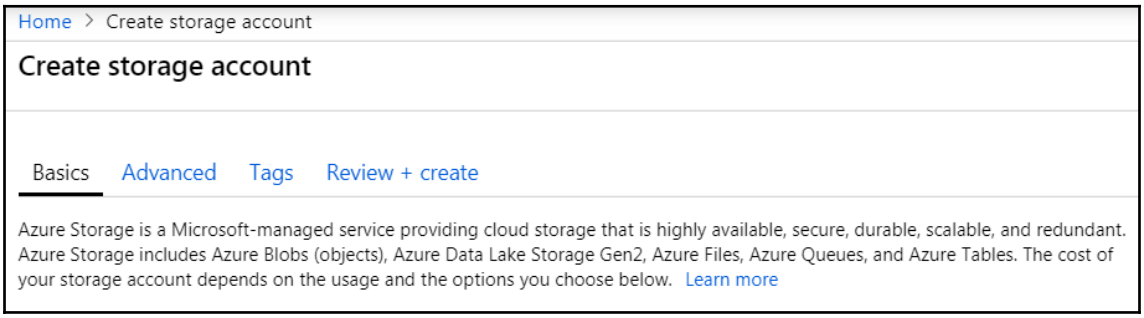


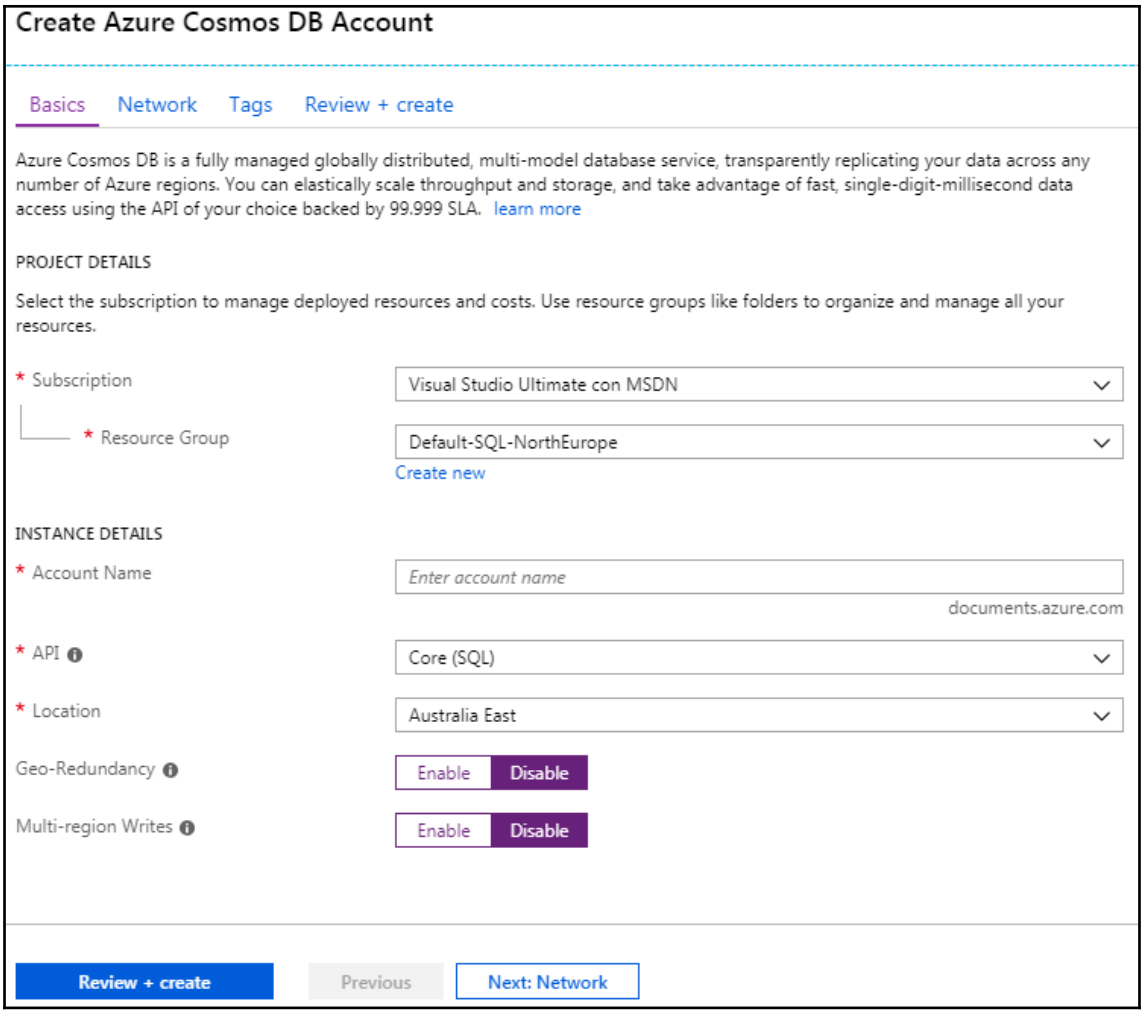
Chapter 7: How to Choose Your Data Storage in the Cloud



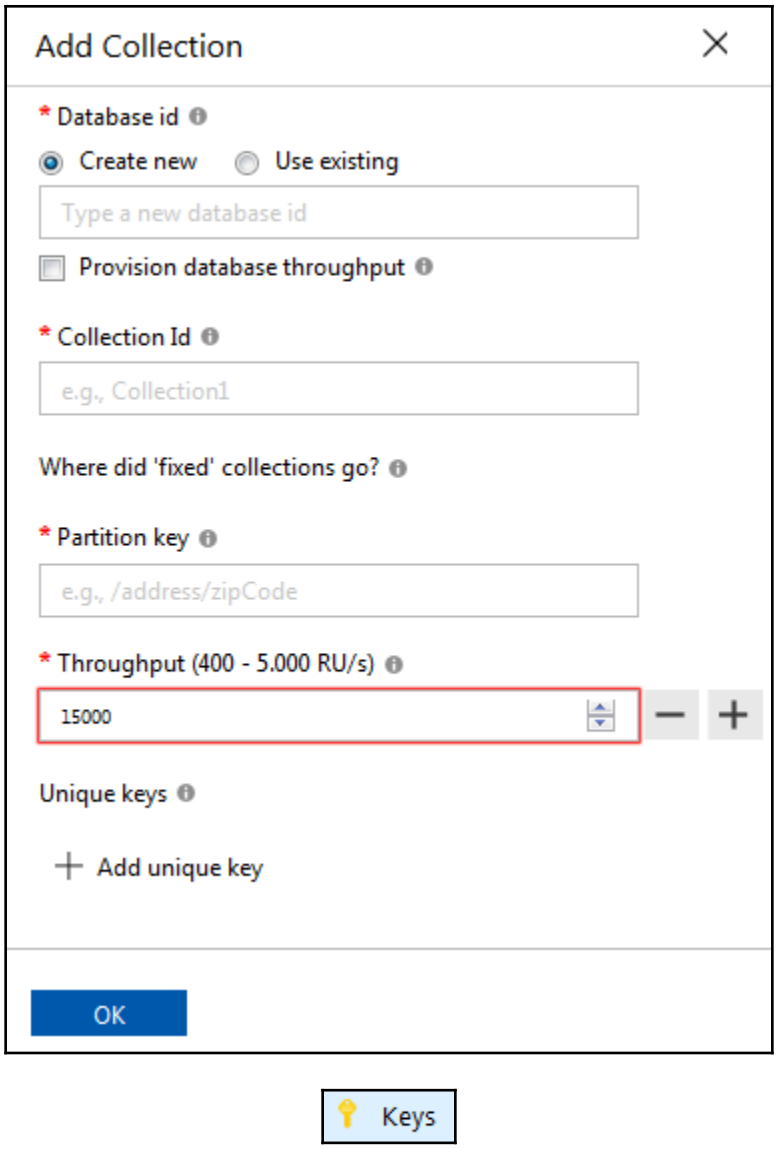



Home > Redis Caches > New Redis Cache
Redis Caches
Directory predefinita
Add
Edit columns
More
Filter by name...
NAME
No redis caches to display
Try changing your filters if you don't see what you're looking for.
New Redis Cache
* DNS name
enter a name
.redis.cache.windows.net
* Subscription
Visual Studio Ultimate con MSDN
* Resource group
Select existing...
Create new
* Location
Central US
* Pricing tier (View full pricing details)
Standard C1 (1 GB Cache, Replication)
(PREVIEW) Availability zone
Requires Premium tier

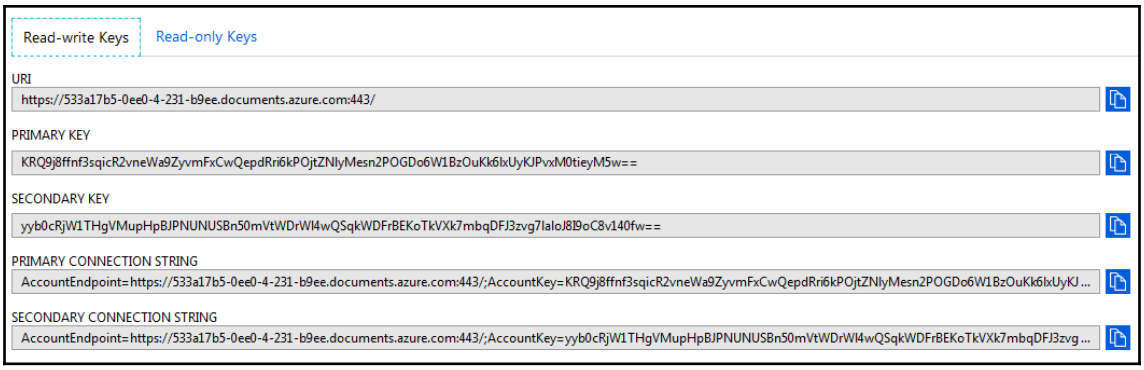

Home > Create storage account
Create storage account
Basics
Advanced
Tags
Review + create
Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. Learn more

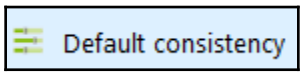

Create Azure Cosmos DB Account
Basics
Network
Tags
Review + create
Azure Cosmos DB is a fully managed globally distributed, multi-model database service, transparently replicating your data across any number of Azure regions. You can elastically scale throughput and storage, and take advantage of fast, single-digit-millisecond data access using the API of your choice backed by 99.999 SLA. learn more
PROJECT DETAILS
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
* Subscription
Visual Studio Ultimate con MSDN
* Resource Group
Default-SQL-NorthEurope
Create new
INSTANCE DETAILS
* Account Name
Enter account name
documents.azure.com
* API
Core (SQL)
* Location
Australia East
Geo-Redundancy
Enable
Disable
Multi-region Writes
Enable
Disable
Review + create
Previous
Next: Network

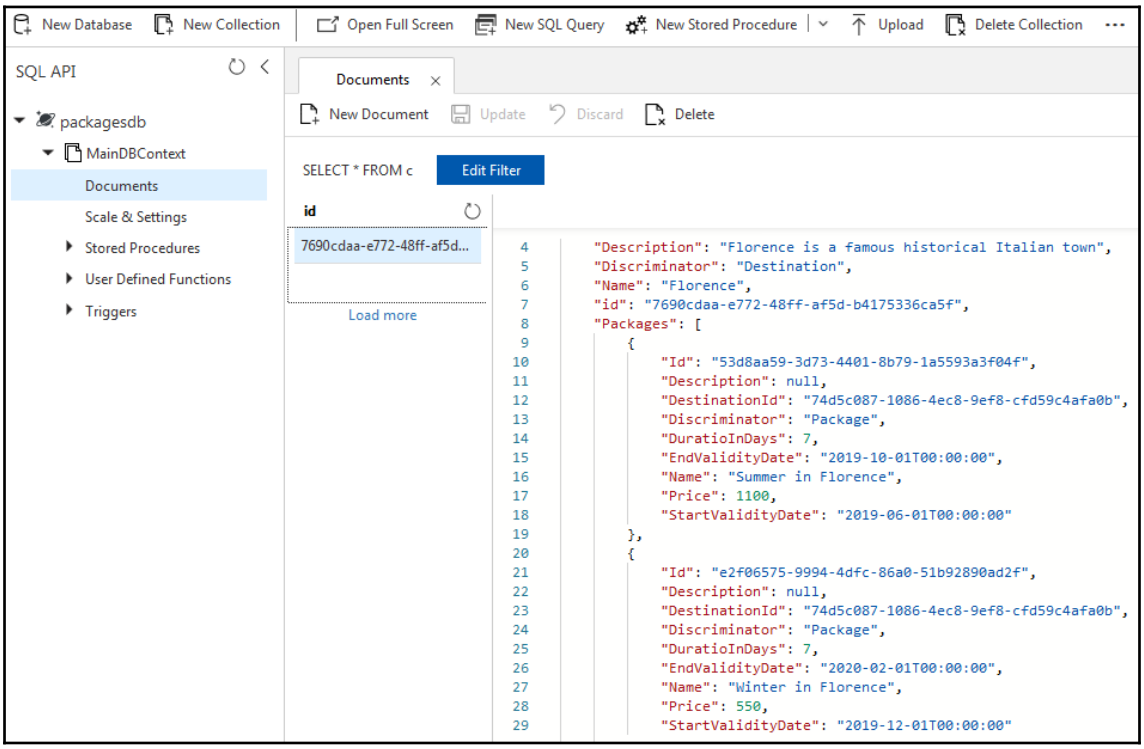

Data Explorer


Add Collection
* Database id
Create new
Use existing
Type a new database id
Provision database throughput
* Collection Id
e.g., Collection1
Where did 'fixed' collections go?
* Partition key
e.g., /address/zipCode
* Throughput (400 - 5.000 RU/s)
15000
Unique keys
Add unique key
OK

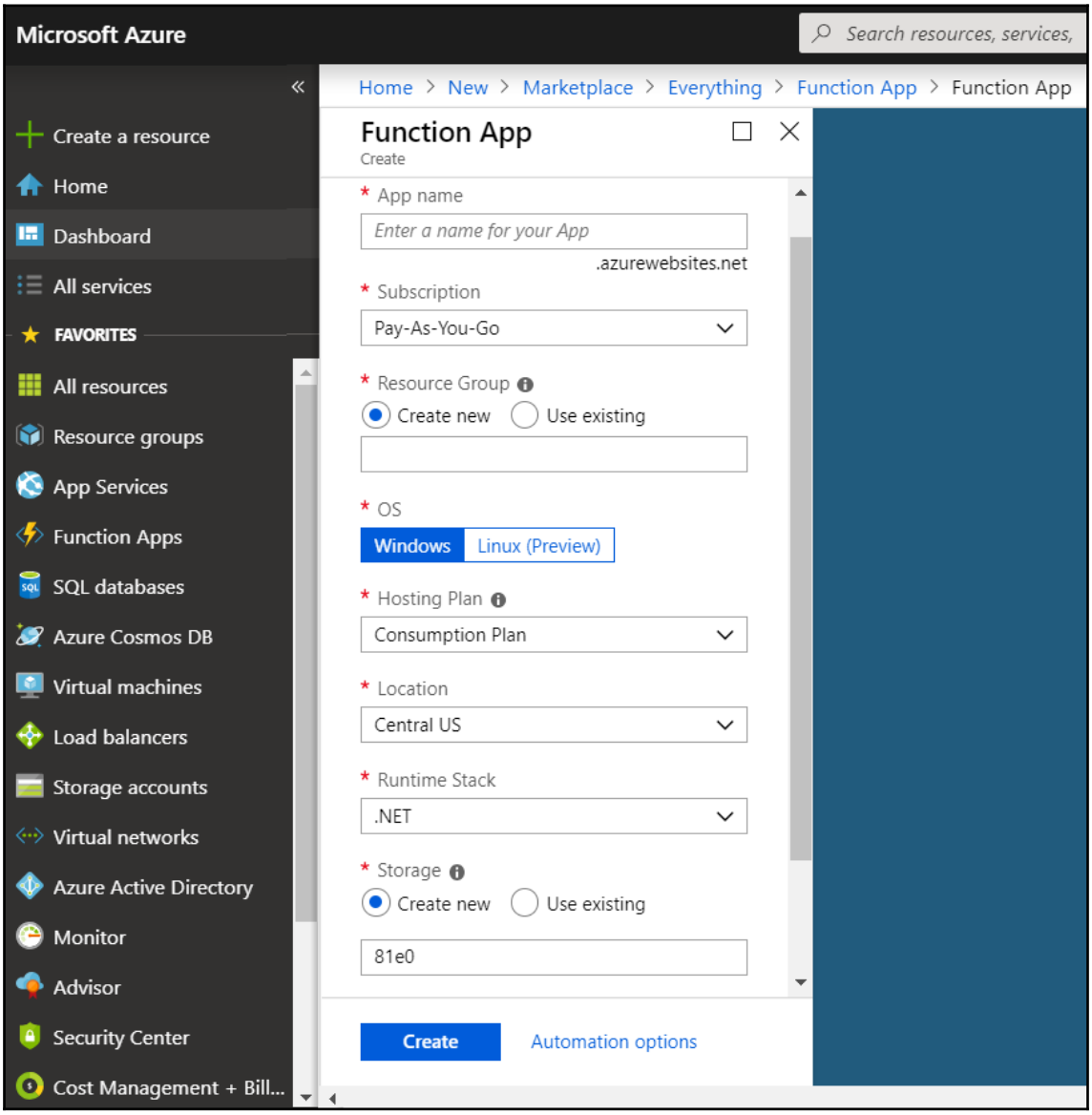
Keys

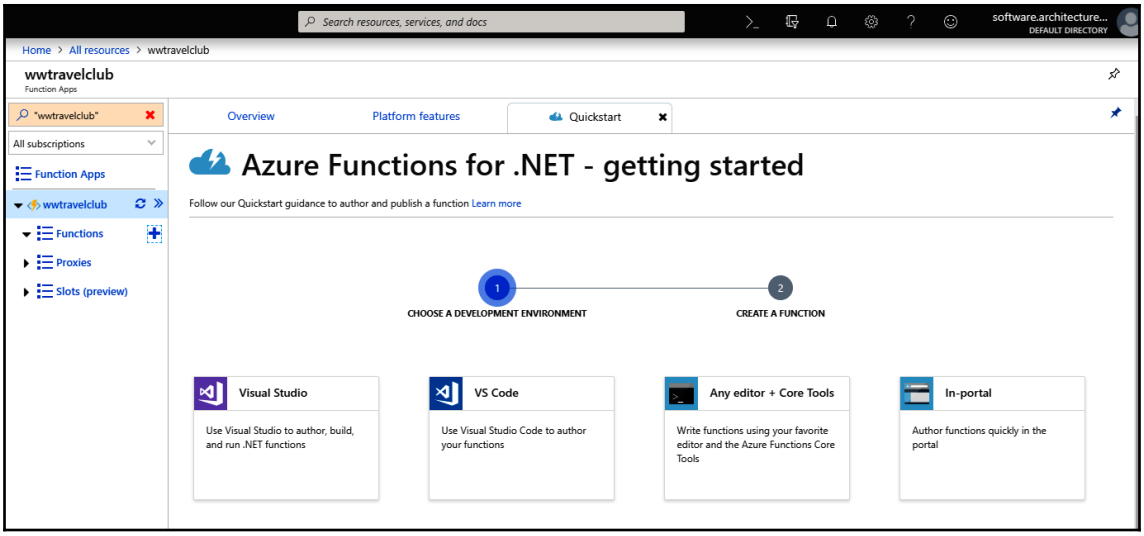

Read-write Keys
Read-only Keys
URI
https://533a17b5-0ee0-4-231-b9ee.documents.azure.com:443/
PRIMARY KEY
KRQ9j8ffnf3sqicR2vneWa9ZyvmFxCwQepdRri6kPOjtZNlyMesn2POGDo6W1BzOuKk6lxUyKJPvxM0tieyM5w==
SECONDARY KEY
yyb0cRjW1THgVMupHpBJPNUNUSBn50mVtWDrWI4wQSqkWDFrBEKoTkVXk7mbqDFJ3zvg7laloJ8l9oC8v140fw==
PRIMARY CONNECTION STRING
AccountEndpoint=https://533a17b5-0ee0-4-231-b9ee.documents.azure.com:443/;AccountKey=KRQ9j8ffnf3sqicR2vneWa9ZyvmFxCwQepdRri6kPOjtZNlyMesn2POGDo6W1BzOuKk6lxUyKJ ...
SECONDARY CONNECTION STRING
AccountEndpoint=https://533a17b5-0ee0-4-231-b9ee.documents.azure.com:443/;AccountKey=yyb0cRjW1THgVMupHpBJPNUNUSBn50mVtWDrWI4wQSqkWDFrBEKoTkVXk7mbqDFJ3zvg ...

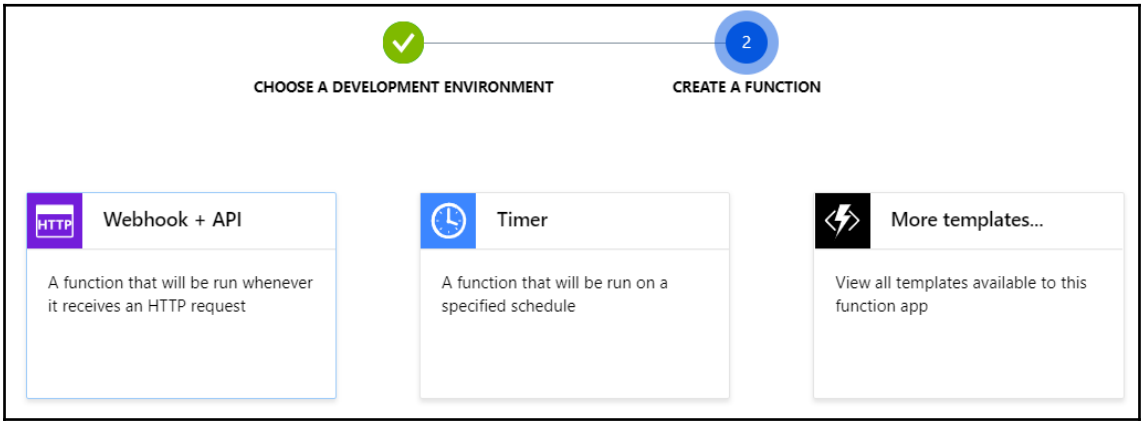

Default consistency

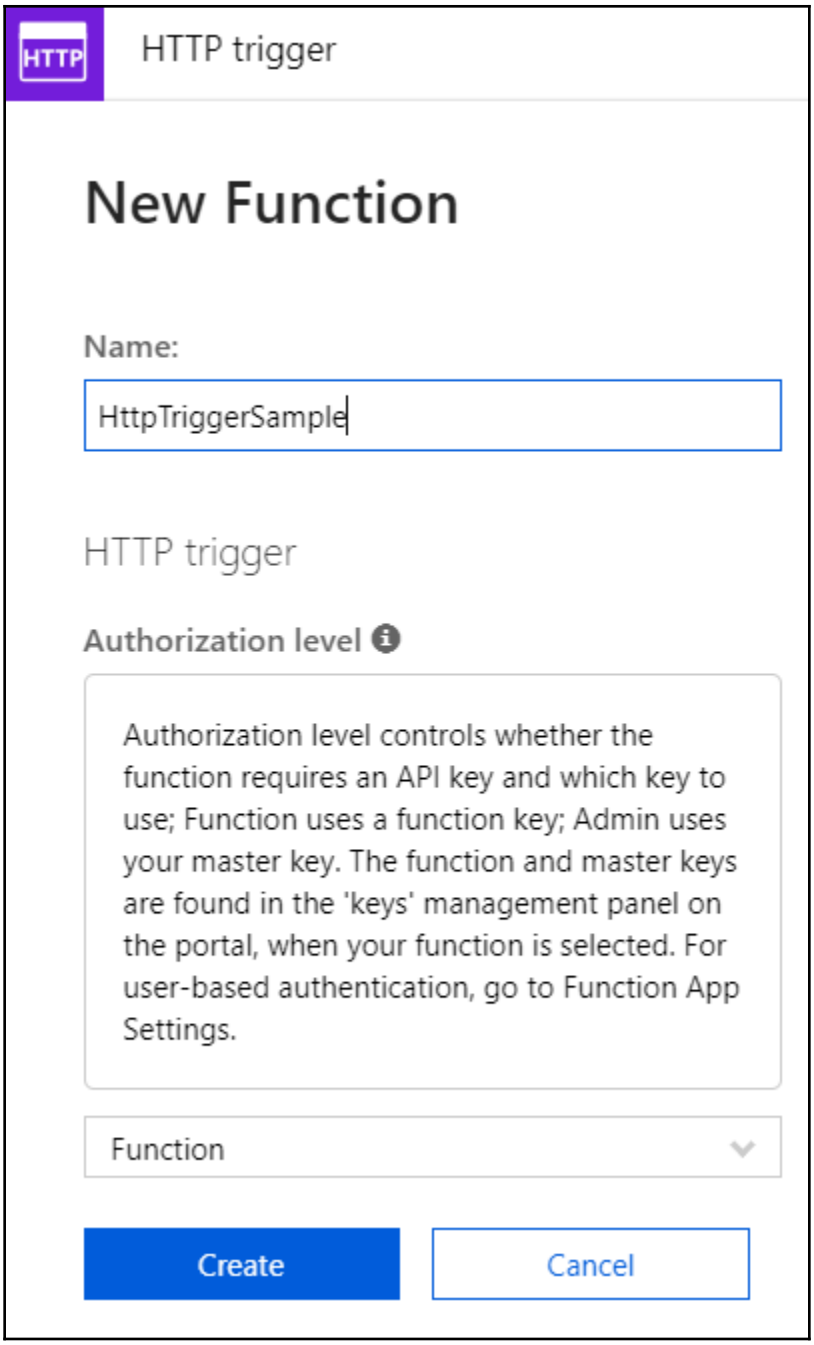

New Database
New Collection
Open Full Screen
New SQL Query
New Stored Procedure
Upload
Delete Collection
SQL API
packagesdb
MainDBContext
Documents
Scale & Settings
Stored Procedures
User Defined Functions
Triggers
Documents
New Document
Update
Discard
Delete
SELECT * FROM c
Edit Filter
id
7690cdaa-e772-48ff-af5d...
Load more
"Description": "Florence is a famous historical Italian town",
"Discriminator": "Destination",
"Name": "Florence",
"id": "7690cdaa-e772-48ff-af5d-b4175336ca5f",
"Packages": [
{
"Id": "53d8aa59-3d73-4401-8b79-1a5593a3f04f",
"Description": null,
"DestinationId": "74d5c087-1086-4ec8-9ef8-cfd59c4afa0b",
"Discriminator": "Package",
"DuratioInDays": 7,
"EndValidityDate": "2019-10-01T00:00:00",
"Name": "Summer in Florence",
"Price": 1100,
"StartValidityDate": "2019-06-01T00:00:00"
},
{
"Id": "e2f06575-9994-4dfc-86a0-51b92890ad2f",
"Description": null,
"DestinationId": "74d5c087-1086-4ec8-9ef8-cfd59c4afa0b",
"Discriminator": "Package",
"DuratioInDays": 7,
"EndValidityDate": "2020-02-01T00:00:00",
"Name": "Winter in Florence",
"Price": 550,
"StartValidityDate": "2019-12-01T00:00:00"

Chapter 8: Working with Azure Functions

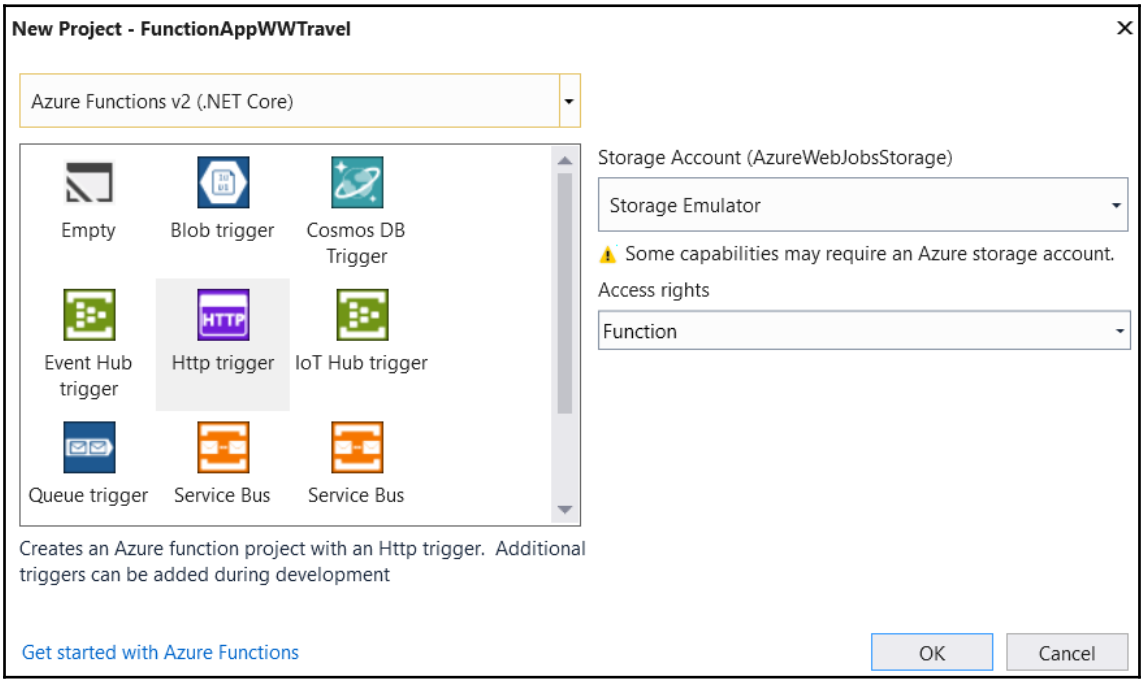



Search resources, services, and docs
software.architecture...
DEFAULT DIRECTORY
Home > All resources > wwtravelclub
wwtravelclub
Function Apps
"wwtravelclub"
All subscriptions
Function Apps
wwtravelclub
Functions
Proxies
Slots (preview)
Overview
Platform features
Quickstart
Azure Functions for .NET - getting started
Follow our Quickstart guidance to author and publish a function Learn more
1
CHOOSE A DEVELOPMENT ENVIRONMENT
2
CREATE A FUNCTION
Visual Studio
Use Visual Studio to author, build, and run .NET functions
VS Code
Use Visual Studio Code to author your functions
Any editor + Core Tools
Write functions using your favorite editor and the Azure Functions Core Tools
In-portal
Author functions quickly in the portal

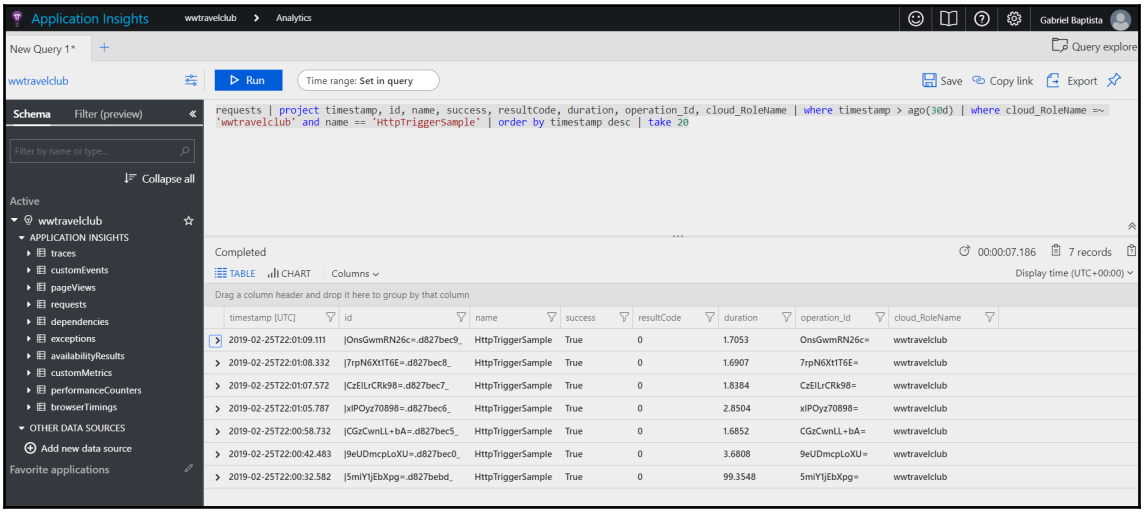

CHOOSE A DEVELOPMENT ENVIRONMENT
2
CREATE A FUNCTION
HTTP
Webhook + API
A function that will be run whenever it receives an HTTP request
Timer
A function that will be run on a specified schedule
More templates...
View all templates available to this function app

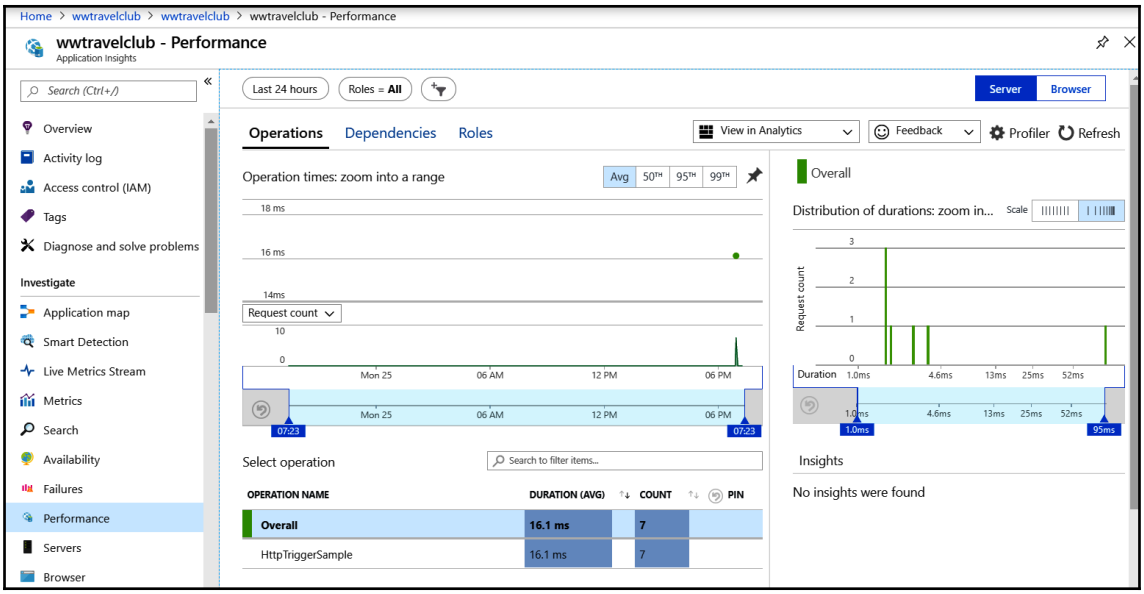

HTTP
HTTP trigger
New Function
Name:
HttpTriggerSample
HTTP trigger
Authorization level
Authorization level controls whether the function requires an API key and which key to use; Function uses a function key; Admin uses your master key. The function and master keys are found in the 'keys' management panel on the portal, when your function is selected. For user-based authentication, go to Function App Settings.
Function
Create
Cancel

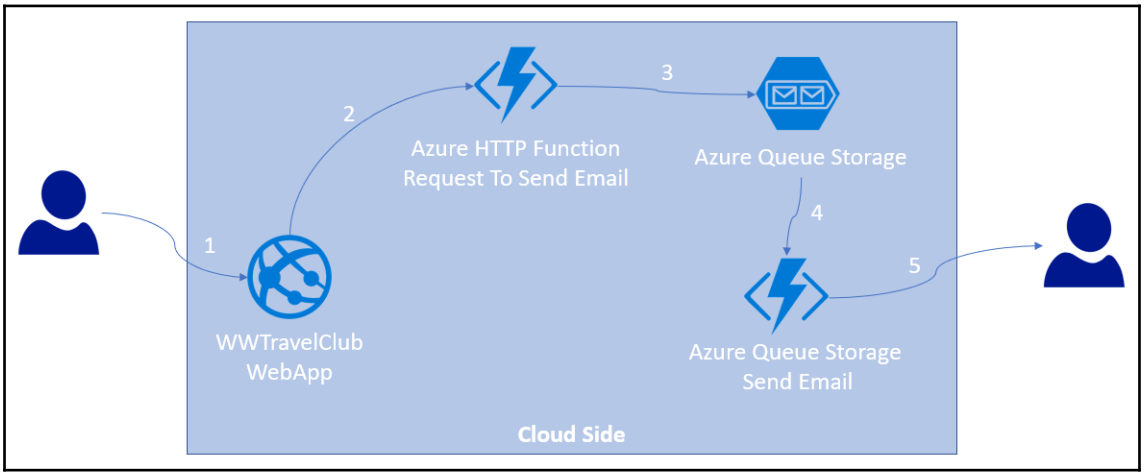

Home > All resources > wwtravelclub - HttpTriggerSample
wwtravelclub - HttpTriggerSample
Function Apps
"wwtravelclub"
All subscriptions
Function Apps
wwtravelclub
Functions
HttpTriggerSample
Integrate
Manage
Monitor
Proxies
Slots (preview)
run.csx
Save
Run
</> Get function URL
View files
Test
#r "Newtonsoft.Json"
using System.Net;
using Microsoft.AspNetCore.Mvc;
using Microsoft.Extensions.Primitives;
using Newtonsoft.Json;
public static async Task<IActionResult> Run(HttpRequest req, ILogger log)
{
log.LogInformation("C# HTTP trigger function processed a request.");
string name = req.Query["name"];
string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
dynamic data = JsonConvert.DeserializeObject(requestBody);
name = name ?? data?.name;
return name != null
? (ActionResult)new OkObjectResult($"Hello, {name}")
: new BadRequestObjectResult("Please pass a name on the query string or in the request body");
}
Logs
Console

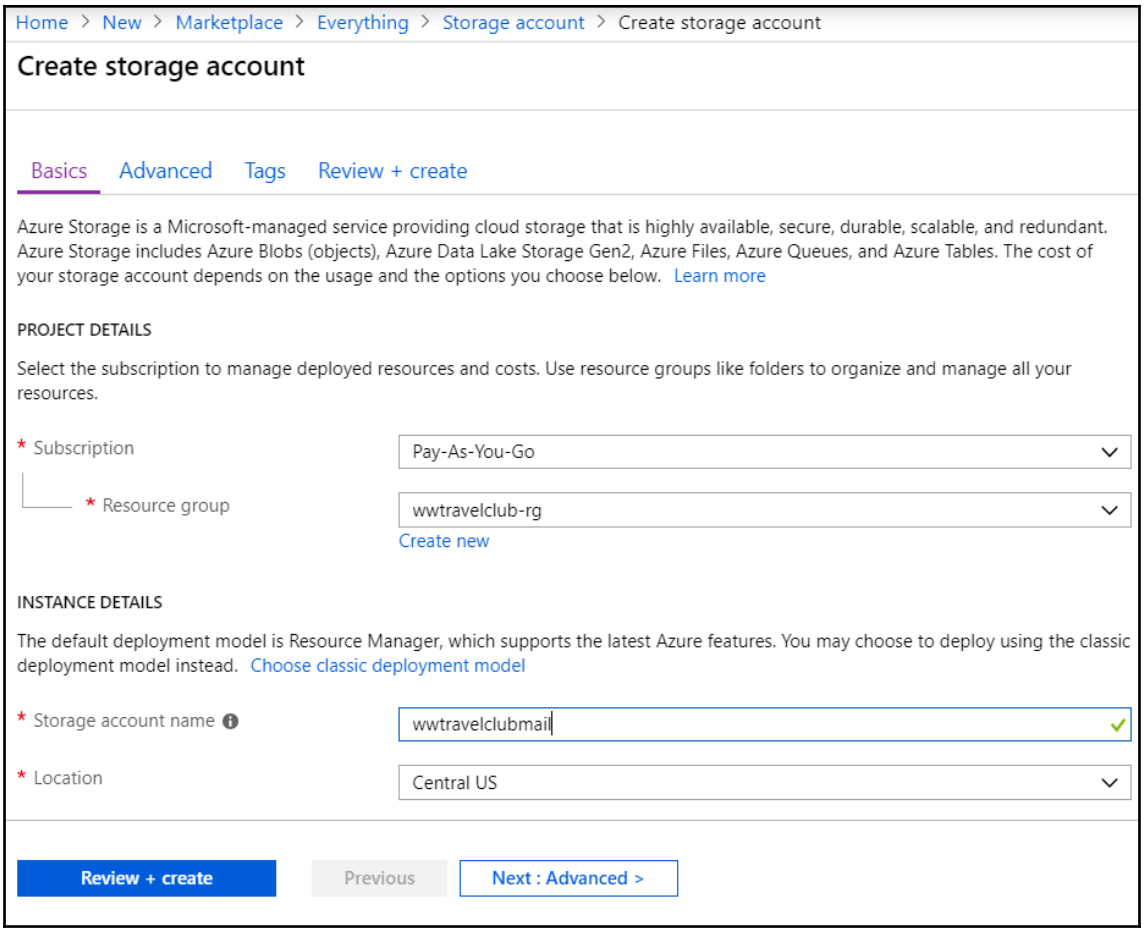

New Project - FunctionAppWWTravel
Azure Functions v2 (.NET Core)
Empty
Blob trigger
Cosmos DB Trigger
Event Hub trigger
Http trigger
IoT Hub trigger
Queue trigger
Service Bus
Service Bus
Storage Account (AzureWebJobsStorage)
Storage Emulator
Some capabilities may require an Azure storage account.
Access rights
Function
Creates an Azure function project with an Http trigger. Additional triggers can be added during development
Get started with Azure Functions
OK
Cancel

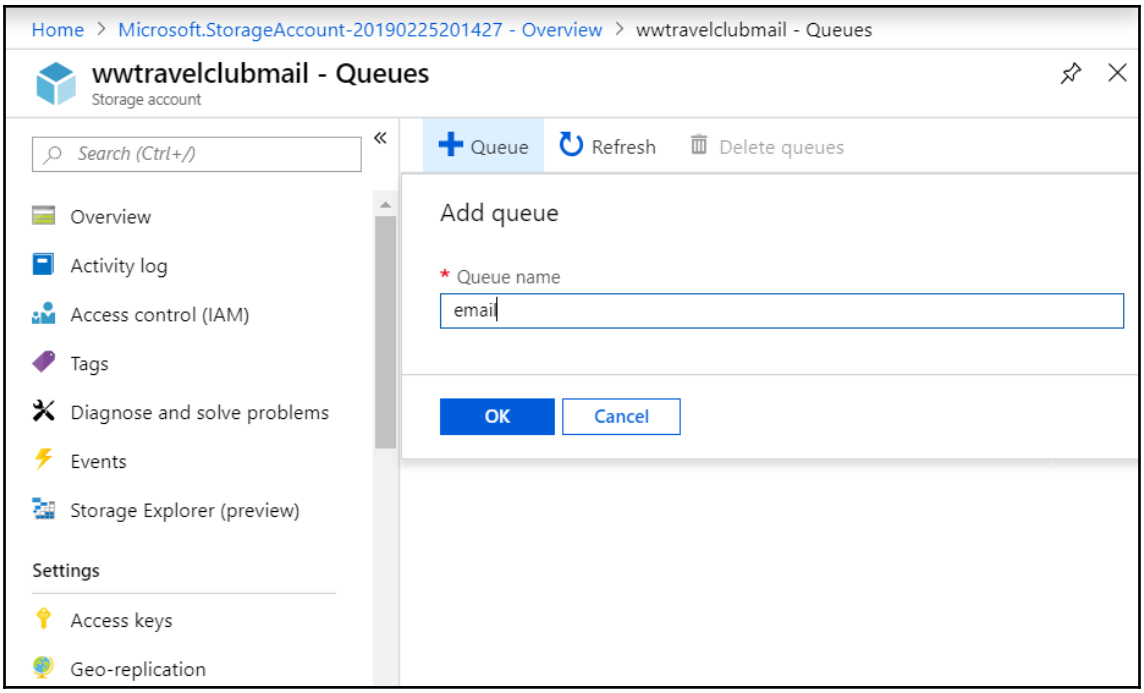

Home > wwtravelclub - HttpTriggerSample
wwtravelclub - HttpTriggerSample
Function Apps
"wwtravelclub"
All subscriptions
Function Apps
wwtravelclub
Functions
HttpTriggerSample
Integrate
Manage
Monitor
Refresh
Application Insights Instance
wwtravelclub
Success count in last 30 days
3
Error count in last 30 days
0
Query returned 3 items
Run in Application Insights
Troubleshoot your app
Diagnose and solve problems
DATE (UTC)
SUCCESS
RESULT CODE
DURATION (MS)
OPERATION ID
2019-02-25 22:00:58.732
0
1.6852
CGzCwnLL+bA=
2019-02-25 22:00:42.483
0
3.6808
9eUDmcpLoXU=
2019-02-25 22:00:32.582
0
99.3548
5miY1jEbXpg=

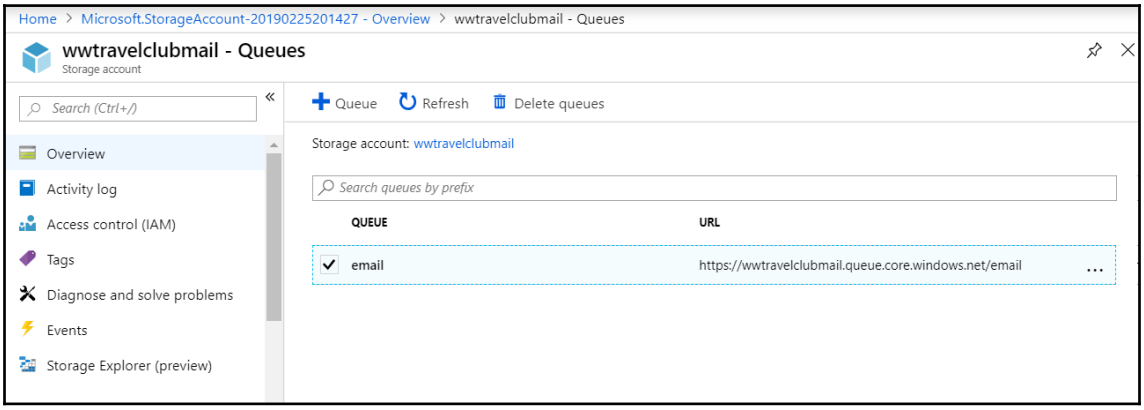

Application Insights
wwtravelclub > Analytics
Gabriel Baptista
New Query 1*
Query explore
wwtravelclub
Run
Time range: Set in query
Save
Copy link
Export
Schema
Filter (preview)
Filter by name or type...
Collapse all
Active
wwtravelclub
APPLICATION INSIGHTS
traces
customEvents
pageViews
requests
dependencies
exceptions
availabilityResults
customMetrics
performanceCounters
browserTimings
OTHER DATA SOURCES
Add new data source
Favorite applications
requests | project timestamp, id, name, success, resultCode, duration, operation_Id, cloud_RoleName | where timestamp > ago(30d) | where cloud_RoleName =~ 'wwtravelclub' and name == 'HttpTriggerSample' | order by timestamp desc | take 20
Completed
00:00:07.186
7 records
TABLE
CHART
Columns
Display time (UTC+00:00)
Drag a column header and drop it here to group by that column
timestamp [UTC]
id
name
success
resultCode
duration
operation_Id
cloud_RoleName
2019-02-25T22:01:09.111
|OnsGwmRN26c=.d827bec9_
HttpTriggerSample
True
0
1.7053
OnsGwmRN26c=
wwtravelclub
2019-02-25T22:01:08.332
|7rpN6Xt1T6E=.d827bec8_
HttpTriggerSample
True
0
1.6907
7rpN6Xt1T6E=
wwtravelclub
2019-02-25T22:01:07.572
|CzElLrCRk98=.d827bec7_
HttpTriggerSample
True
0
1.8384
CzElLrCRk98=
wwtravelclub
2019-02-25T22:01:05.787
|xlPOyz70898=.d827bec6_
HttpTriggerSample
True
0
2.8504
xlPOyz70898=
wwtravelclub
2019-02-25T22:00:58.732
|CGzCwnLL+bA=.d827bec5_
HttpTriggerSample
True
0
1.6852
CGzCwnLL+bA=
wwtravelclub
2019-02-25T22:00:42.483
|9eUDmcpLoXU=.d827bec0_
HttpTriggerSample
True
0
3.6808
9eUDmcpLoXU=
wwtravelclub
2019-02-25T22:00:32.582
|5miY1jEbXpg=.d827bebd_
HttpTriggerSample
True
0
99.3548
5miY1jEbXpg=
wwtravelclub

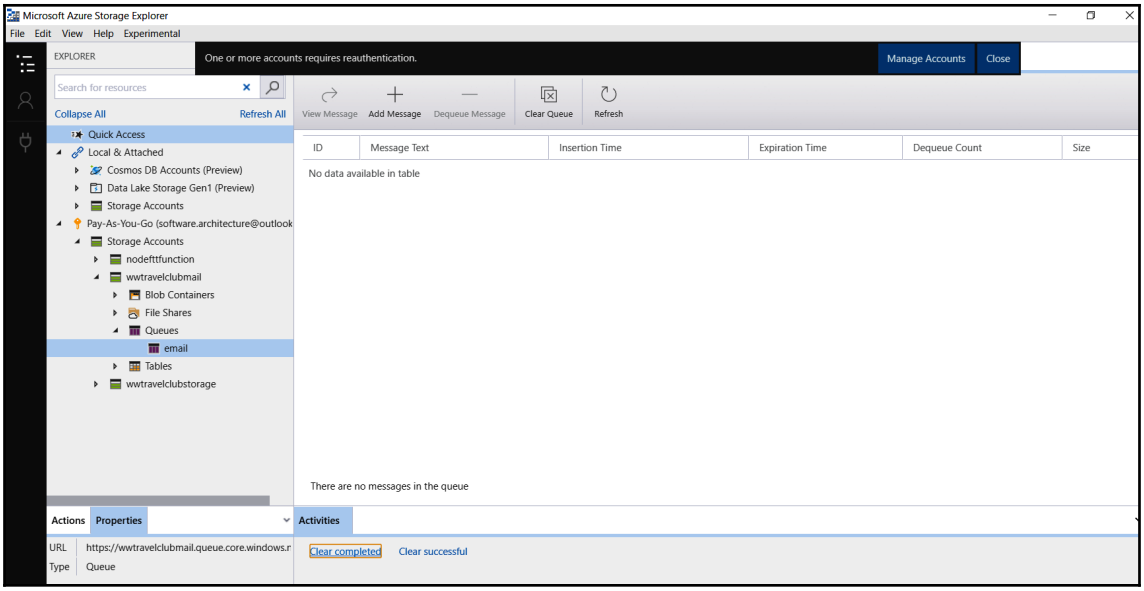

Home > wwtravelclub > wwtravelclub > wwtravelclub - Performance
wwtravelclub - Performance
Application Insights
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Investigate
Application map
Smart Detection
Live Metrics Stream
Metrics
Search
Availability
Failures
Performance
Servers
Browser
Last 24 hours
Roles = All
Server
Browser
Operations
Dependencies
Roles
View in Analytics
Feedback
Profiler
Refresh
Operation times: zoom into a range
Avg
50TH
95TH
99TH
18 ms
16 ms
14ms
Request count
10
0
Mon 25
06 AM
12 PM
06 PM
07:23
Overall
Distribution of durations: zoom in...
Scale
Request count
Duration
1.0ms
4.6ms
13ms
25ms
52ms
95ms
Select operation
Search to filter items...
OPERATION NAME
DURATION (AVG)
COUNT
PIN
Overall
16.1 ms
7
HttpTriggerSample
16.1 ms
7
Insights
No insights were found

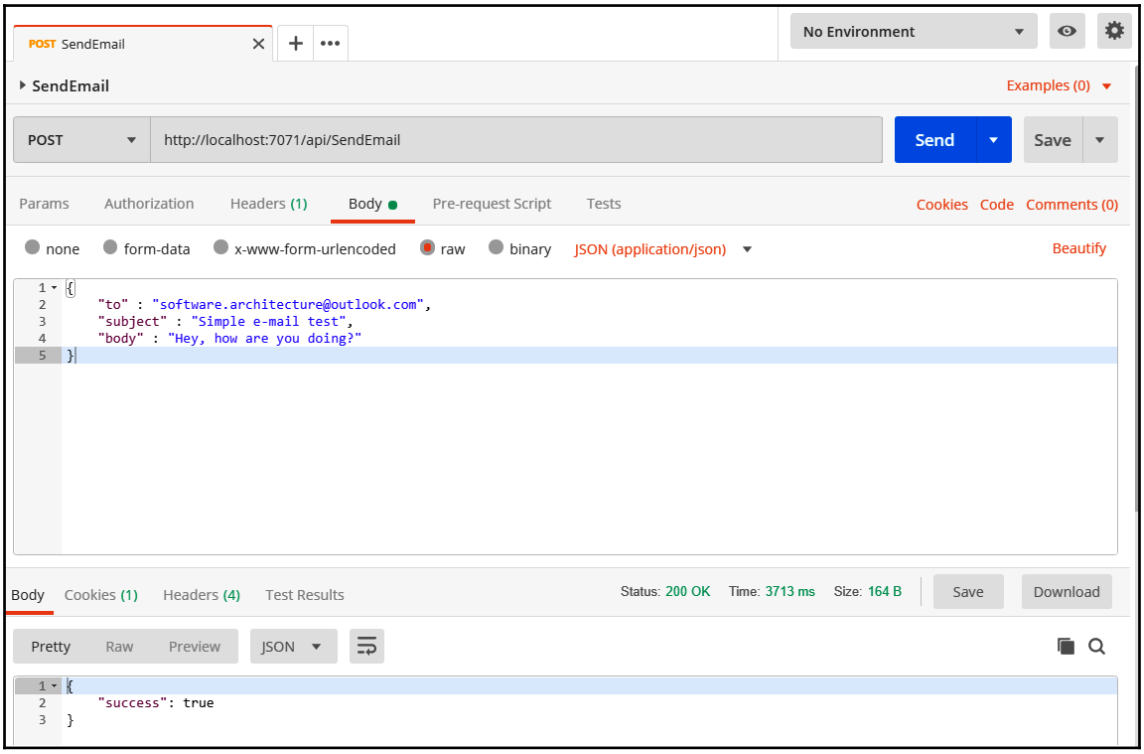

1
2
Azure HTTP Function
Request To Send Email
3
Azure Queue Storage
4
5
WWTravelClub
WebApp
Azure Queue Storage
Send Email
Cloud Side

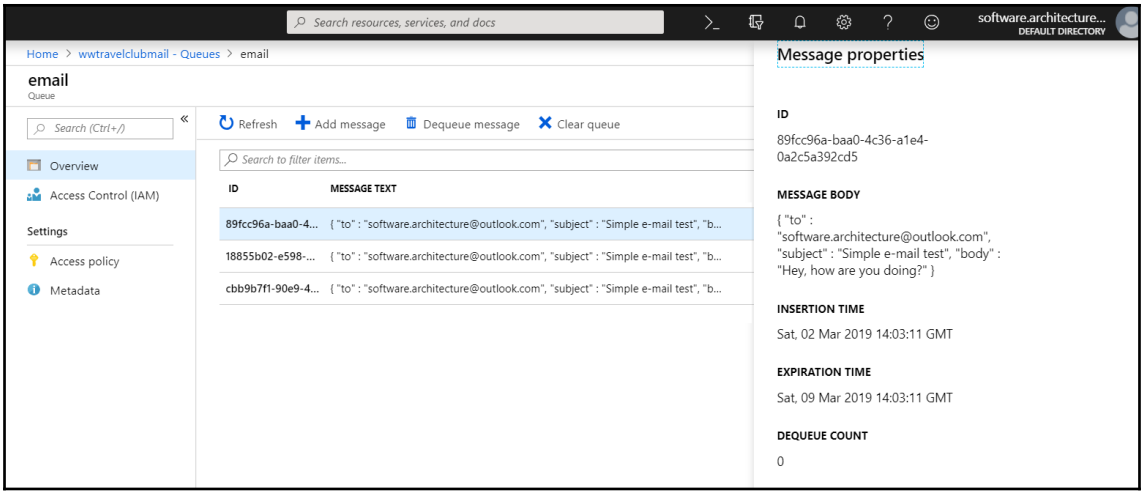

Home > New > Marketplace > Everything > Storage account > Create storage account
Create storage account
Basics
Advanced
Tags
Review + create
Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. Learn more
PROJECT DETAILS
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
* Subscription
Pay-As-You-Go
* Resource group
wwtravelclub-rg
Create new
INSTANCE DETAILS
The default deployment model is Resource Manager, which supports the latest Azure features. You may choose to deploy using the classic deployment model instead. Choose classic deployment model
* Storage account name
wwtravelclubmail
* Location
Central US
Review + create
Previous
Next : Advanced >

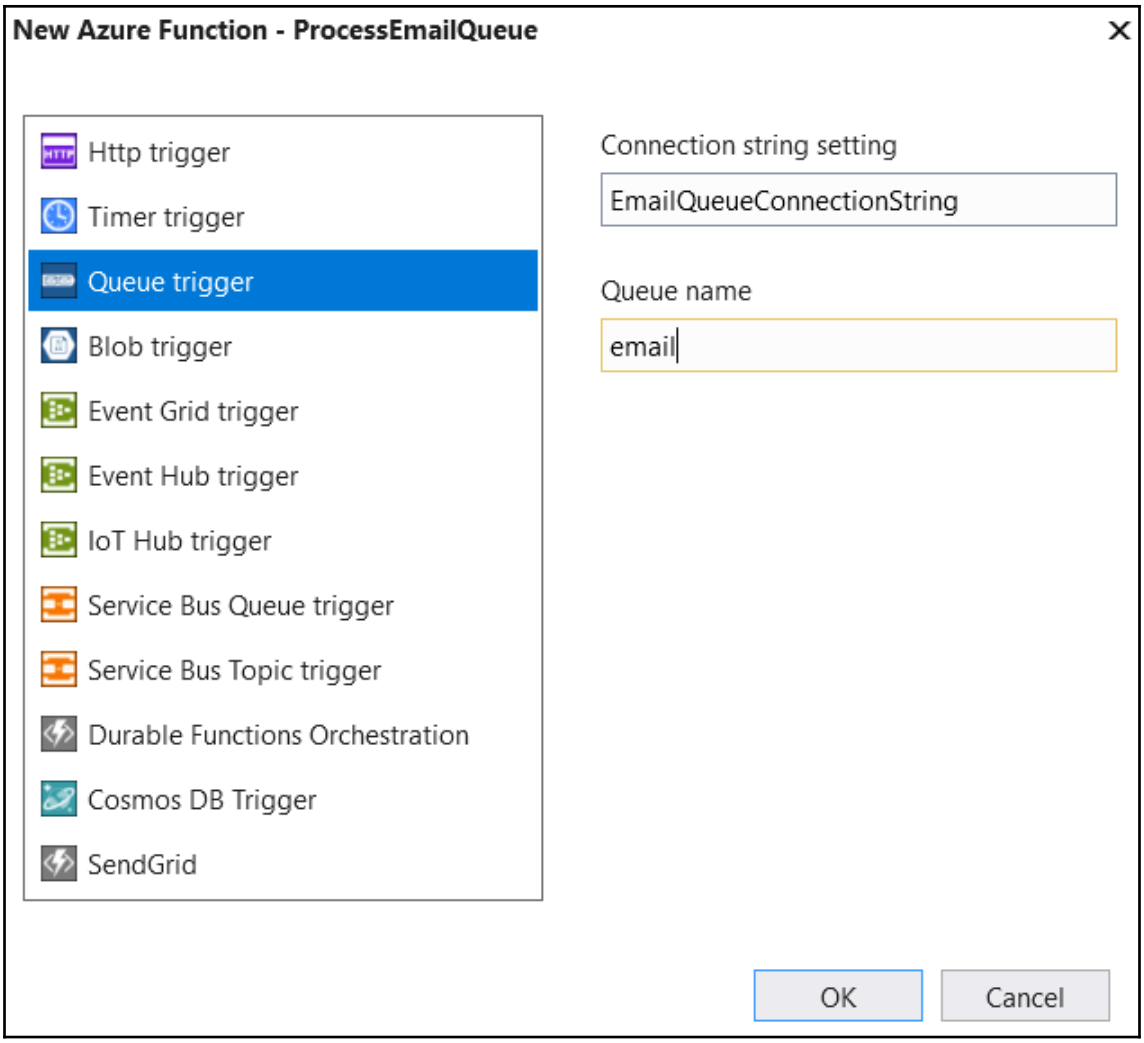

Home > Microsoft.StorageAccount-20190225201427 - Overview > wwtravelclubmail - Queues
wwtravelclubmail - Queues
Storage account
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Storage Explorer (preview)
Settings
Access keys
Geo-replication
Queue
Refresh
Delete queues
Add queue
* Queue name
email
OK
Cancel

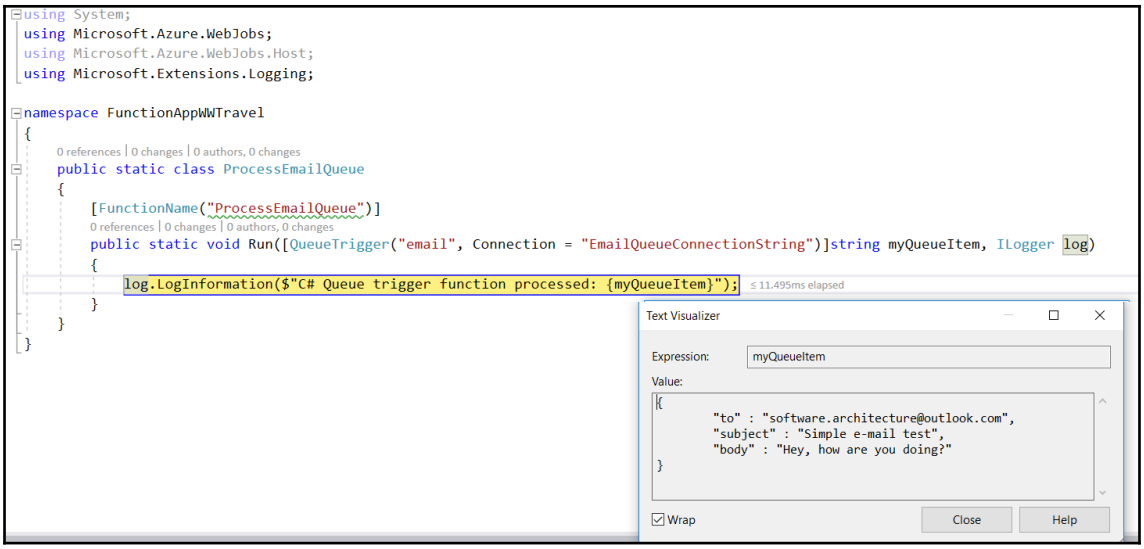

Home > Microsoft.StorageAccount-20190225201427 - Overview > wwtravelclubmail - Queues
wwtravelclubmail - Queues
Storage account
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Events
Storage Explorer (preview)
Queue
Refresh
Delete queues
Storage account: wwtravelclubmail
Search queues by prefix
QUEUE
URL
email
https://wwtravelclubmail.queue.core.windows.net/email


Microsoft Azure Storage Explorer
File Edit View Help Experimental
EXPLORER
One or more accounts requires reauthentication.
Manage Accounts
Close
Search for resources
Collapse All
Refresh All
View Message
Add Message
Dequeue Message
Clear Queue
Refresh
Quick Access
Local & Attached
Cosmos DB Accounts (Preview)
Data Lake Storage Gen1 (Preview)
Storage Accounts
Pay-As-You-Go (software.architecture@outlook
Storage Accounts
nodefttfunction
wwtravelclubmail
Blob Containers
File Shares
Queues
email
Tables
wwtravelclubstorage
ID
Message Text
Insertion Time
Expiration Time
Dequeue Count
Size
No data available in table
There are no messages in the queue
Actions
Properties
Activities
URL
https://wwtravelclubmail.queue.core.windows.r
Type
Queue
Clear completed
Clear successful

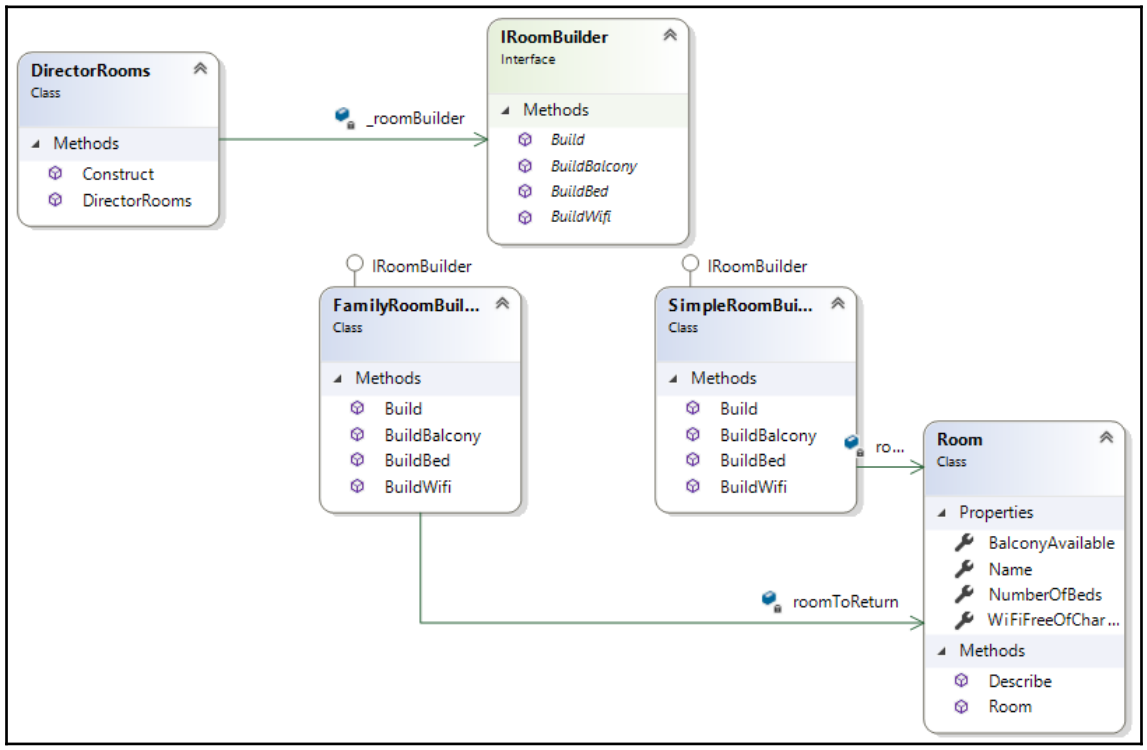

POST SendEmail
No Environment
SendEmail
Examples (0)
POST
http://localhost:7071/api/SendEmail
Send
Save
Params
Authorization
Headers (1)
Body
Pre-request Script
Tests
Cookies
Code
Comments (0)
none
form-data
x-www-form-urlencoded
raw
binary
JSON (application/json)
Beautify
{
"to" : "software.architecture@outlook.com",
"subject" : "Simple e-mail test",
"body" : "Hey, how are you doing?"
}
Body
Cookies (1)
Headers (4)
Test Results
Status: 200 OK
Time: 3713 ms
Size: 164 B
Save
Download
Pretty
Raw
Preview
JSON
{
"success": true
}

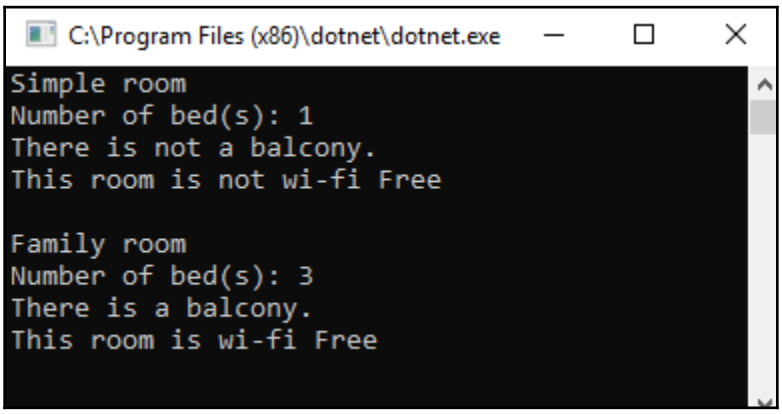

Search resources, services, and docs
software.architecture...
DEFAULT DIRECTORY
Home > wwtravelclubmail - Queues > email
email
Queue
Search (Ctrl+/)
Overview
Access Control (IAM)
Settings
Access policy
Metadata
Refresh
Add message
Dequeue message
Clear queue
Search to filter items...
ID
MESSAGE TEXT
89fcc96a-baa0-4...
{ "to" : "software.architecture@outlook.com", "subject" : "Simple e-mail test", "b...
18855b02-e598-...
{ "to" : "software.architecture@outlook.com", "subject" : "Simple e-mail test", "b...
cbb9b7f1-90e9-4...
{ "to" : "software.architecture@outlook.com", "subject" : "Simple e-mail test", "b...
Message properties
ID
89fcc96a-baa0-4c36-a1e4-0a2c5a392cd5
MESSAGE BODY
{ "to" : "software.architecture@outlook.com", "subject" : "Simple e-mail test", "body" : "Hey, how are you doing?" }
INSERTION TIME
Sat, 02 Mar 2019 14:03:11 GMT
EXPIRATION TIME
Sat, 09 Mar 2019 14:03:11 GMT
DEQUEUE COUNT
0

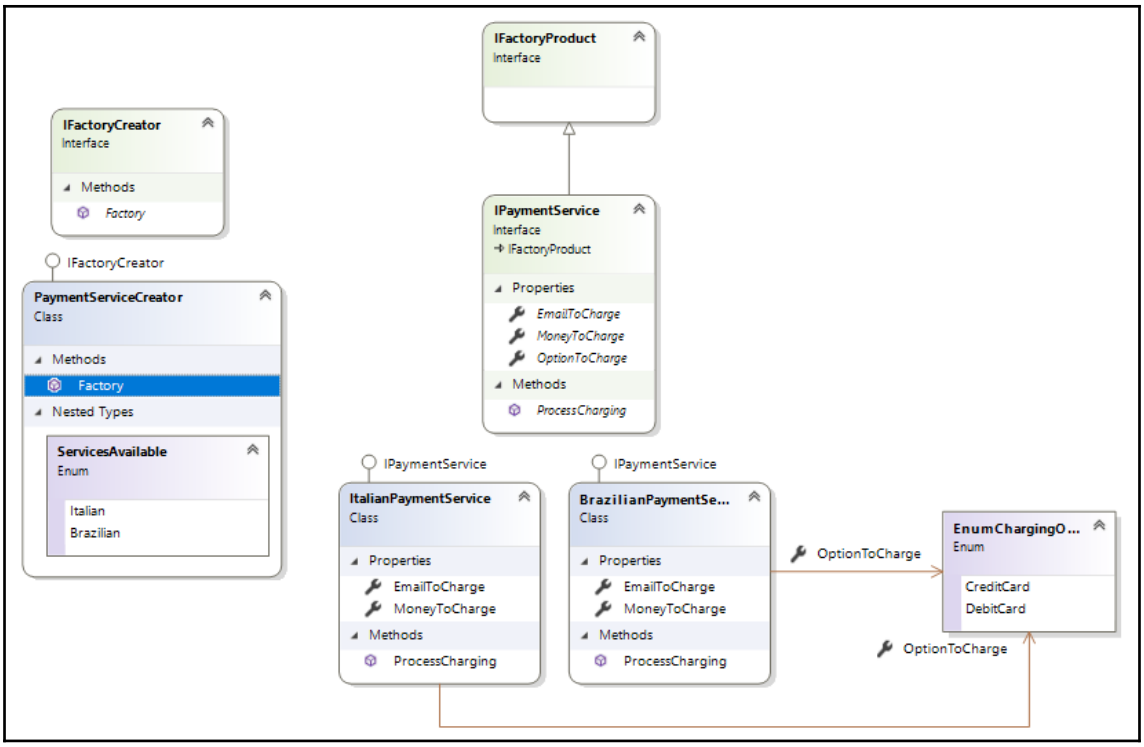

New Azure Function - ProcessEmailQueue
Http trigger
Timer trigger
Queue trigger
Blob trigger
Event Grid trigger
Event Hub trigger
IoT Hub trigger
Service Bus Queue trigger
Service Bus Topic trigger
Durable Functions Orchestration
Cosmos DB Trigger
SendGrid
Connection string setting
EmailQueueConnectionString
Queue name
email
OK
Cancel

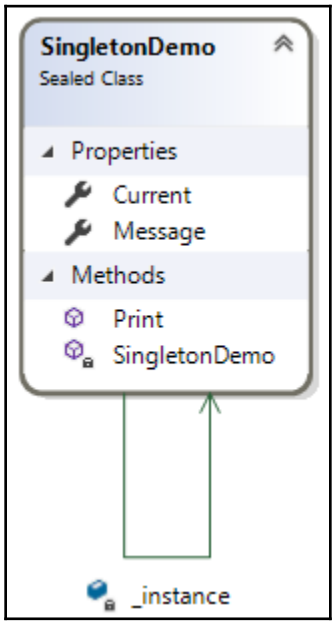

using System;
using Microsoft.Azure.WebJobs;
using Microsoft.Azure.WebJobs.Host;
using Microsoft.Extensions.Logging;
namespace FunctionAppWWTravel
{
0 references | 0 changes | 0 authors, 0 changes
public static class ProcessEmailQueue
{
[FunctionName("ProcessEmailQueue")]
0 references | 0 changes | 0 authors, 0 changes
public static void Run([QueueTrigger("email", Connection = "EmailQueueConnectionString")]string myQueueItem, ILogger log)
{
log.LogInformation($"C# Queue trigger function processed: {myQueueItem}");
≤ 11.495ms elapsed
}
}
}
Text Visualizer
Expression:
myQueueItem
Value:
{
"to" : "software.architecture@outlook.com",
"subject" : "Simple e-mail test",
"body" : "Hey, how are you doing?"
}
Wrap
Close
Help

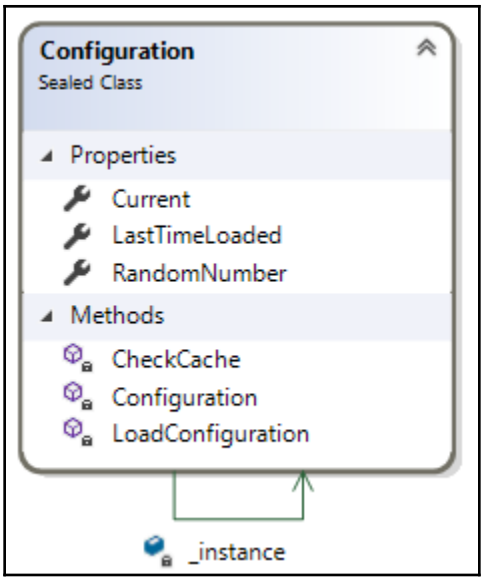
Chapter 9: Design Patterns and .NET Core Implementation

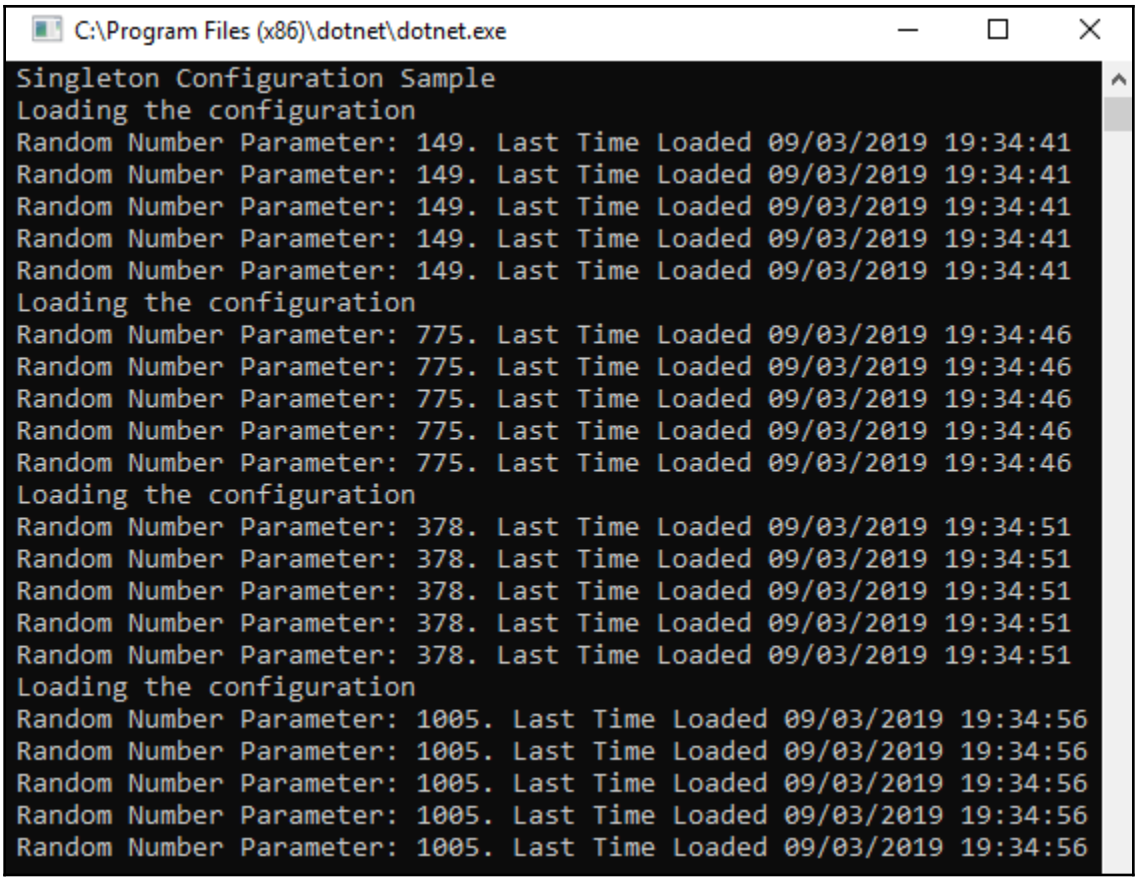


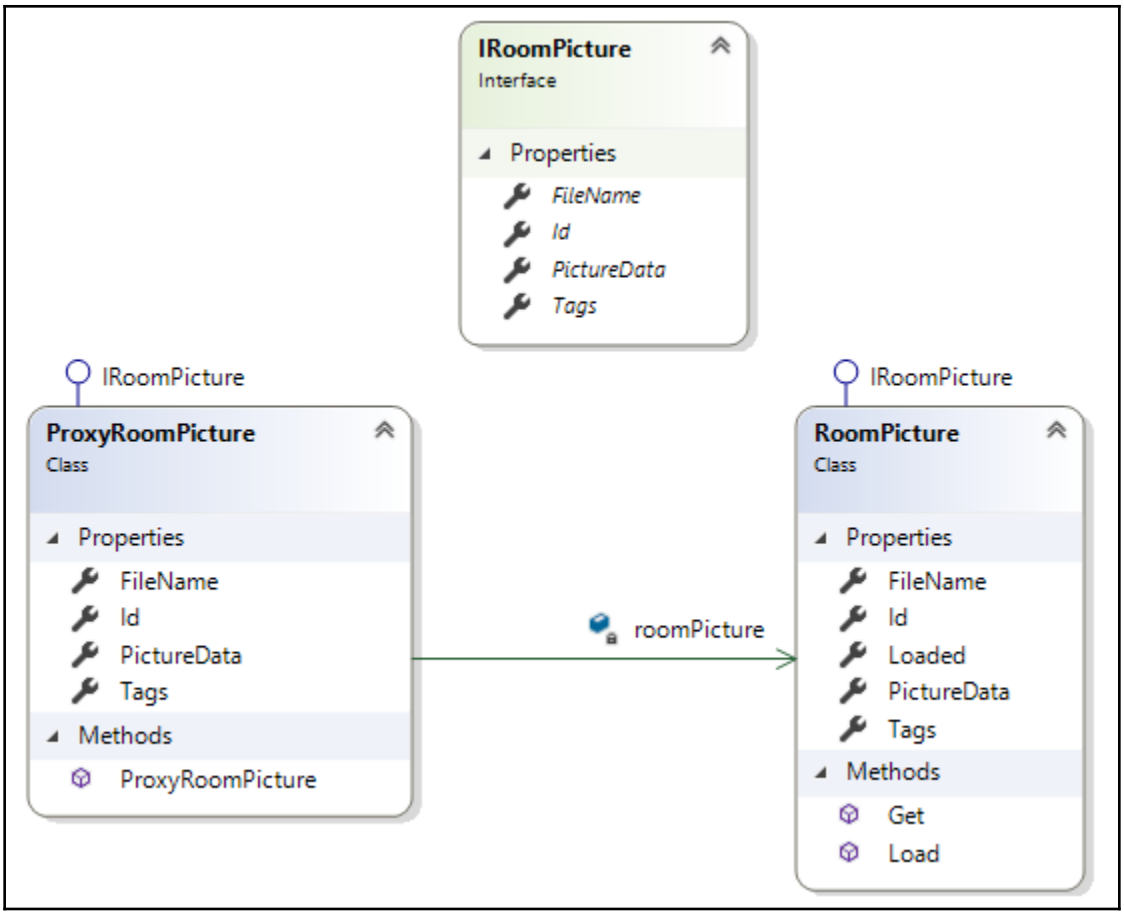


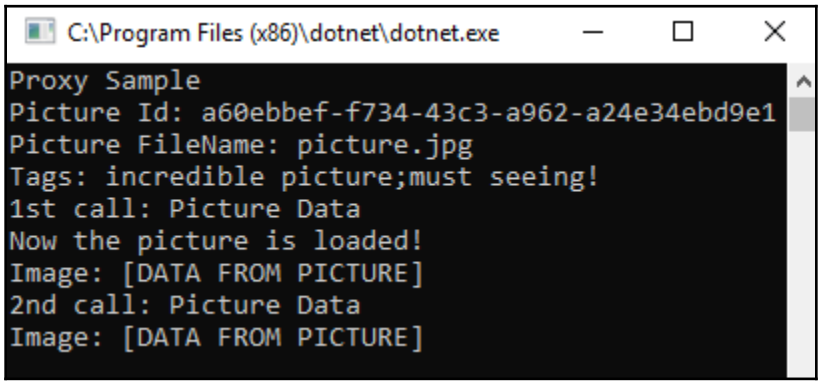

IFactoryProduct
Interface
IFactoryCreator
Interface
Methods
Factory
IPaymentService
Interface
IFactoryProduct
Properties
EmailToCharge
MoneyToCharge
OptionToCharge
Methods
ProcessCharging
IFactoryCreator
PaymentServiceCreator
Class
Methods
Factory
Nested Types
ServicesAvailable
Enum
Italian
Brazilian
IPaymentService
ItalianPaymentService
Class
Properties
EmailToCharge
MoneyToCharge
Methods
ProcessCharging
IPaymentService
BrazilianPaymentSe...
Class
Properties
EmailToCharge
MoneyToCharge
Methods
ProcessCharging
OptionToCharge
EnumChargingO...
Enum
CreditCard
DebitCard
OptionToCharge

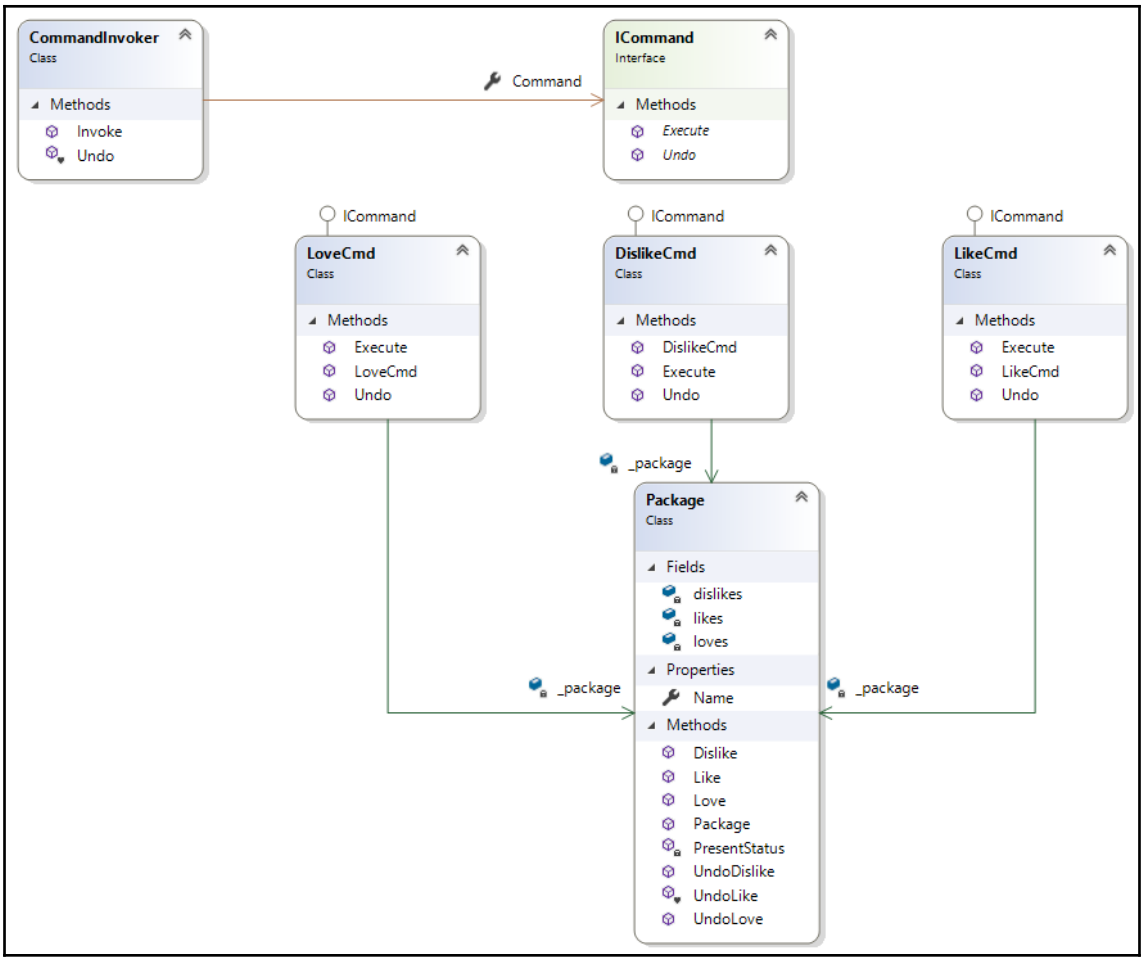

SingletonDemo
Sealed Class
Properties
Current
Message
Methods
Print
SingletonDemo
_instance

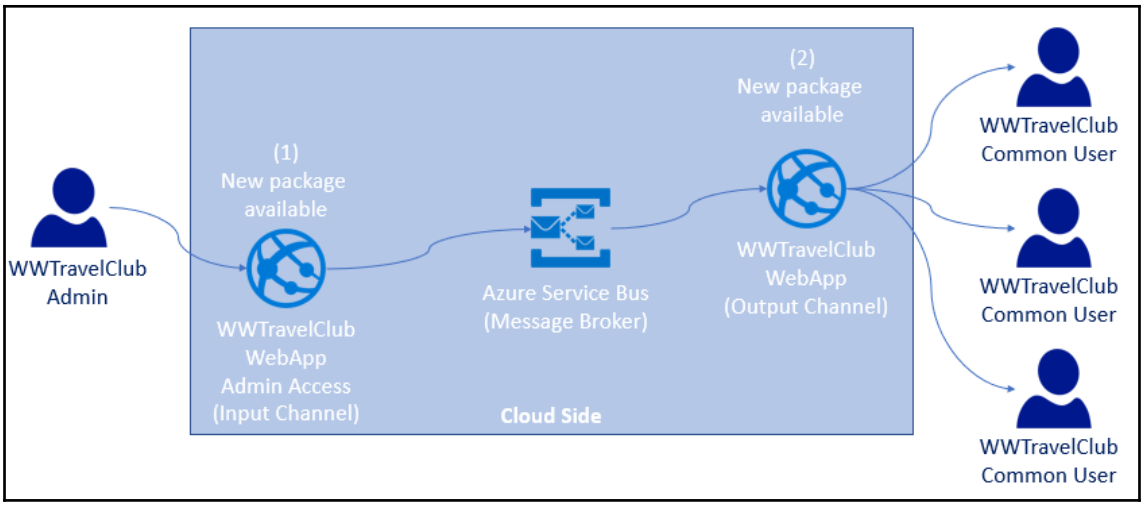

Configuration
Sealed Class
Properties
Current
LastTimeLoaded
RandomNumber
Methods
CheckCache
Configuration
LoadConfiguration
_instance

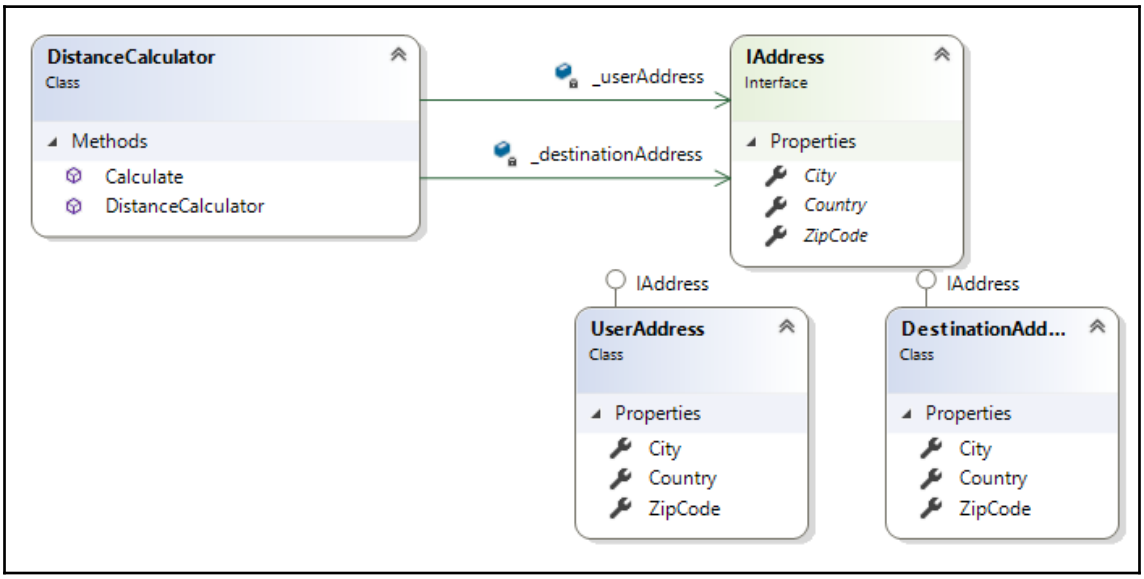

C:\Program Files (x86)\dotnet\dotnet.exe
Singleton Configuration Sample
Loading the configuration
Random Number Parameter: 149. Last Time Loaded 09/03/2019 19:34:41
Random Number Parameter: 149. Last Time Loaded 09/03/2019 19:34:41
Random Number Parameter: 149. Last Time Loaded 09/03/2019 19:34:41
Random Number Parameter: 149. Last Time Loaded 09/03/2019 19:34:41
Random Number Parameter: 149. Last Time Loaded 09/03/2019 19:34:41
Loading the configuration
Random Number Parameter: 775. Last Time Loaded 09/03/2019 19:34:46
Random Number Parameter: 775. Last Time Loaded 09/03/2019 19:34:46
Random Number Parameter: 775. Last Time Loaded 09/03/2019 19:34:46
Random Number Parameter: 775. Last Time Loaded 09/03/2019 19:34:46
Random Number Parameter: 775. Last Time Loaded 09/03/2019 19:34:46
Loading the configuration
Random Number Parameter: 378. Last Time Loaded 09/03/2019 19:34:51
Random Number Parameter: 378. Last Time Loaded 09/03/2019 19:34:51
Random Number Parameter: 378. Last Time Loaded 09/03/2019 19:34:51
Random Number Parameter: 378. Last Time Loaded 09/03/2019 19:34:51
Random Number Parameter: 378. Last Time Loaded 09/03/2019 19:34:51
Loading the configuration
Random Number Parameter: 1005. Last Time Loaded 09/03/2019 19:34:56
Random Number Parameter: 1005. Last Time Loaded 09/03/2019 19:34:56
Random Number Parameter: 1005. Last Time Loaded 09/03/2019 19:34:56
Random Number Parameter: 1005. Last Time Loaded 09/03/2019 19:34:56
Random Number Parameter: 1005. Last Time Loaded 09/03/2019 19:34:56


IRoomPicture
Interface
Properties
FileName
Id
PictureData
Tags
IRoomPicture
ProxyRoomPicture
Class
Properties
FileName
Id
PictureData
Tags
Methods
ProxyRoomPicture
roomPicture
IRoomPicture
RoomPicture
Class
Properties
FileName
Id
Loaded
PictureData
Tags
Methods
Get
Load

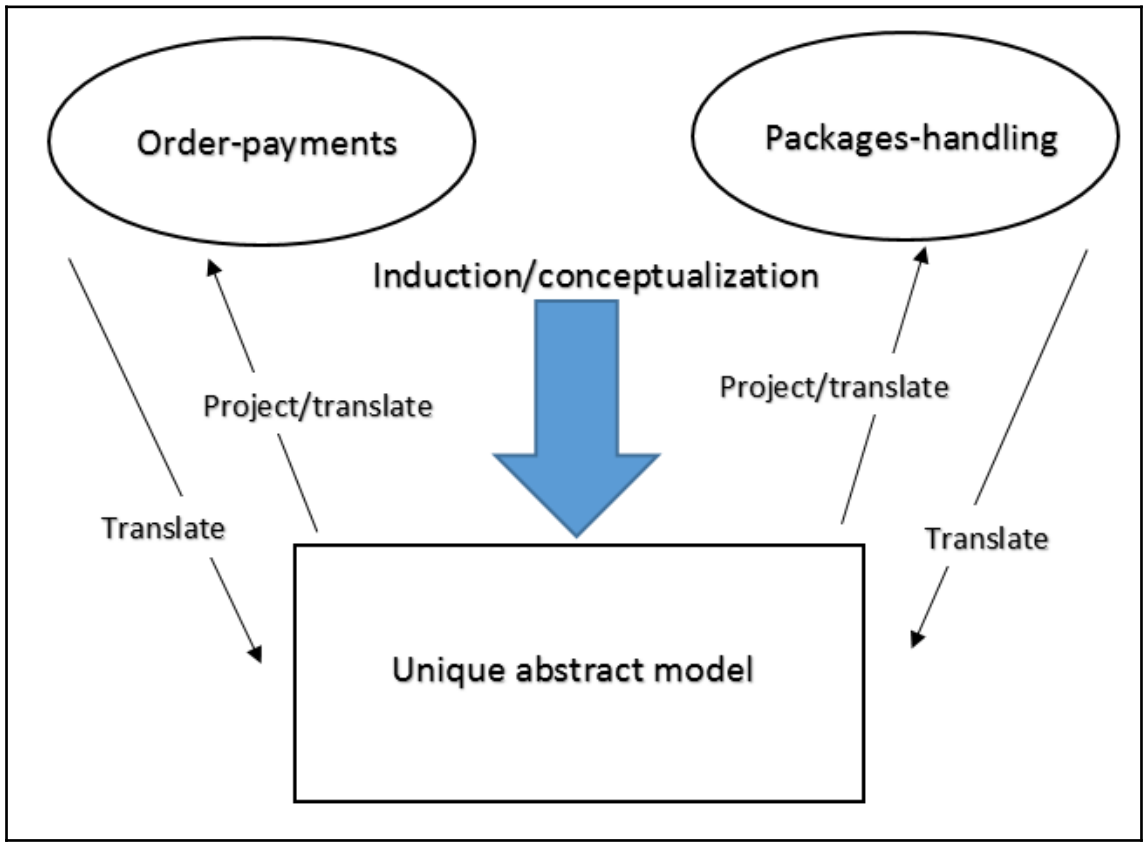

C:\Program Files (x86)\dotnet\dotnet.exe
Proxy Sample
Picture Id: a60ebbef-f734-43c3-a962-a24e34ebd9e1
Picture FileName: picture.jpg
Tags: incredible picture;must seeing!
1st call: Picture Data
Now the picture is loaded!
Image: [DATA FROM PICTURE]
2nd call: Picture Data
Image: [DATA FROM PICTURE]

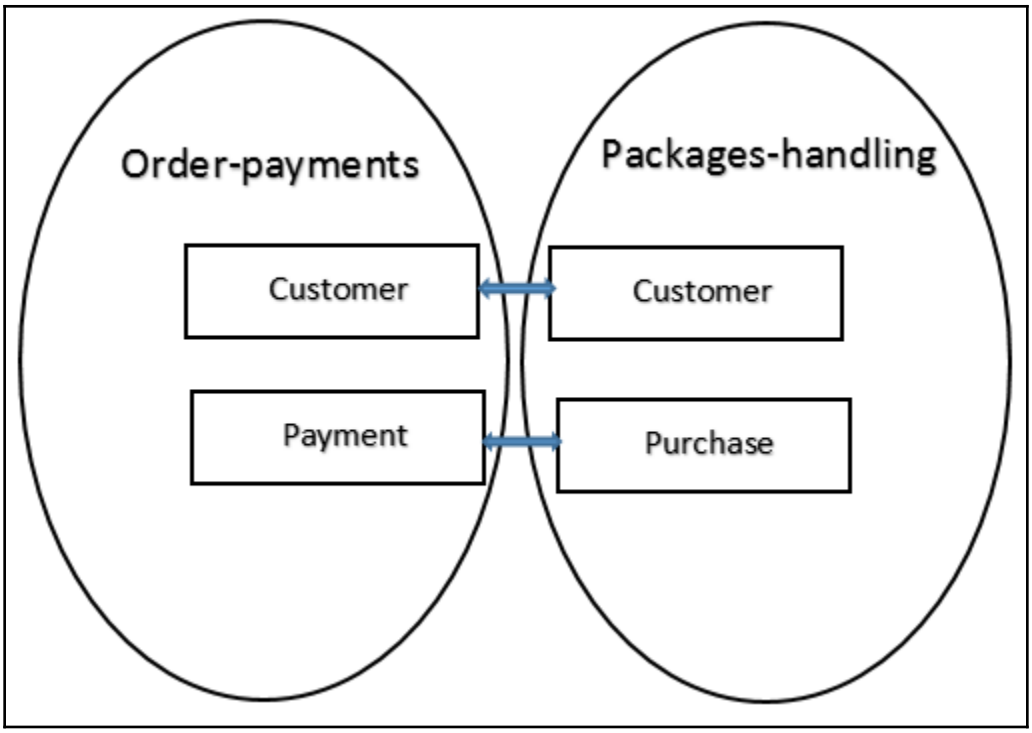

CommandInvoker
Class
Methods
Invoke
Undo
Command
ICommand
Interface
Methods
Execute
Undo
ICommand
LoveCmd
Class
Methods
Execute
LoveCmd
Undo
ICommand
DislikeCmd
Class
Methods
DislikeCmd
Execute
Undo
ICommand
LikeCmd
Class
Methods
Execute
LikeCmd
Undo
_package
Package
Class
Fields
dislikes
likes
loves
Properties
Name
Methods
Dislike
Like
Love
Package
PresentStatus
UndoDislike
UndoLike
UndoLove
_package
_package

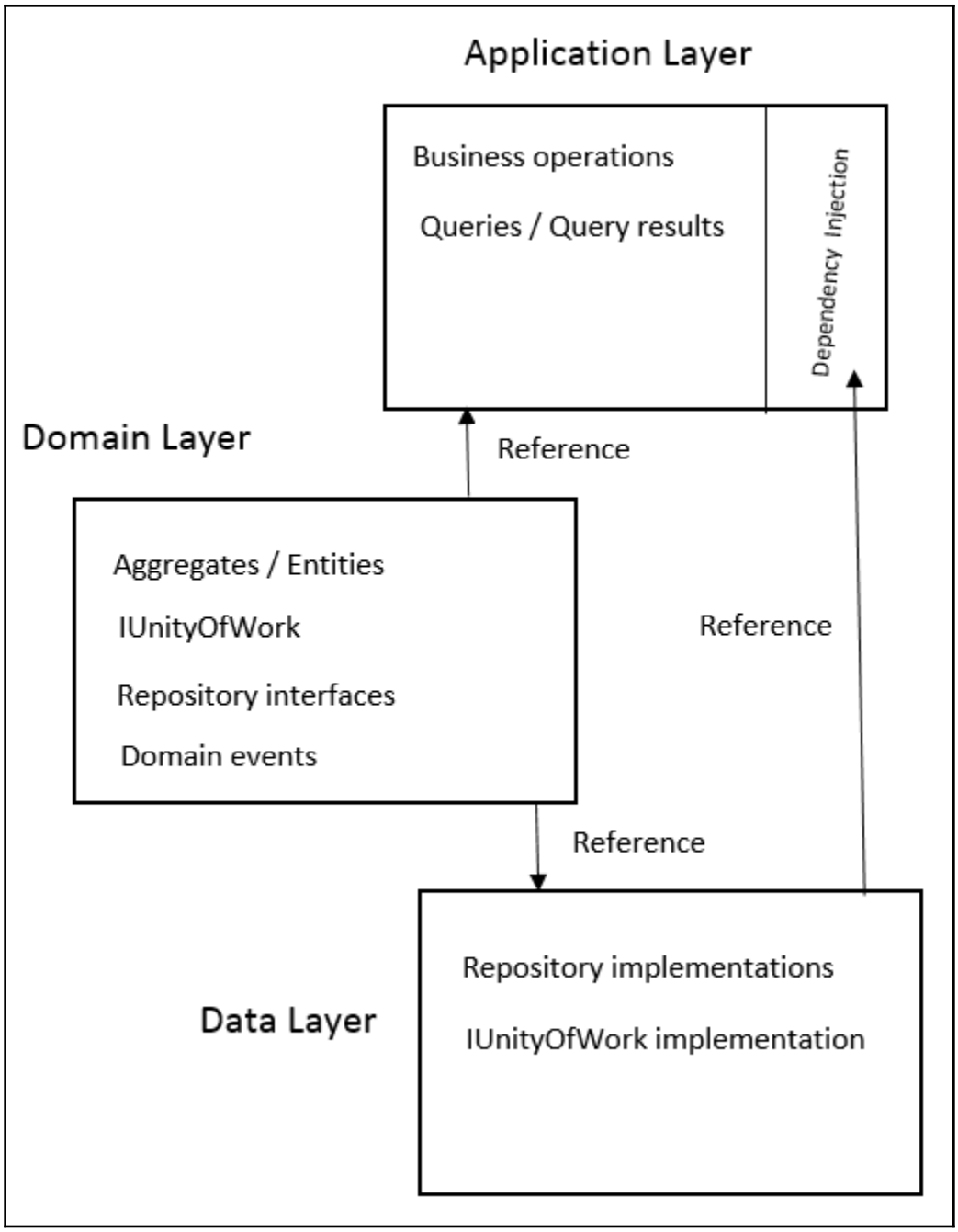

(1)
New package
available
(2)
New package
available
WWTravelClub
Admin
WWTravelClub
WebApp
Admin Access
(Input Channel)
Azure Service Bus
(Message Broker)
WWTravelClub
WebApp
(Output Channel)
WWTravelClub
Common User
WWTravelClub
Common User
WWTravelClub
Common User
Cloud Side

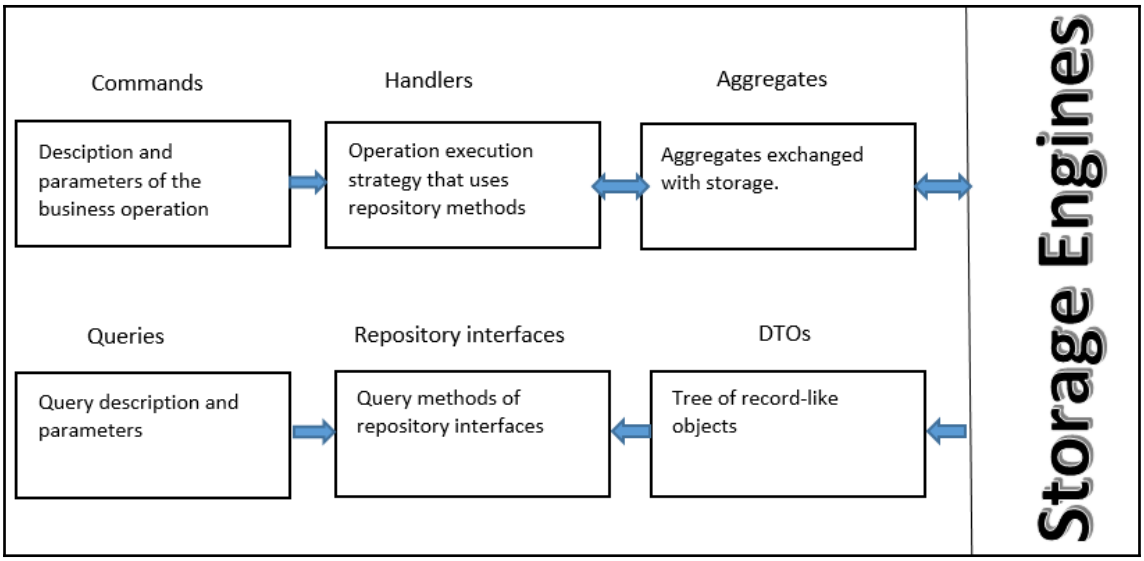

DistanceCalculator
Class
Methods
Calculate
DistanceCalculator
_userAddress
_destinationAddress
IAddress
Interface
Properties
City
Country
ZipCode
IAddress
IAddress
UserAddress
Class
Properties
City
Country
ZipCode
DestinationAdd...
Class
Properties
City
Country
ZipCode

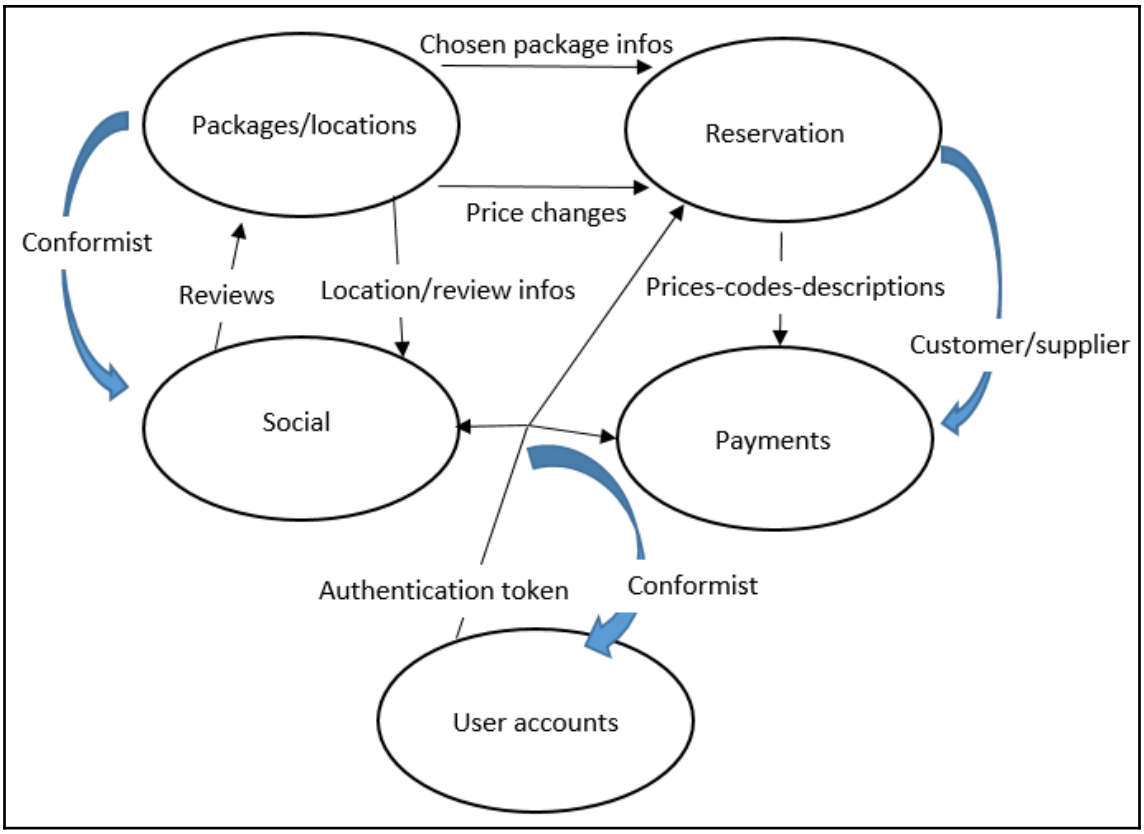
Chapter 10: Understanding the Different Domains in Software Solutions



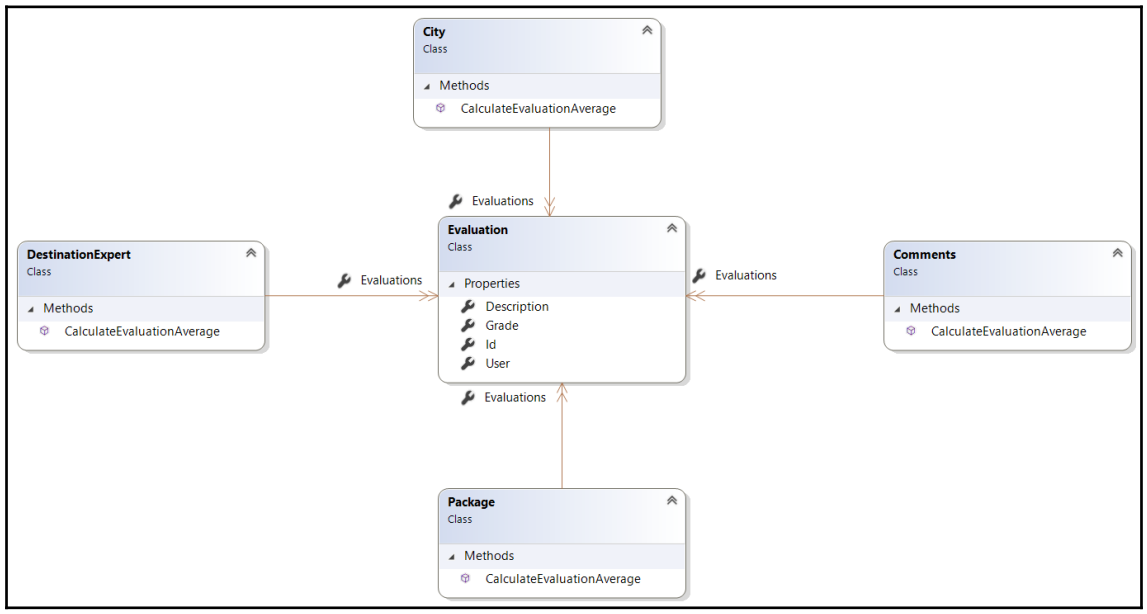

Order-payments
Customer
Payment
Packages-handling
Customer
Purchase

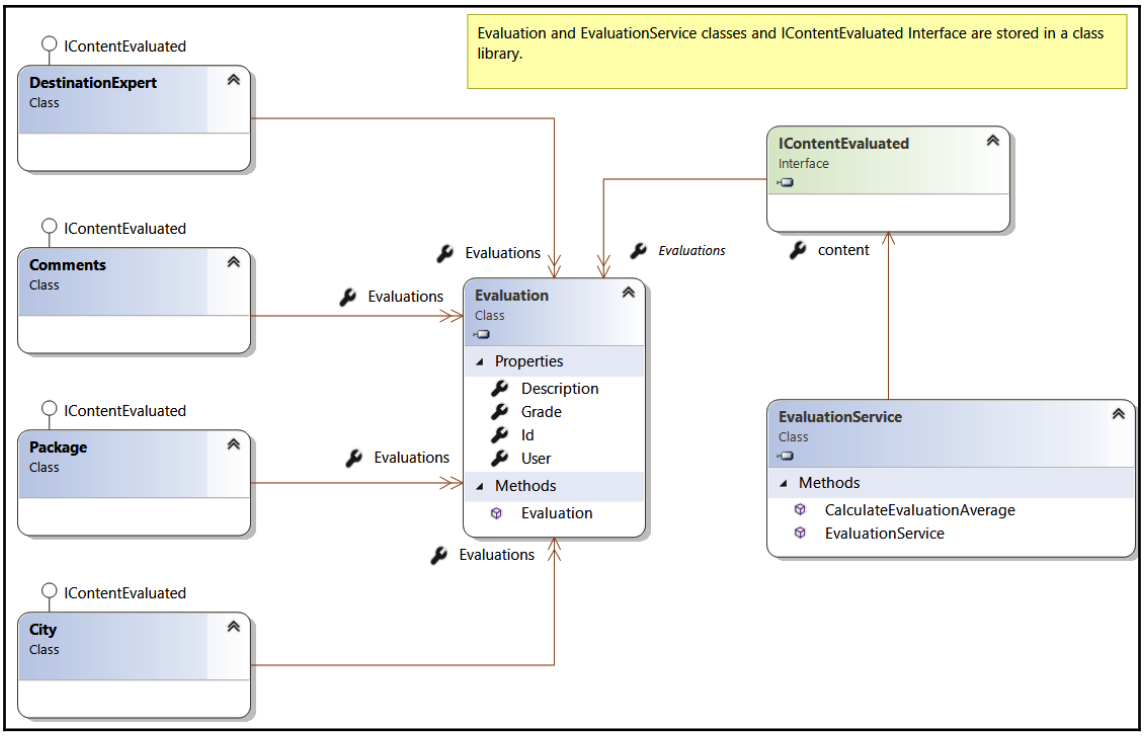

Application Layer
Business operations
Queries / Query results
Dependency Injection
Domain Layer
Reference
Aggregates / Entities
IUnityOfWork
Repository interfaces
Domain events
Reference
Reference
Repository implementations
IUnityOfWork implementation
Data Layer

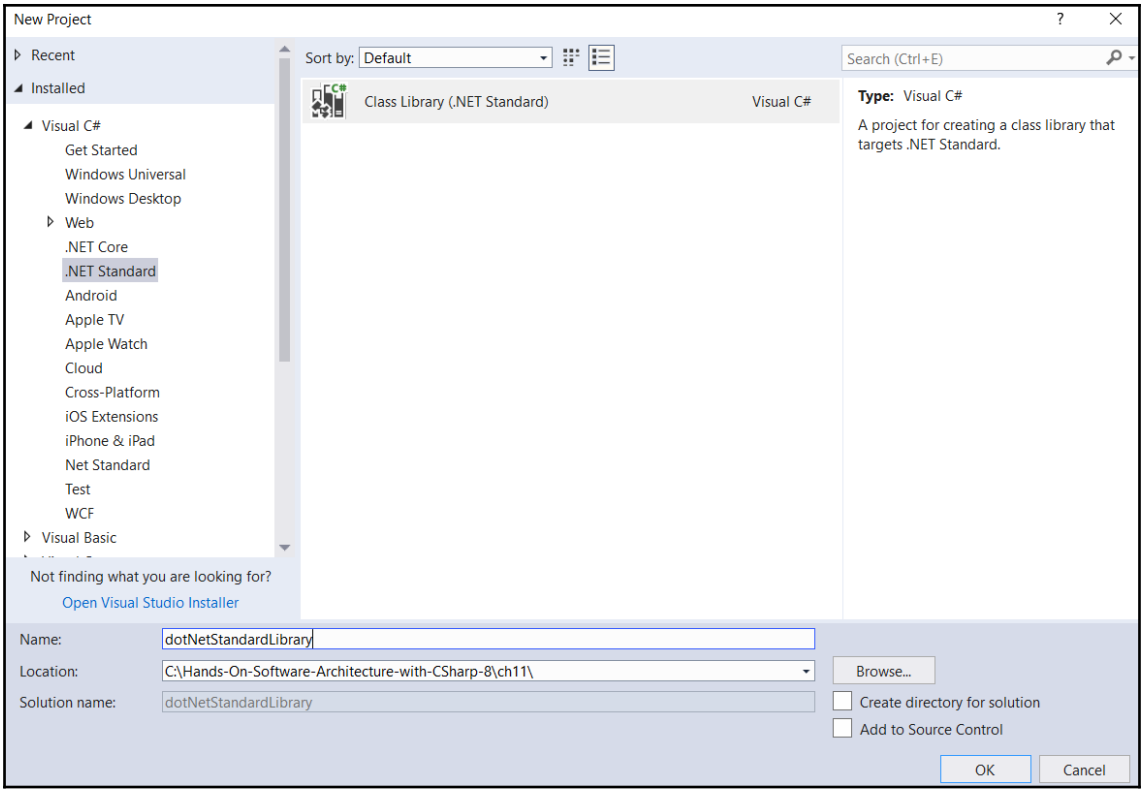

Commands
Handlers
Aggregates
Desciption and parameters of the business operation
Operation execution strategy that uses repository methods
Aggregates exchanged with storage.
Queries
Repository interfaces
DTOs
Query description and parameters
Query methods of repository interfaces
Tree of record-like objects
Storage Engines

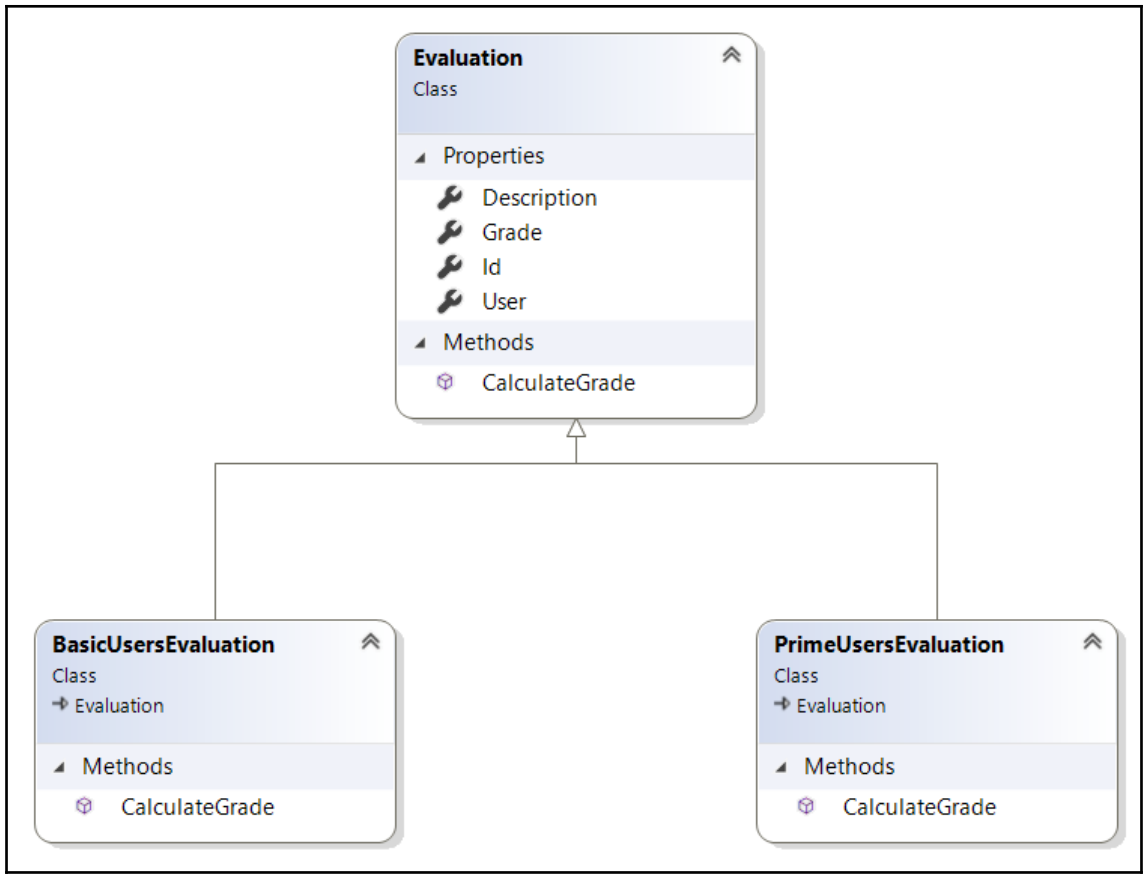

Chosen package infos
Packages/locations
Reservation
Price changes
Conformist
Reviews
Location/review infos
Prices-codes-descriptions
Customer/supplier
Social
Payments
Authentication token
Conformist
User accounts

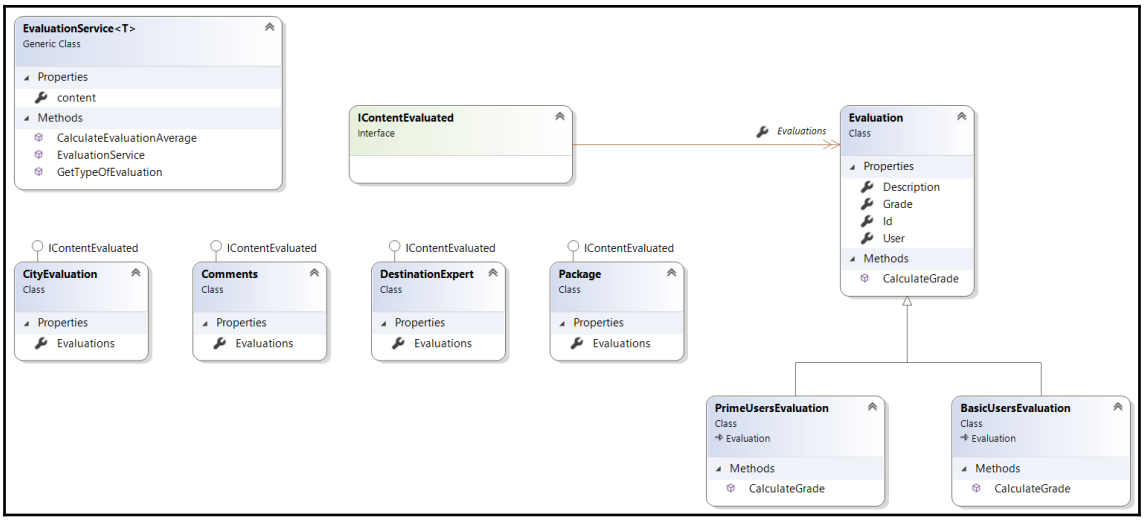
Chapter 11: Implementing Code Reusability in C# 8



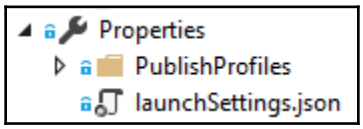

Evaluation and EvaluationService classes and IContentEvaluated Interface are stored in a class library.
IContentEvaluated
DestinationExpert
Class
IContentEvaluated
Comments
Class
IContentEvaluated
Package
Class
IContentEvaluated
City
Class
IContentEvaluated
Interface
content
Evaluations
Evaluations
Evaluations
Evaluations
Evaluations
Evaluation
Class
Properties
Description
Grade
Id
User
Methods
Evaluation
EvaluationService
Class
Methods
CalculateEvaluationAverage
EvaluationService

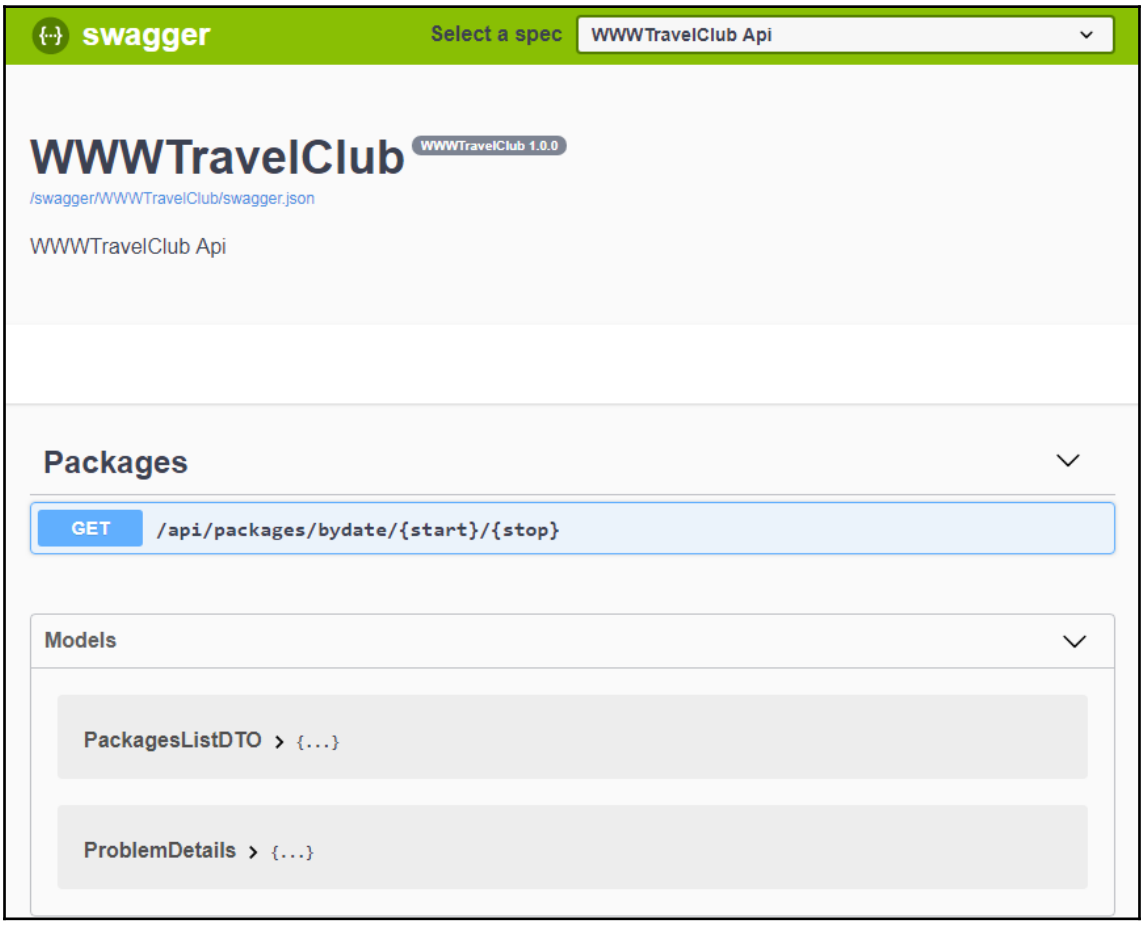

New Project
Recent
Installed
Visual C#
Get Started
Windows Universal
Windows Desktop
Web
.NET Core
.NET Standard
Android
Apple TV
Apple Watch
Cloud
Cross-Platform
iOS Extensions
iPhone & iPad
Net Standard
Test
WCF
Visual Basic
Not finding what you are looking for?
Open Visual Studio Installer
Sort by: Default
Class Library (.NET Standard)
Visual C#
Search (Ctrl+E)
Type: Visual C#
A project for creating a class library that targets .NET Standard.
Name: dotNetStandardLibrary
Location: C:\Hands-On-Software-Architecture-with-CSharp-8\ch11\
Solution name: dotNetStandardLibrary
Browse...
Create directory for solution
Add to Source Control
OK
Cancel

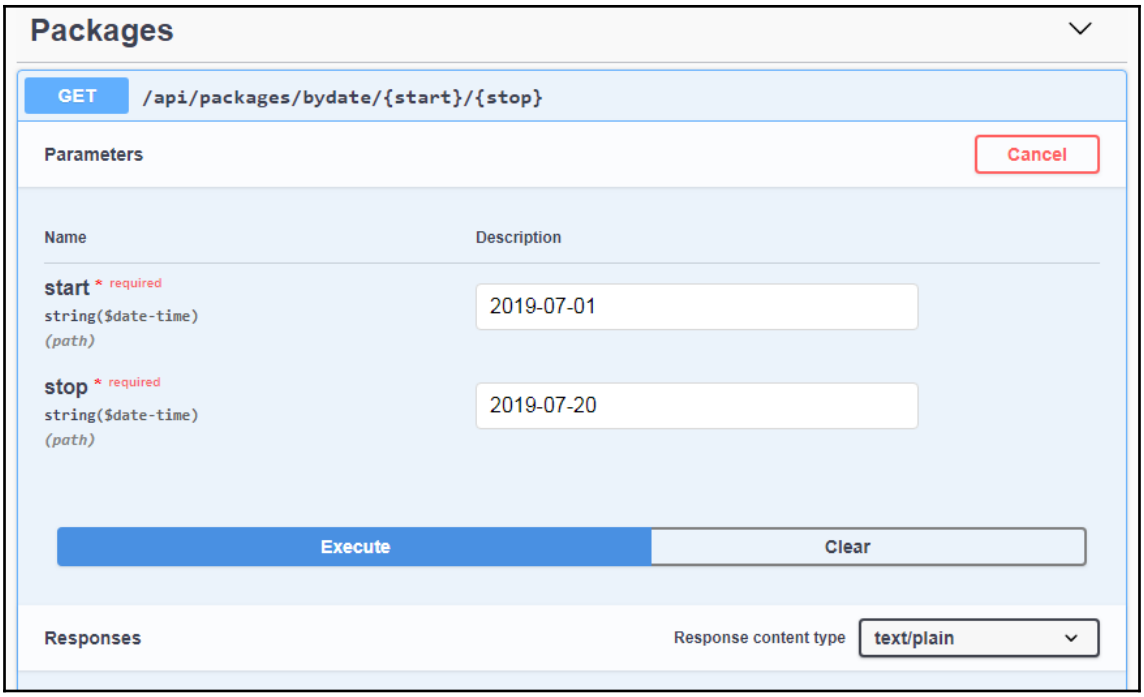

Evaluation
Class
Properties
Description
Grade
Id
User
Methods
CalculateGrade
BasicUsersEvaluation
Class
Evaluation
Methods
CalculateGrade
PrimeUsersEvaluation
Class
Evaluation
Methods
CalculateGrade


EvaluationService<T>
Generic Class
Properties
content
Methods
CalculateEvaluationAverage
EvaluationService
GetTypeOfEvaluation
IContentEvaluated
Interface
Evaluations
Evaluation
Class
Properties
Description
Grade
Id
User
Methods
CalculateGrade
IContentEvaluated
CityEvaluation
Class
Properties
Evaluations
IContentEvaluated
Comments
Class
Properties
Evaluations
IContentEvaluated
DestinationExpert
Class
Properties
Evaluations
IContentEvaluated
Package
Class
Properties
Evaluations
PrimeUsersEvaluation
Class
Evaluation
Methods
CalculateGrade
BasicUsersEvaluation
Class
Evaluation
Methods
CalculateGrade

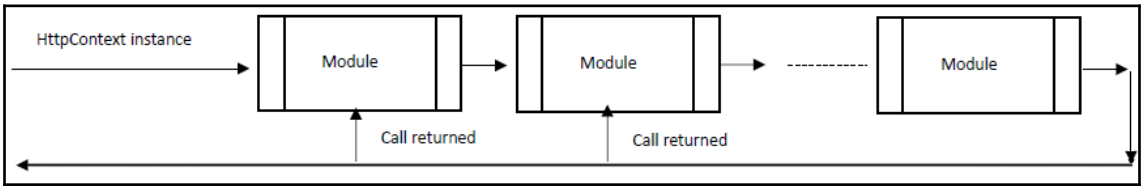
Chapter 12: Applying Service-Oriented Architectures with .NET Core

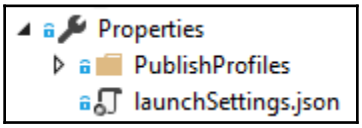


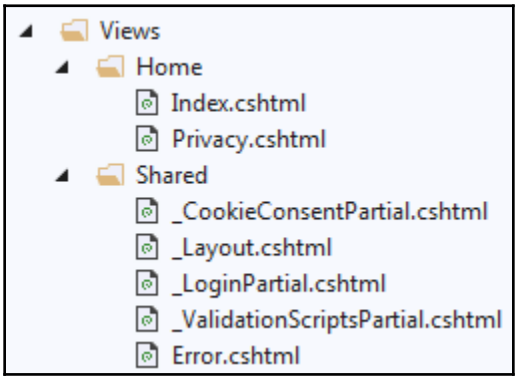


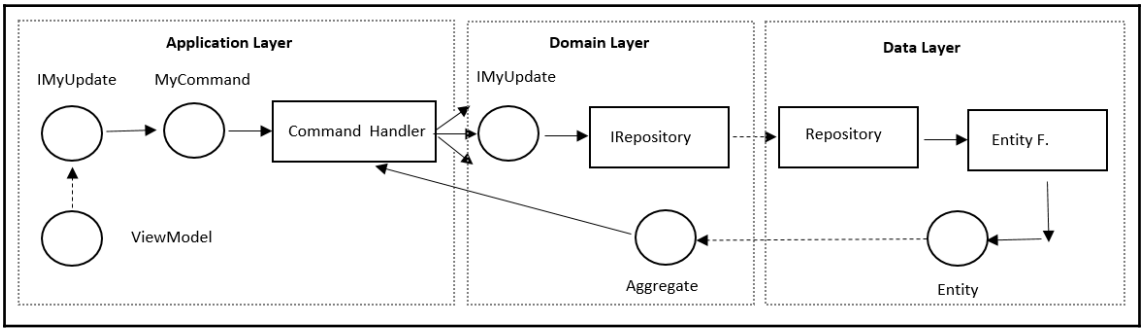

Packages
GET
/api/packages/bydate/{start}/{stop}
Parameters
Cancel
Name
Description
start * required
string($date-time)
(path)
2019-07-01
stop * required
string($date-time)
(path)
2019-07-20
Execute
Clear
Responses
Response content type
text/plain

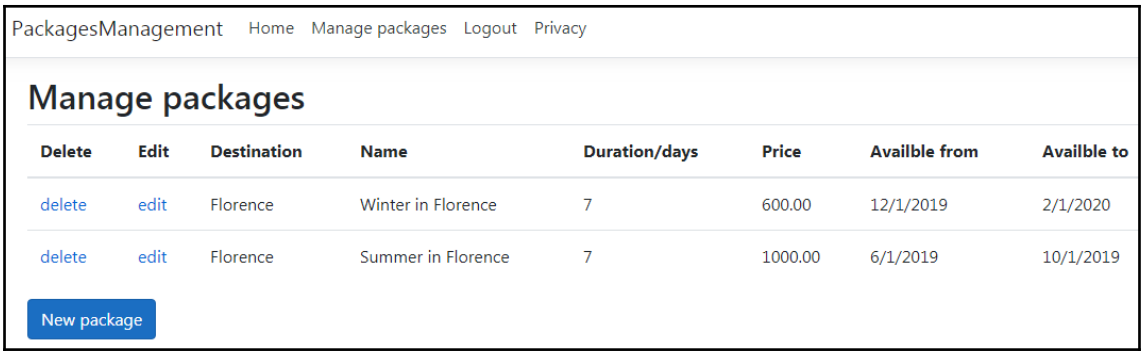
Chapter 13: Presenting ASP.NET Core MVC



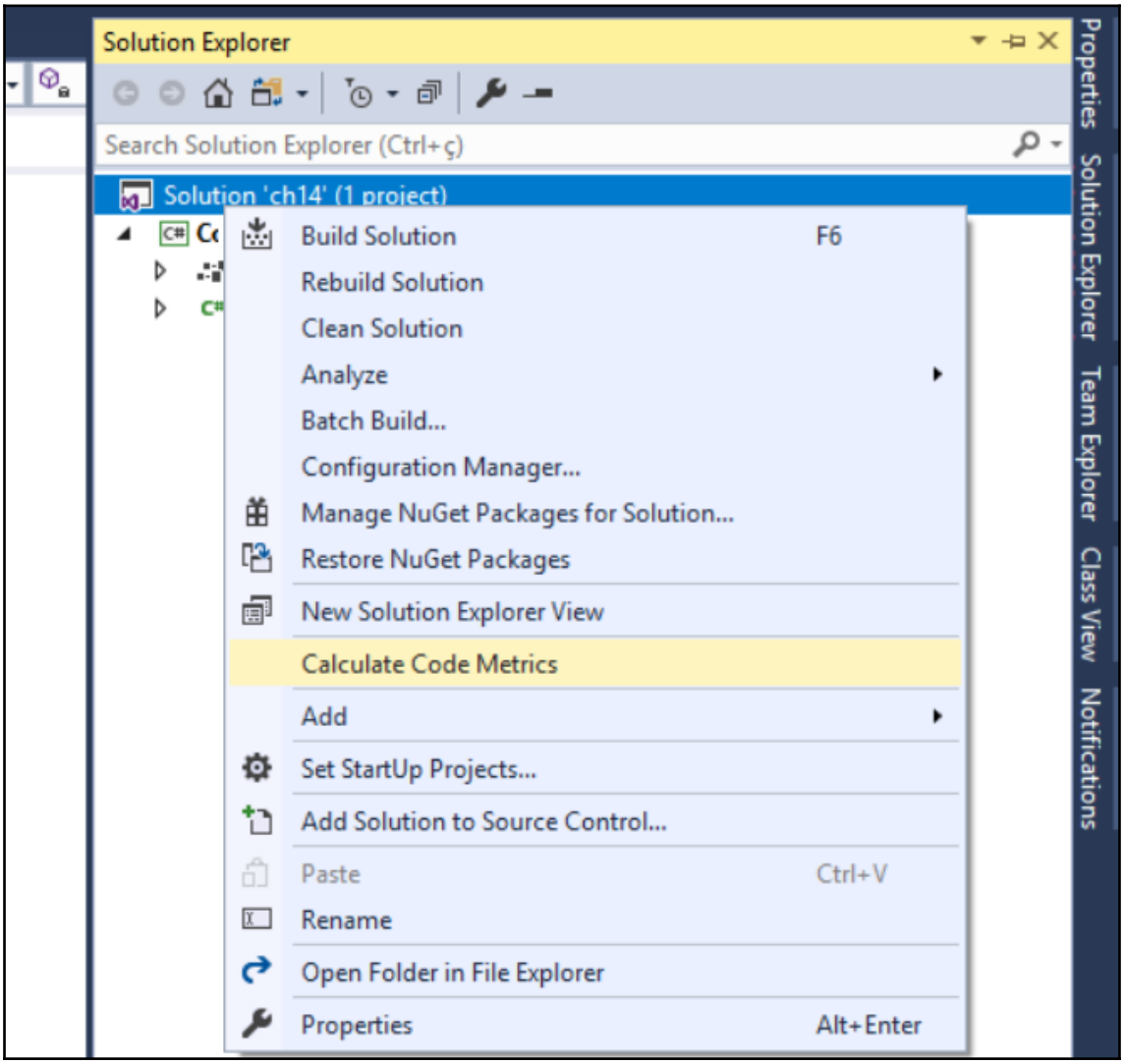







PackagesManagement
Home
Manage packages
Logout
Privacy
Manage packages
Delete
Edit
Destination
Name
Duration/days
Price
Availble from
Availble to
delete
edit
Florence
Winter in Florence
7
600.00
12/1/2019
2/1/2020
delete
edit
Florence
Summer in Florence
7
1000.00
6/1/2019
10/1/2019
New package

Chapter 14: Best Practices in Coding C# 8



Code Metrics Results

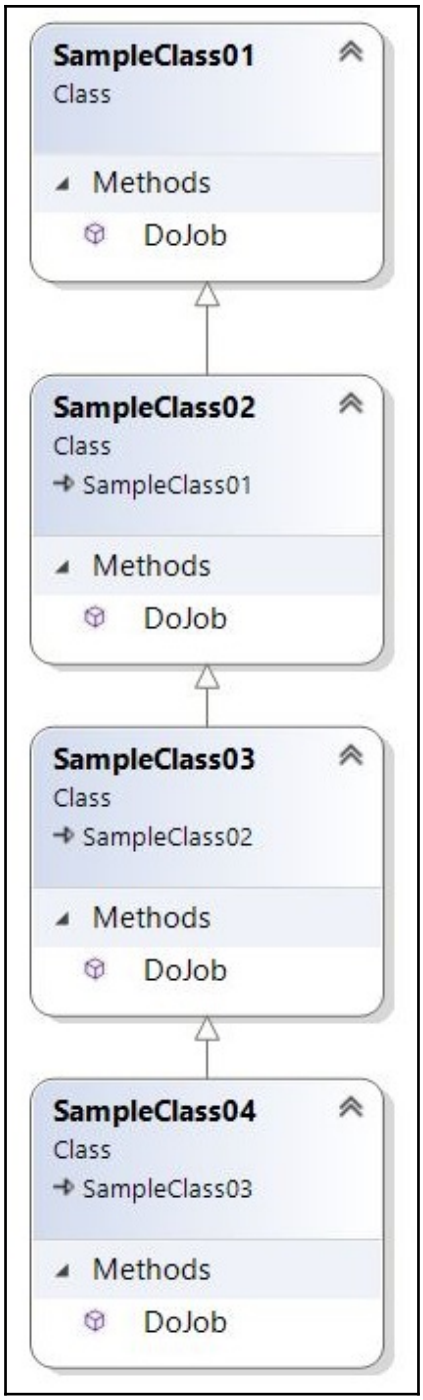
Filter: None Min: Max:

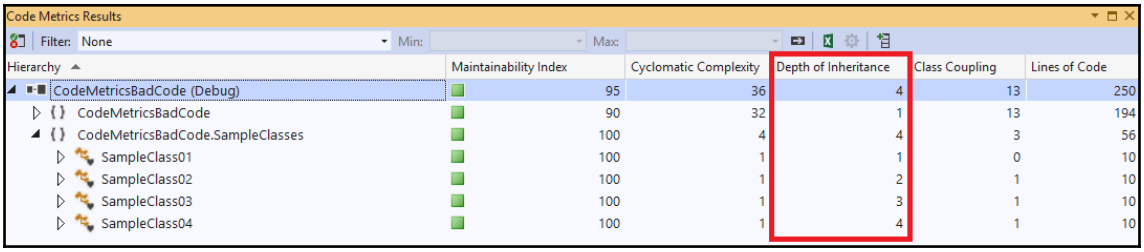
Hierarchy	Maintainability In...	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
CodeMetrics (Debug)	57	31	1	1	54
CodeMetrics	57	31	1	1	54
Program	57	31	1	1	54
Main() : void	37	28		1	51
GetBillingMode() : string	93	1		0	1
ProcessCreditCardMethod() : strin	93	1		0	1
Program()	100	1		0	1

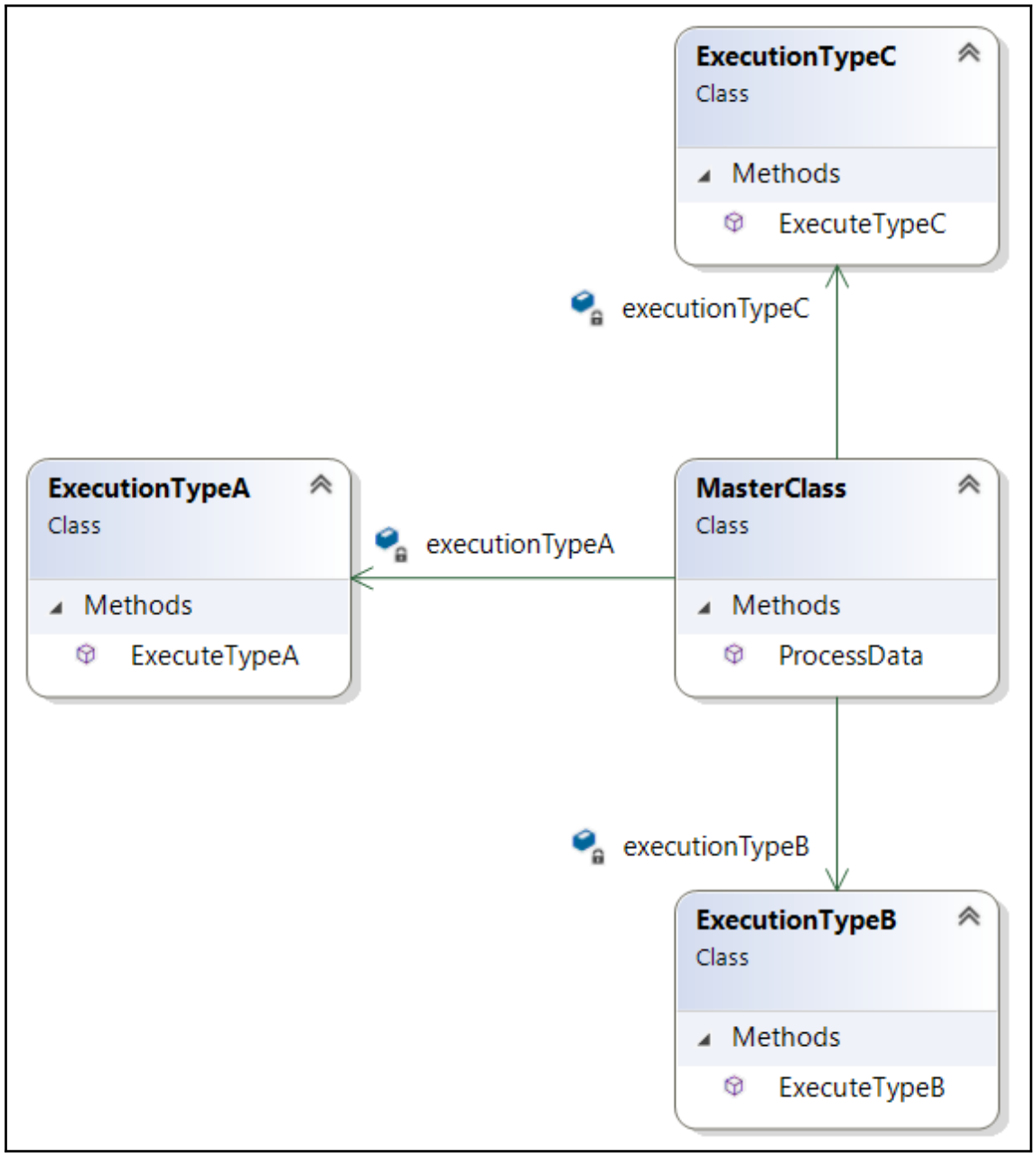
Code Metrics Results

Filter: None Min: Max:

Hierarchy	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
CodeMetricsGoodCode (Debug)	91	24	1	5	146
CodeMetricsGoodCode	90	22	1	5	116
Program	80	21	1	5	112
Main() : void	73	2		5	11
GetMethodsForCheckingResult() : Dictionary<CreditCardProces	62	1		3	15
CheckResultSucceed(BillingMode, CreditCardProcessingResult)	90	2		3	8
CheckResultG(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultF(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultE(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultD(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultC(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultB(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
CheckResultA(BillingMode, CreditCardProcessingResult) : void	90	2		3	8
GetBillingMode() : BillingMode	100	1		1	9
ProcessCreditCardMethod() : CreditCardProcessingResult	100	1		1	9
Program.CheckResultMethod	100	1	1	2	1
CodeMetricsGoodCode.Enums	93	2	1	0	30


SampleClass01
Class
Methods
DoJob
SampleClass02
Class
SampleClass01
Methods
DoJob
SampleClass03
Class
SampleClass02
Methods
DoJob
SampleClass04
Class
SampleClass03
Methods
DoJob

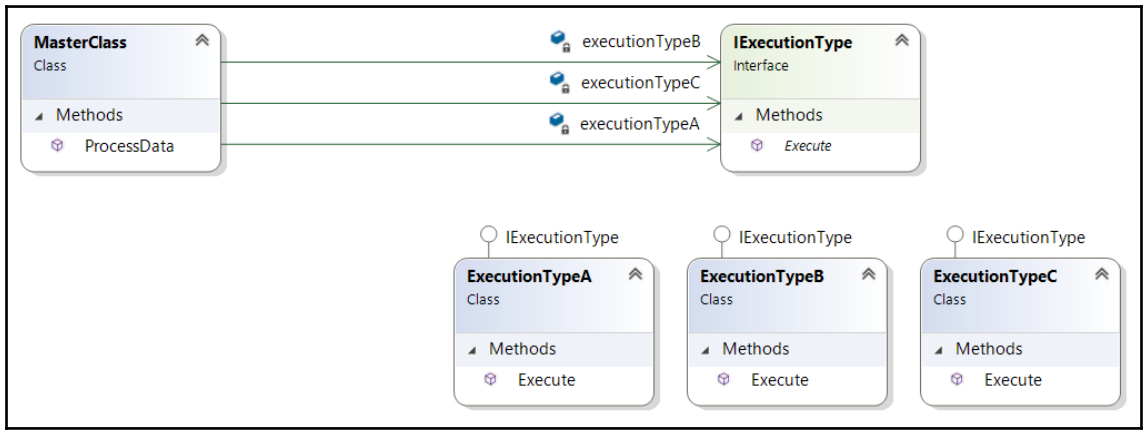

Code Metrics Results
Filter: None
Min:
Max:
Hierarchy
Maintainability Index
Cyclomatic Complexity
Depth of Inheritance
Class Coupling
Lines of Code
CodeMetricsBadCode (Debug) 95 36 4 13 250
CodeMetricsBadCode 90 32 1 13 194
CodeMetricsBadCode.SampleClasses 100 4 4 3 56
SampleClass01 100 1 1 0 10
SampleClass02 100 1 2 1 10
SampleClass03 100 1 3 1 10
SampleClass04 100 1 4 1 10


ExecutionTypeC
Class
Methods
ExecuteTypeC
executionTypeC
ExecutionTypeA
Class
Methods
ExecuteTypeA
executionTypeA
MasterClass
Class
Methods
ProcessData
executionTypeB
ExecutionTypeB
Class
Methods
ExecuteTypeB

Code Metrics Results

Filter: None Min: Max:

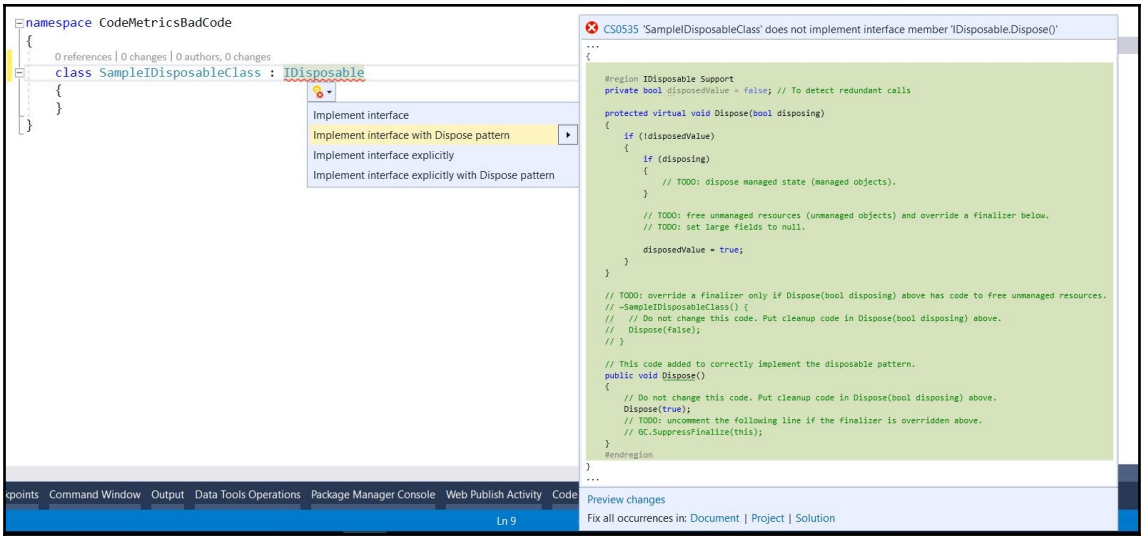
Hierarchy	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
CodeMetricsBadCode (Debug)	96	40	4	16	302
CodeMetricsBadCode	90	32	1	13	194
CodeMetricsBadCode.CouplingSample	86	1	1	3	19
MasterClass	86	1	1	3	15
executionTypeA : ExecutionTypeA	93	0		1	1
executionTypeB : ExecutionTypeB	93	0		1	1
executionTypeC : ExecutionTypeC	93	0		1	1
ProcessData() : void	81	1		3	7



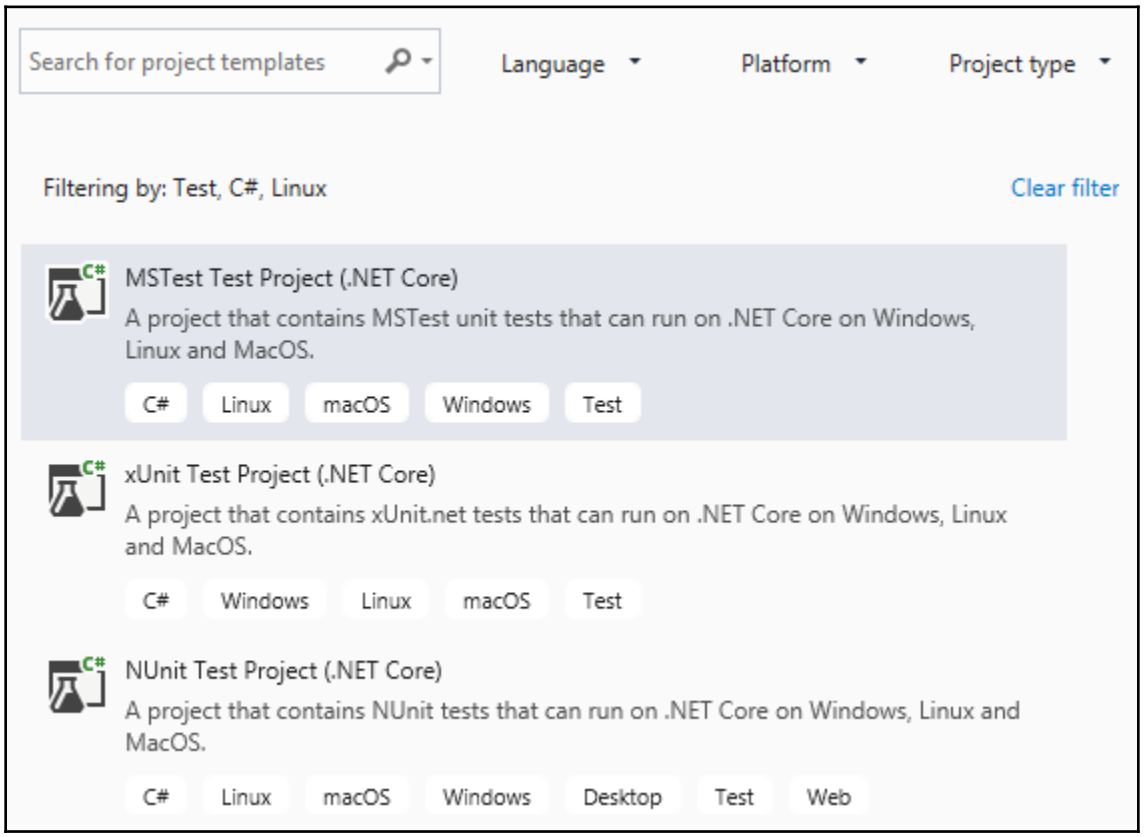
Code Metrics Results

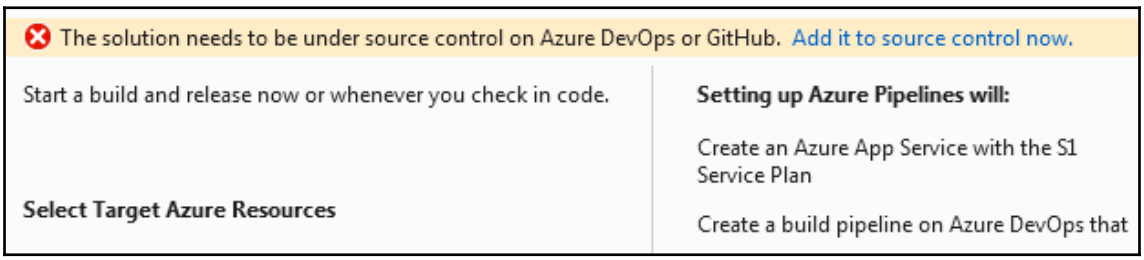
Filter: None Min: Max:

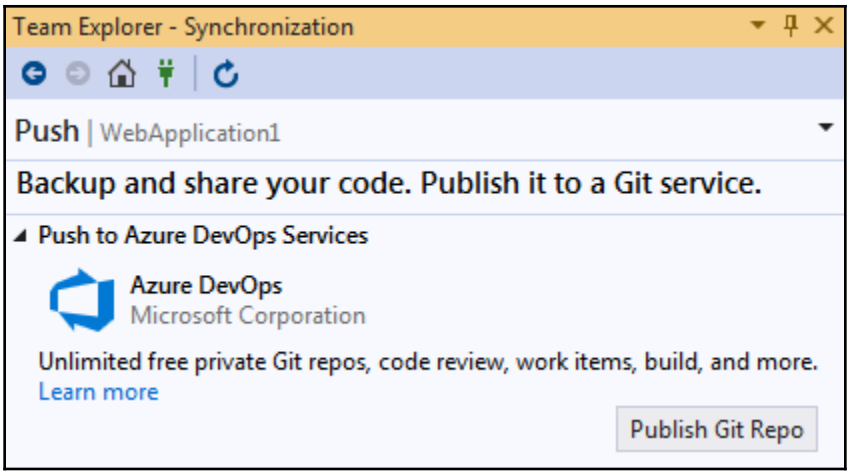
Hierarchy	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
CodeMetricsGoodCode (Debug)	94	29	1	9	206
CodeMetricsGoodCode	90	22	1	5	116
CodeMetricsGoodCode.CouplingSample	93	2	1	4	27
IExecutionType	100	1	0	0	4
MasterClass	86	1	1	4	15
executionTypeA : IExecutionType	93	0		2	1
executionTypeB : IExecutionType	93	0		2	1
executionTypeC : IExecutionType	93	0		2	1
ProcessData() : void	81	1		1	7

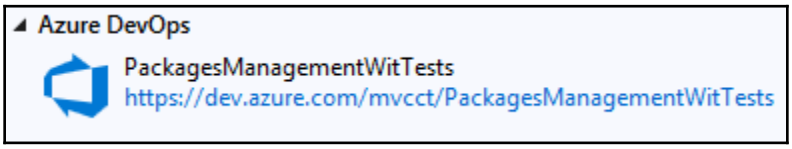

namespace CodeMetricsBadCode
{
0 references | 0 changes | 0 authors, 0 changes
class SampleIDisposableClass : IDisposable
{
}
}
Implement interface
Implement interface with Dispose pattern
Implement interface explicitly
Implement interface explicitly with Dispose pattern
CS0535 'SampleIDisposableClass' does not implement interface member 'IDisposable.Dispose()'
#region IDisposable Support
private bool disposedValue = false; // To detect redundant calls
protected virtual void Dispose(bool disposing)
if (!disposedValue)
if (disposing)
// TODO: dispose managed state (managed objects).
// TODO: free unmanaged resources (unmanaged objects) and override a finalizer below.
// TODO: set large fields to null.
disposedValue = true;
// TODO: override a finalizer only if Dispose(bool disposing) above has code to free unmanaged resources.
// ~SampleIDisposableClass() {
// Do not change this code. Put cleanup code in Dispose(bool disposing) above.
// Dispose(false);
// }
// This code added to correctly implement the disposable pattern.
public void Dispose()
Dispose(true);
// TODO: uncomment the following line if the finalizer is overridden above.
// GC.SuppressFinalize(this);
#endregion
Preview changes
Fix all occurrences in: Document | Project | Solution
Command Window
Output
Data Tools Operations
Package Manager Console
Web Publish Activity
Ln 9

Chapter 15: Testing Your Code with Unit Test Cases and TDD

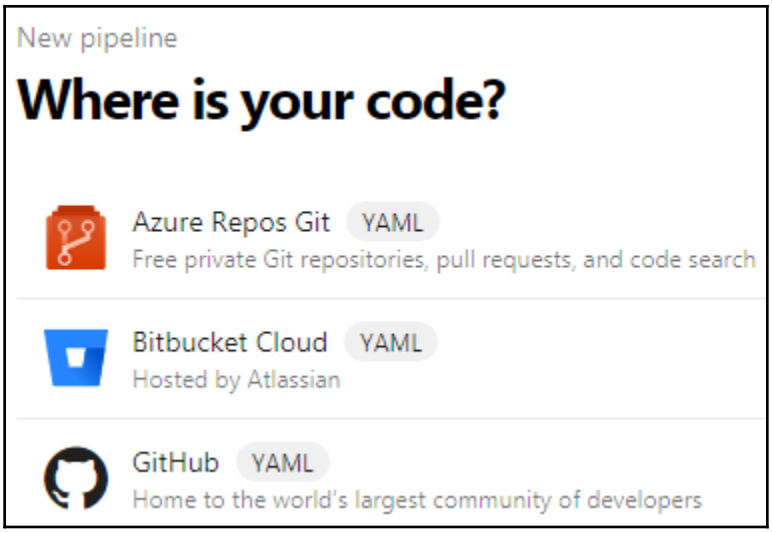


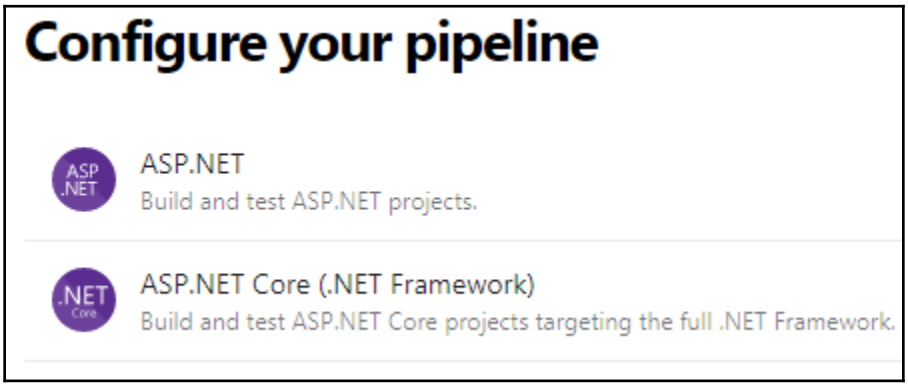


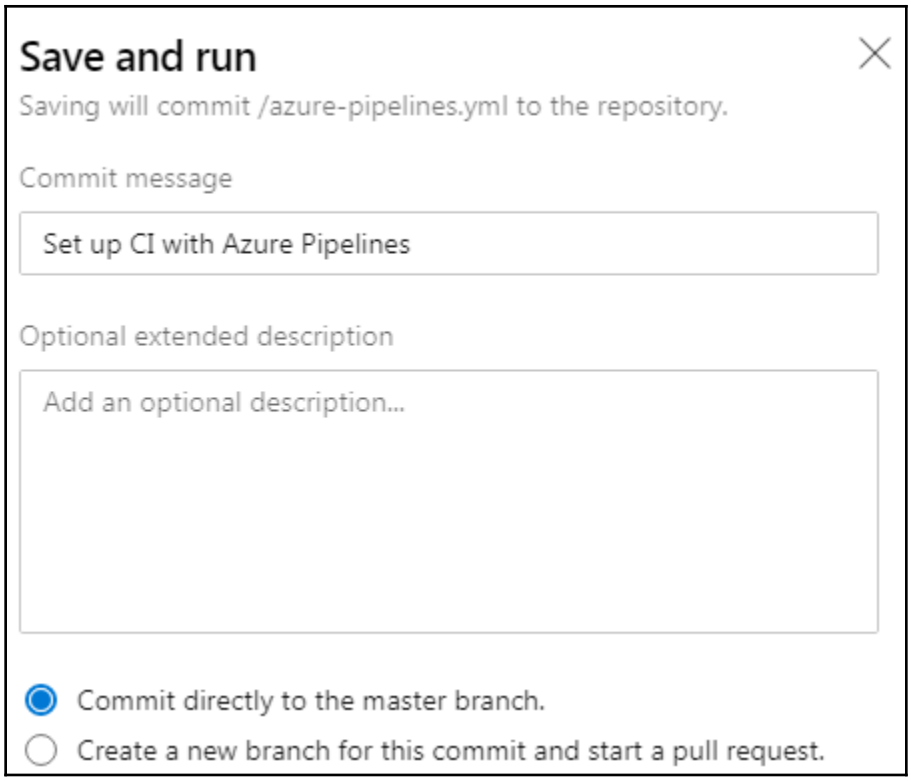

Team Explorer - Synchronization
Push | WebApplication1
Backup and share your code. Publish it to a Git service.
Push to Azure DevOps Services
Azure DevOps
Microsoft Corporation
Unlimited free private Git repos, code review, work items, build, and more.
Learn more
Publish Git Repo


Azure DevOps
PackagesManagementWitTests
https://dev.azure.com/mvcct/PackagesManagementWitTests

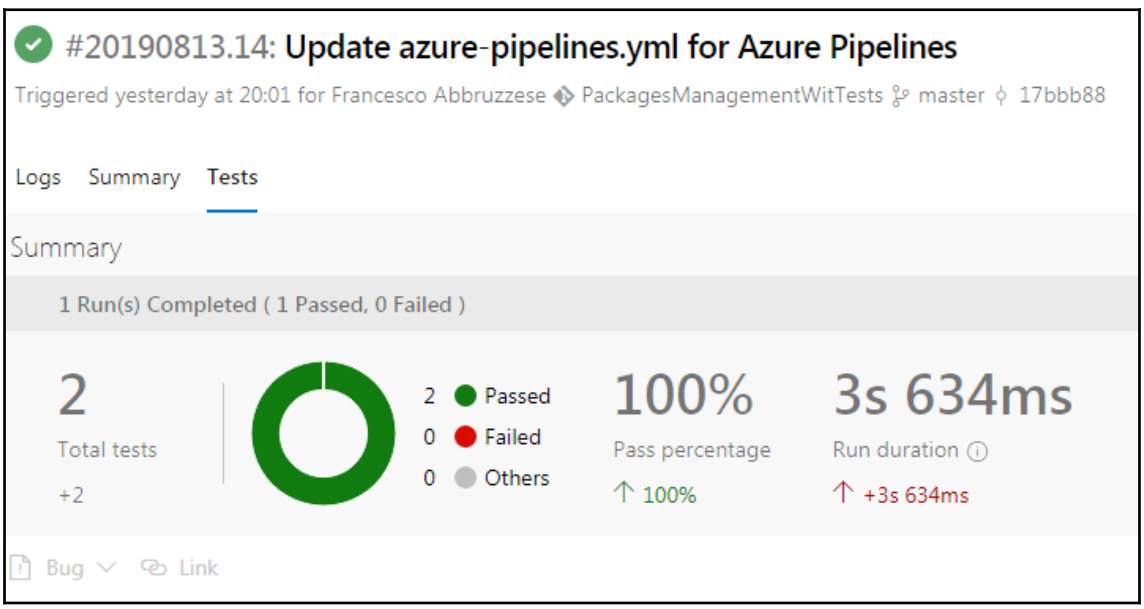

No build pipelines were found
Automate your build in a few easy steps with a new pipeline.
New pipeline

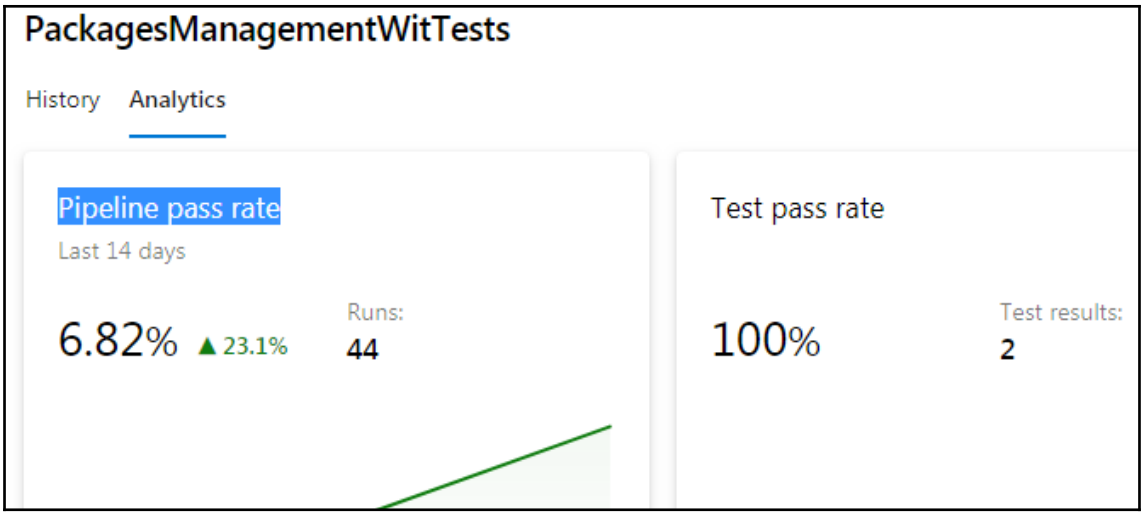

New pipeline
Where is your code?
Azure Repos Git
YAML
Free private Git repositories, pull requests, and code search
Bitbucket Cloud
YAML
Hosted by Atlassian
GitHub
YAML
Home to the world's largest community of developers


Configure your pipeline
ASP.NET
Build and test ASP.NET projects.
ASP.NET Core (.NET Framework)
Build and test ASP.NET Core projects targeting the full .NET Framework.

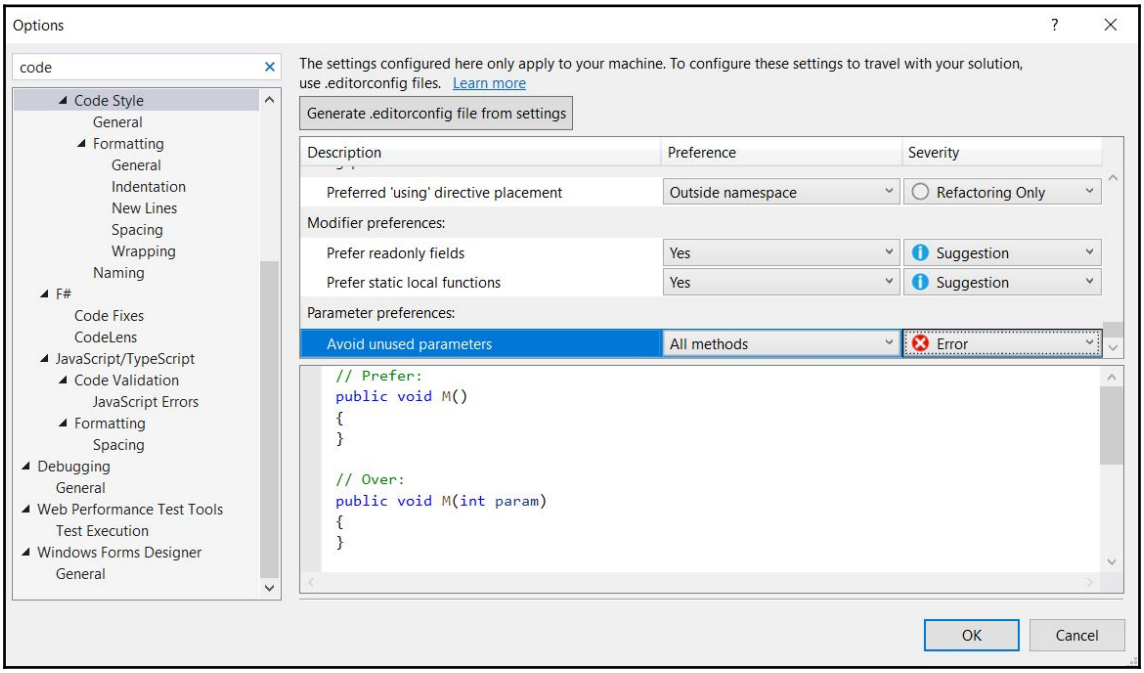

Save and run
Saving will commit /azure-pipelines.yml to the repository.
Commit message
Set up CI with Azure Pipelines
Optional extended description
Add an optional description...
Commit directly to the master branch.
Create a new branch for this commit and start a pull request.

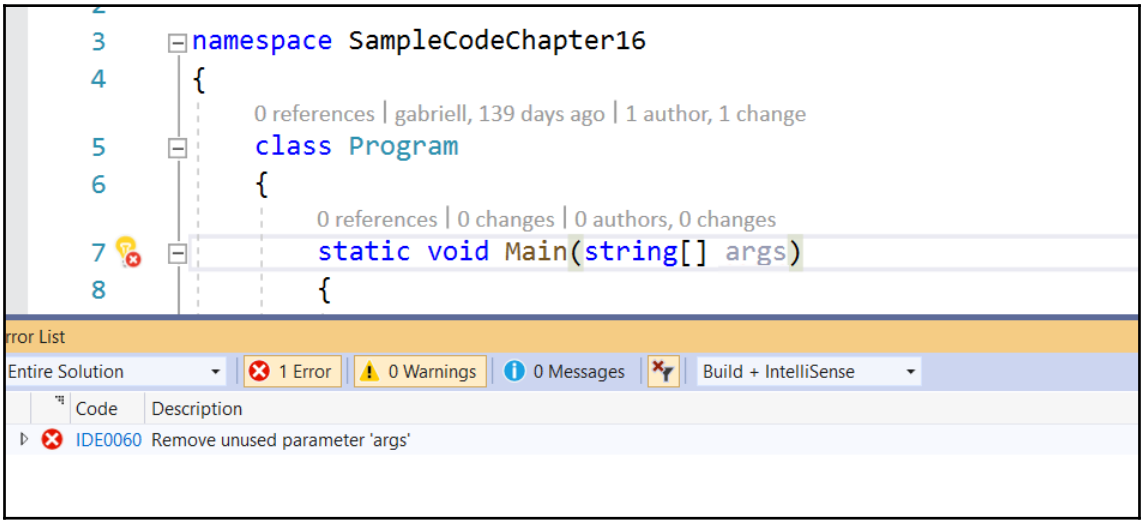
```yaml
steps:
Settings
- task: NuGetToolInstaller@1

Settings
- task: NuGetCommand@2
  inputs:
    restoreSolution: '$(solution)'

Settings
- task: VSBuild@1
  inputs:
    solution: '$(solution)'
    msbuildArgs: '/p:DeployOnBuild=true /p:WebPublishMethod=Package /p:PackageAsSingleFil
    platform: '$(buildPlatform)'
    configuration: '$(buildConfiguration)'

Settings
- task: VSTest@2
  inputs:
    platform: '$(buildPlatform)'
    configuration: '$(buildConfiguration)'
```

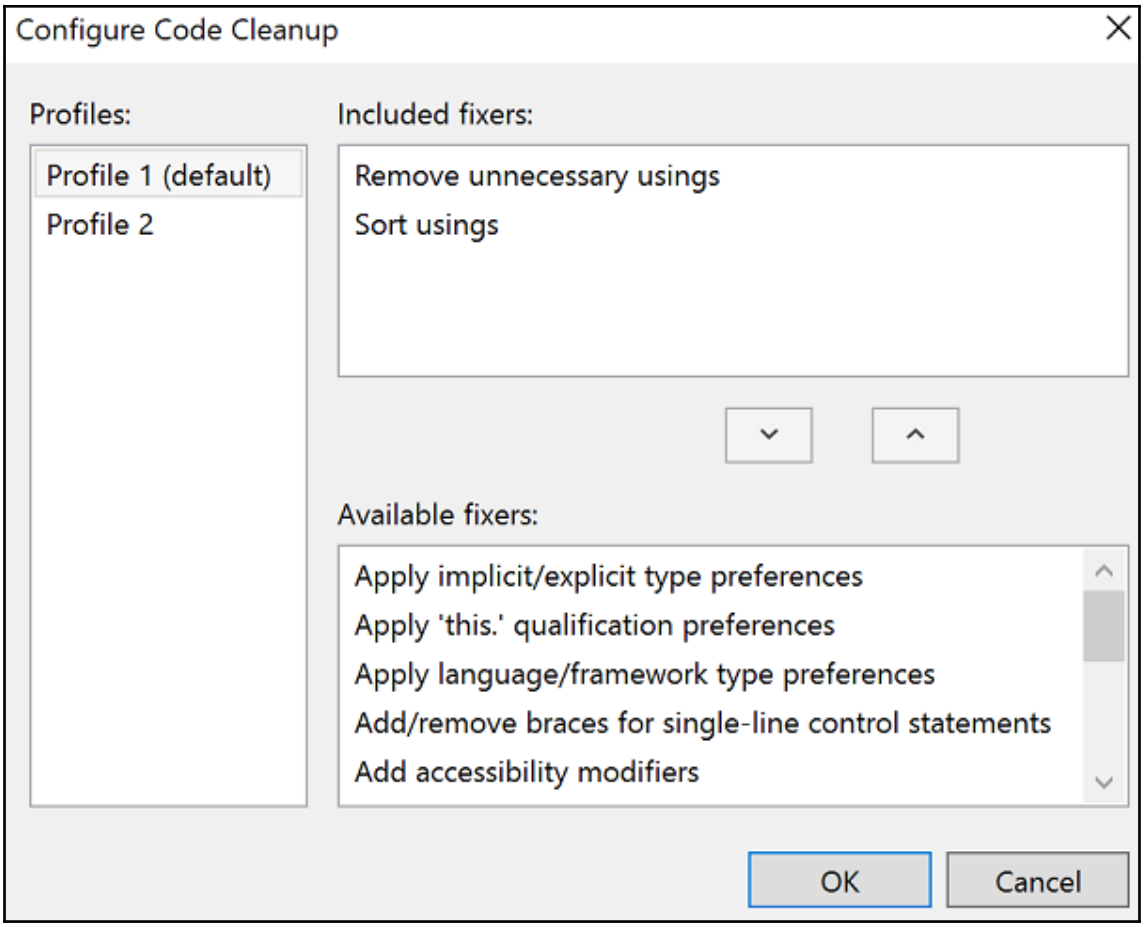


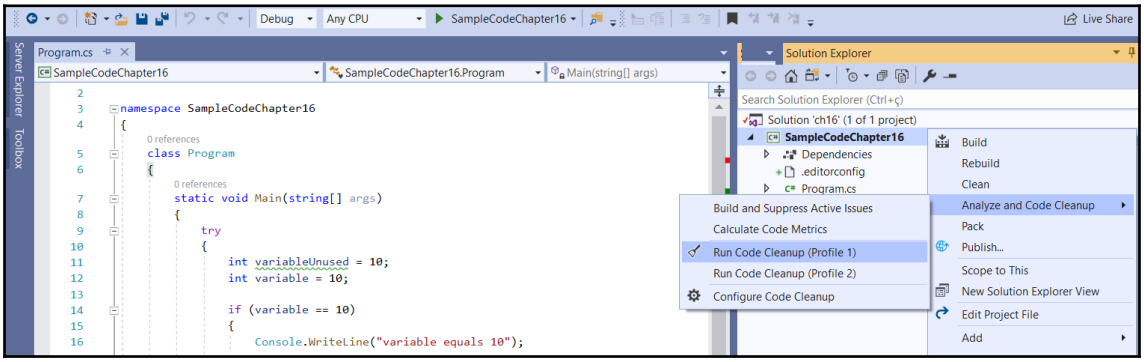

PackagesManagementWitTests
History
Analytics
Pipeline pass rate
Last 14 days
6.82%
▲ 23.1%
Runs:
44
Test pass rate
100%
Test results:
2

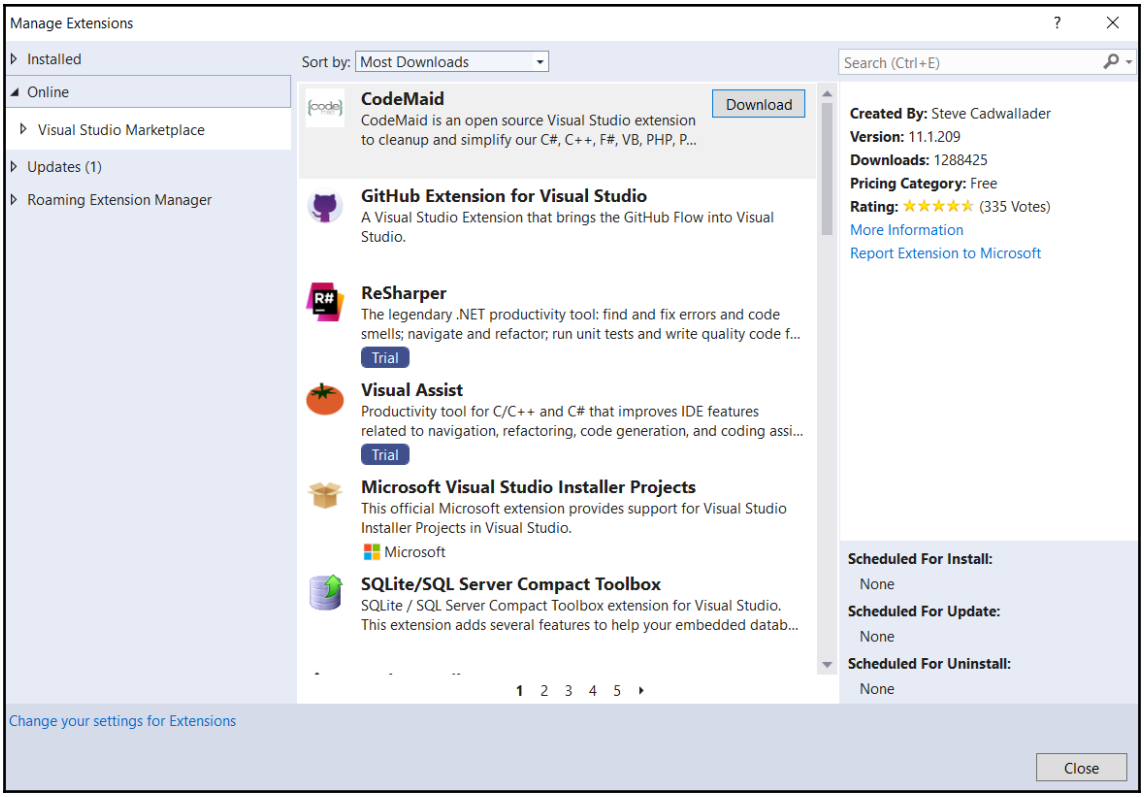
Chapter 16: Using Tools to Write Better Code



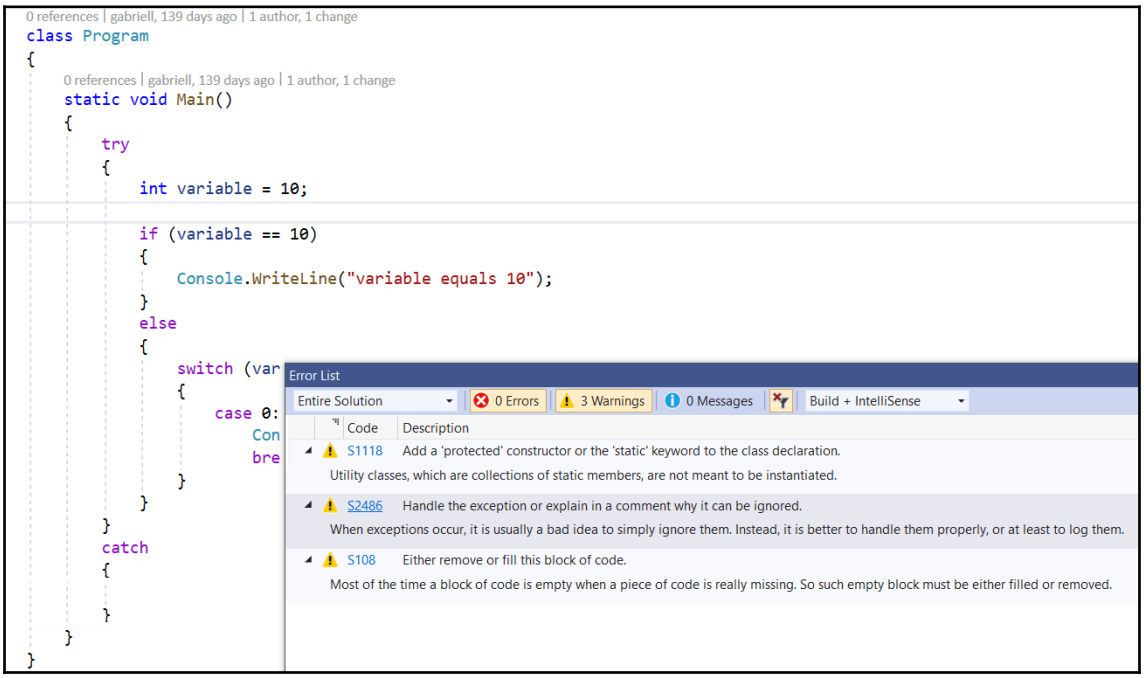


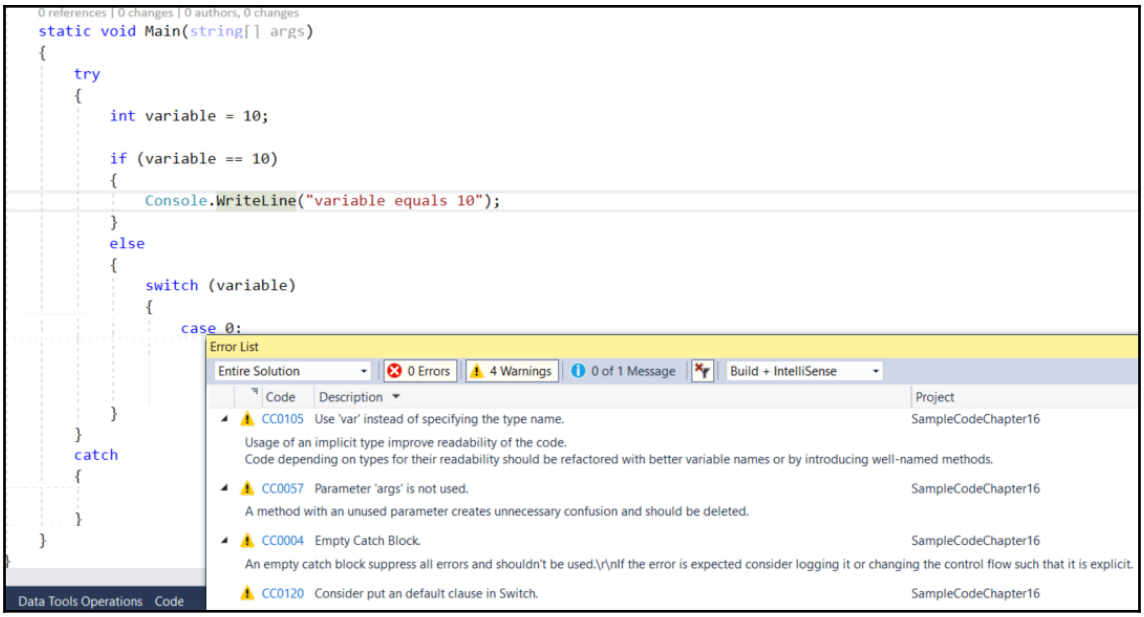

Configure Code Cleanup
Profiles:
Profile 1 (default)
Profile 2
Included fixers:
Remove unnecessary usings
Sort usings
Available fixers:
Apply implicit/explicit type preferences
Apply 'this.' qualification preferences
Apply language/framework type preferences
Add/remove braces for single-line control statements
Add accessibility modifiers
OK
Cancel

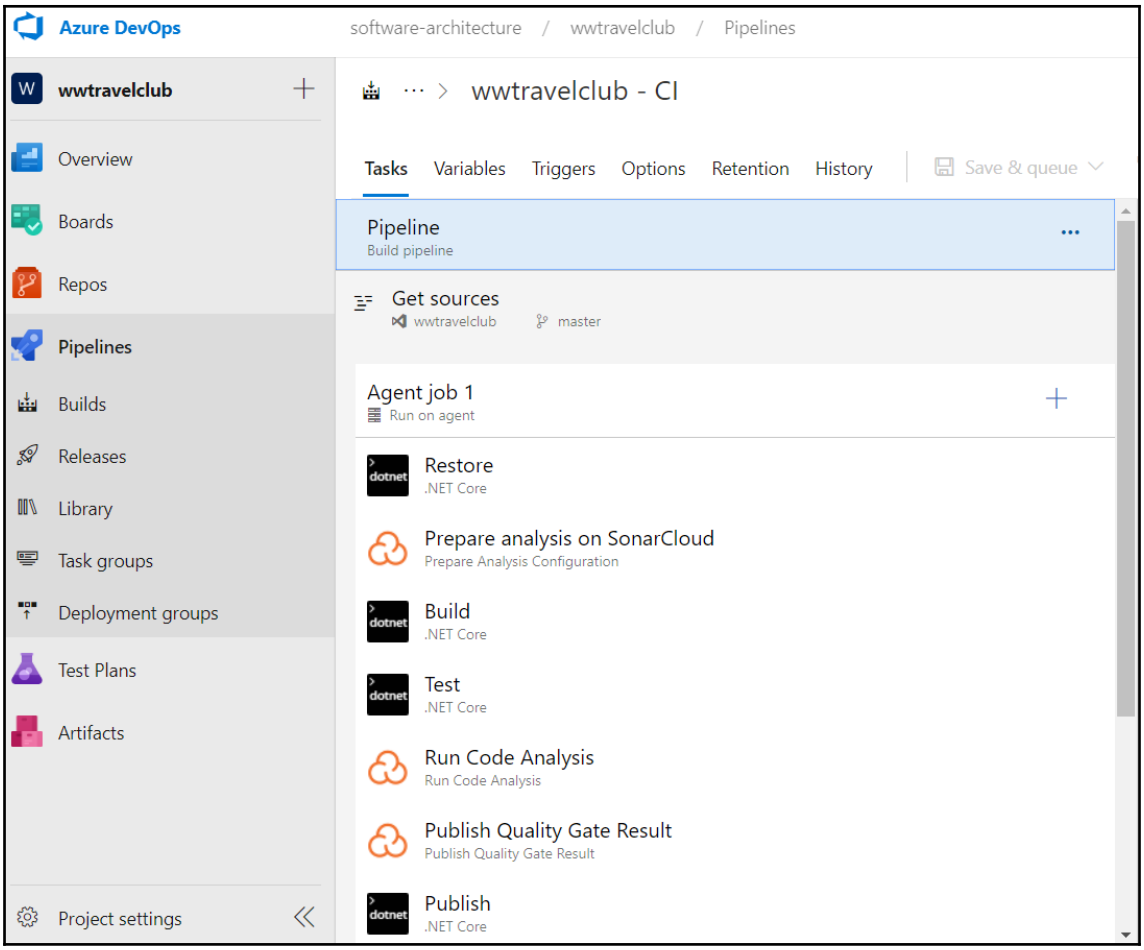

Debug
Any CPU
SampleCodeChapter16
Live Share
Program.cs
SampleCodeChapter16
SampleCodeChapter16.Program
Main(string[] args)
namespace SampleCodeChapter16
{
0 references
class Program
{
0 references
static void Main(string[] args)
{
try
{
int variableUnused = 10;
int variable = 10;
if (variable == 10)
{
Console.WriteLine("variable equals 10");
Solution Explorer
Search Solution Explorer (Ctrl+ç)
Solution 'ch16' (1 of 1 project)
SampleCodeChapter16
Dependencies
.editorconfig
Program.cs
Build
Rebuild
Clean
Analyze and Code Cleanup
Pack
Publish...
Scope to This
New Solution Explorer View
Edit Project File
Add
Build and Suppress Active Issues
Calculate Code Metrics
Run Code Cleanup (Profile 1)
Run Code Cleanup (Profile 2)
Configure Code Cleanup
Server Explorer
Toolbox

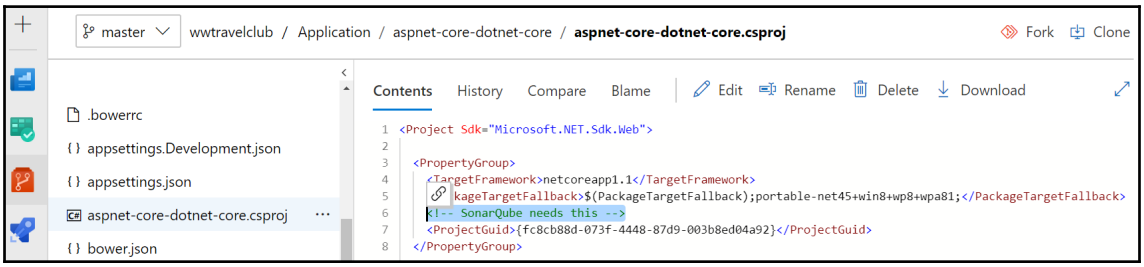

Manage Extensions
Installed
Online
Visual Studio Marketplace
Updates (1)
Roaming Extension Manager
Sort by: Most Downloads
Search (Ctrl+E)
CodeMaid
CodeMaid is an open source Visual Studio extension to cleanup and simplify our C#, C++, F#, VB, PHP, P...
Download
GitHub Extension for Visual Studio
A Visual Studio Extension that brings the GitHub Flow into Visual Studio.
ReSharper
The legendary .NET productivity tool: find and fix errors and code smells; navigate and refactor; run unit tests and write quality code f...
Trial
Visual Assist
Productivity tool for C/C++ and C# that improves IDE features related to navigation, refactoring, code generation, and coding assi...
Trial
Microsoft Visual Studio Installer Projects
This official Microsoft extension provides support for Visual Studio Installer Projects in Visual Studio.
Microsoft
SQLite/SQL Server Compact Toolbox
SQLite / SQL Server Compact Toolbox extension for Visual Studio. This extension adds several features to help your embedded datab...
1 2 3 4 5
Created By: Steve Cadwallader
Version: 11.1.209
Downloads: 1288425
Pricing Category: Free
Rating: (335 Votes)
More Information
Report Extension to Microsoft
Scheduled For Install:
None
Scheduled For Update:
None
Scheduled For Uninstall:
None
Change your settings for Extensions
Close

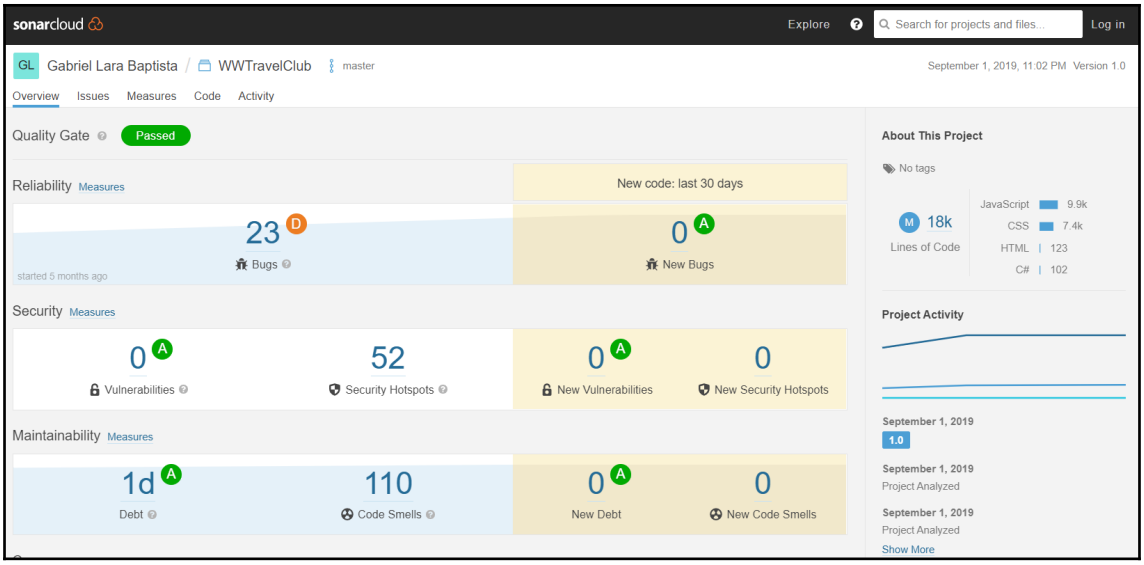

class Program
{
0 references | gabriell, 139 days ago | 1 author, 1 change
static void Main()
{
try
{
int variable = 10;
if (variable == 10)
{
Console.WriteLine("variable equals 10");
}
else
{
switch (variable)
{
case 0:
Console.WriteLine("variable equals 0");
break;
}
}
}
catch
{
}
}
}
Error List
Entire Solution
0 Errors
0 Warnings
1 Message
Build + IntelliSense
Code
Description
CA1031
Modify 'Main' to catch a more specific exception type, or rethrow the exception.
A general exception such as System.Exception or System.SystemException is caught in a catch statement, or a general catch clause is used. General exceptions should not be caught.


0 references | gabriell, 139 days ago | 1 author, 1 change
class Program
{
0 references | gabriell, 139 days ago | 1 author, 1 change
static void Main()
{
try
{
int variable = 10;
if (variable == 10)
{
Console.WriteLine("variable equals 10");
}
else
{
switch (var
{
case 0:
Con
bre
}
}
}
catch
{
}
}
}
Error List
Entire Solution
0 Errors
3 Warnings
0 Messages
Build + IntelliSense
Code
Description
S1118
Add a 'protected' constructor or the 'static' keyword to the class declaration.
Utility classes, which are collections of static members, are not meant to be instantiated.
S2486
Handle the exception or explain in a comment why it can be ignored.
When exceptions occur, it is usually a bad idea to simply ignore them. Instead, it is better to handle them properly, or at least to log them.
S108
Either remove or fill this block of code.
Most of the time a block of code is empty when a piece of code is really missing. So such empty block must be either filled or removed.

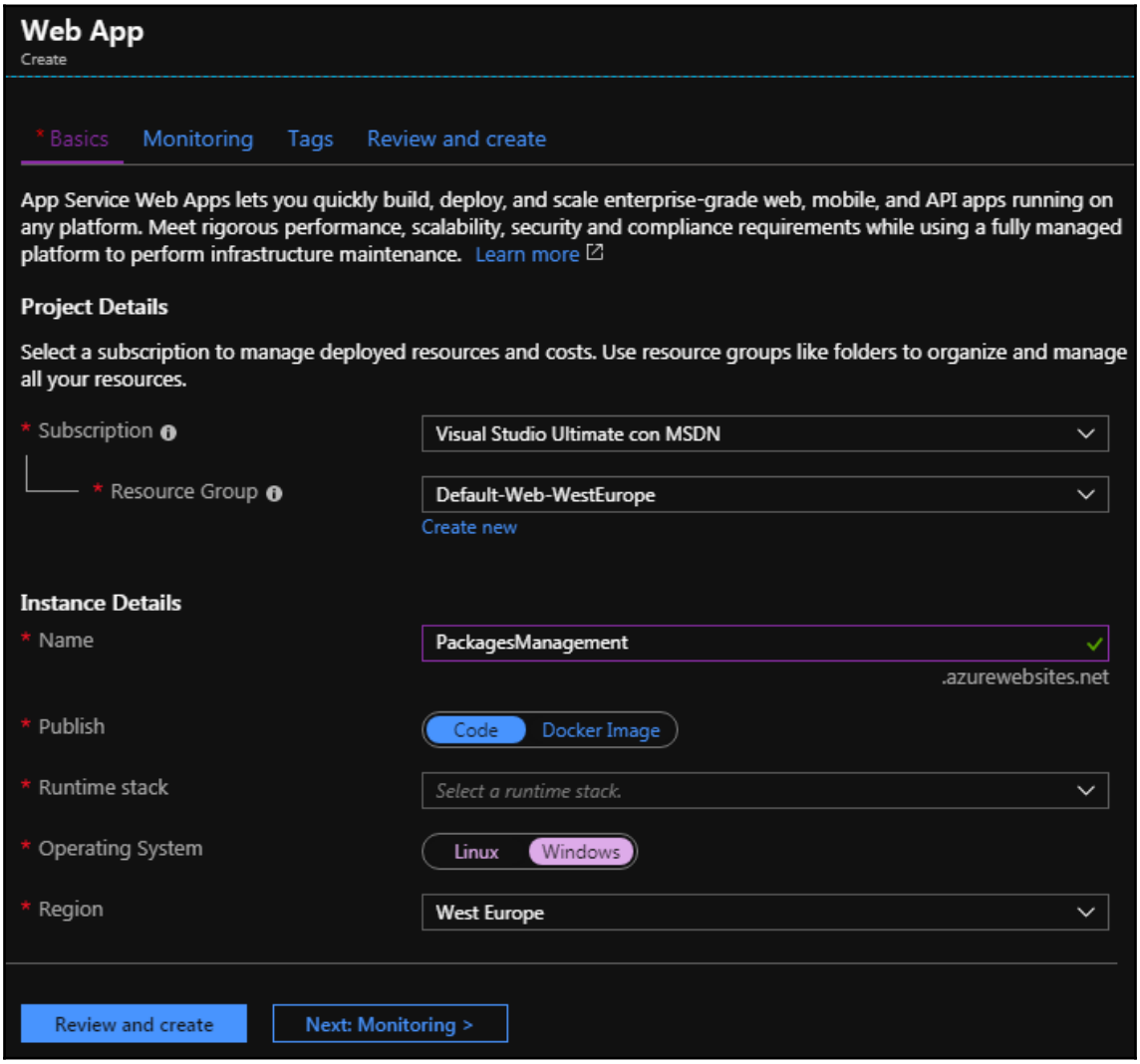

0 references | 0 changes | 0 authors, 0 changes
static void Main(string[] args)
{
try
{
int variable = 10;
if (variable == 10)
{
Console.WriteLine("variable equals 10");
}
else
{
switch (variable)
{
case 0:
}
}
catch
{
}
}
}
Error List
Entire Solution
0 Errors
4 Warnings
0 of 1 Message
Build + IntelliSense
Code
Description
Project
CC0105 Use 'var' instead of specifying the type name.
SampleCodeChapter16
Usage of an implicit type improve readability of the code.
Code depending on types for their readability should be refactored with better variable names or by introducing well-named methods.
CC0057 Parameter 'args' is not used.
SampleCodeChapter16
A method with an unused parameter creates unnecessary confusion and should be deleted.
CC0004 Empty Catch Block.
SampleCodeChapter16
An empty catch block suppress all errors and shouldn't be used.\r\nIf the error is expected consider logging it or changing the control flow such that it is explicit.
CC0120 Consider put an default clause in Switch.
SampleCodeChapter16
Data Tools Operations
Code

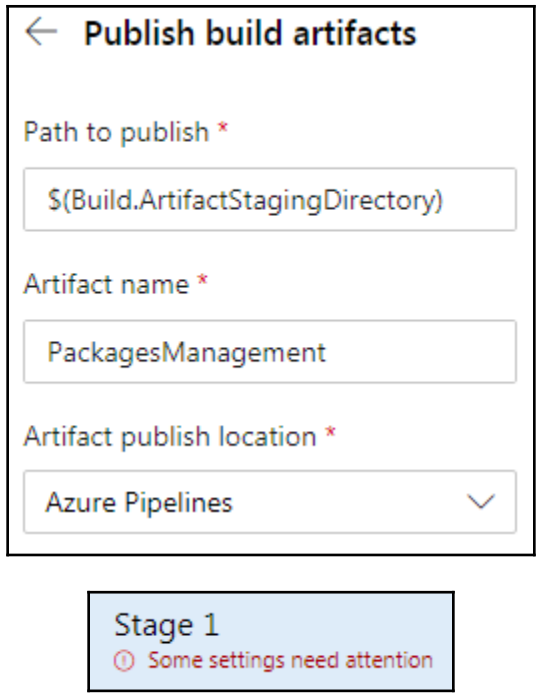

Azure DevOps
software-architecture / wwtravelclub / Pipelines
wwtravelclub
Overview
Boards
Repos
Pipelines
Builds
Releases
Library
Task groups
Deployment groups
Test Plans
Artifacts
Project settings
wwtravelclub - CI
Tasks
Variables
Triggers
Options
Retention
History
Save & queue
Pipeline
Build pipeline
Get sources
wwtravelclub
master
Agent job 1
Run on agent
Restore
.NET Core
Prepare analysis on SonarCloud
Prepare Analysis Configuration
Build
.NET Core
Test
.NET Core
Run Code Analysis
Run Code Analysis
Publish Quality Gate Result
Publish Quality Gate Result
Publish
.NET Core

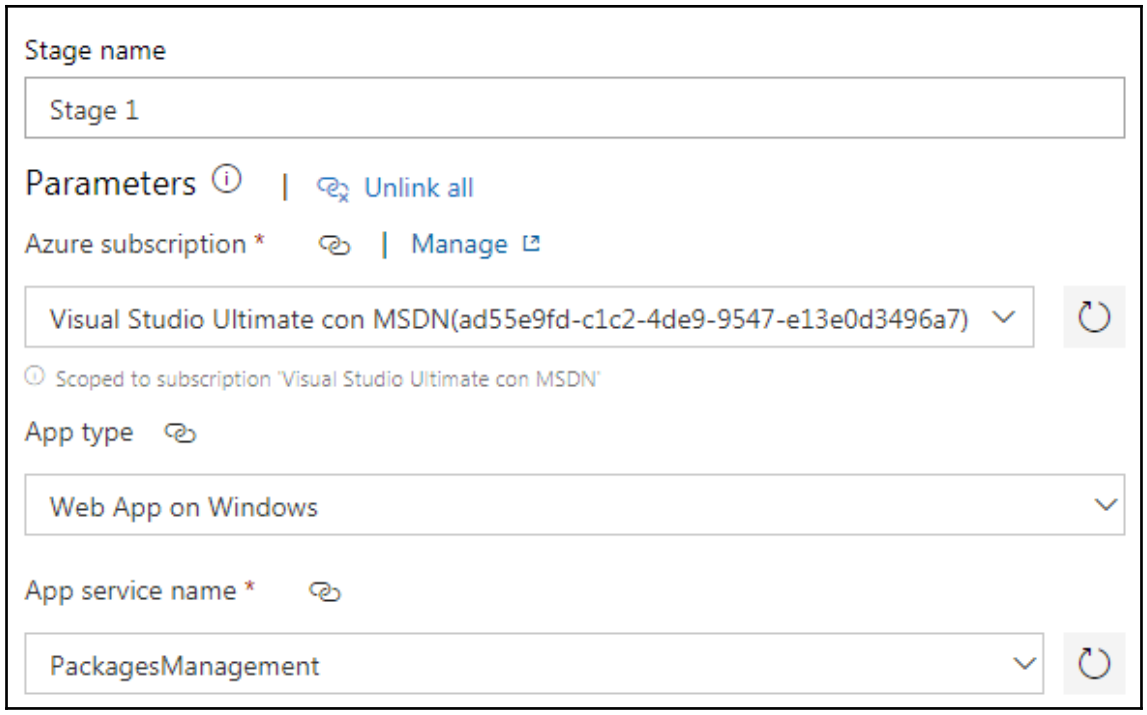

master
wwtravelclub / Application / aspnet-core-dotnet-core / aspnet-core-dotnet-core.csproj
Fork
Clone
.bowerrc
appsettings.Development.json
appsettings.json
aspnet-core-dotnet-core.csproj
bower.json
Contents
History
Compare
Blame
Edit
Rename
Delete
Download
<Project Sdk="Microsoft.NET.Sdk.Web">
<PropertyGroup>
<TargetFramework>netcoreapp1.1</TargetFramework>
kageTargetFallback>$(PackageTargetFallback);portable-net45+win8+wp8+wpa81;</PackageTargetFallback>
<!-- SonarQube needs this -->
<ProjectGuid>{fc8cb88d-073f-4448-87d9-003b8ed04a92}</ProjectGuid>
</PropertyGroup>

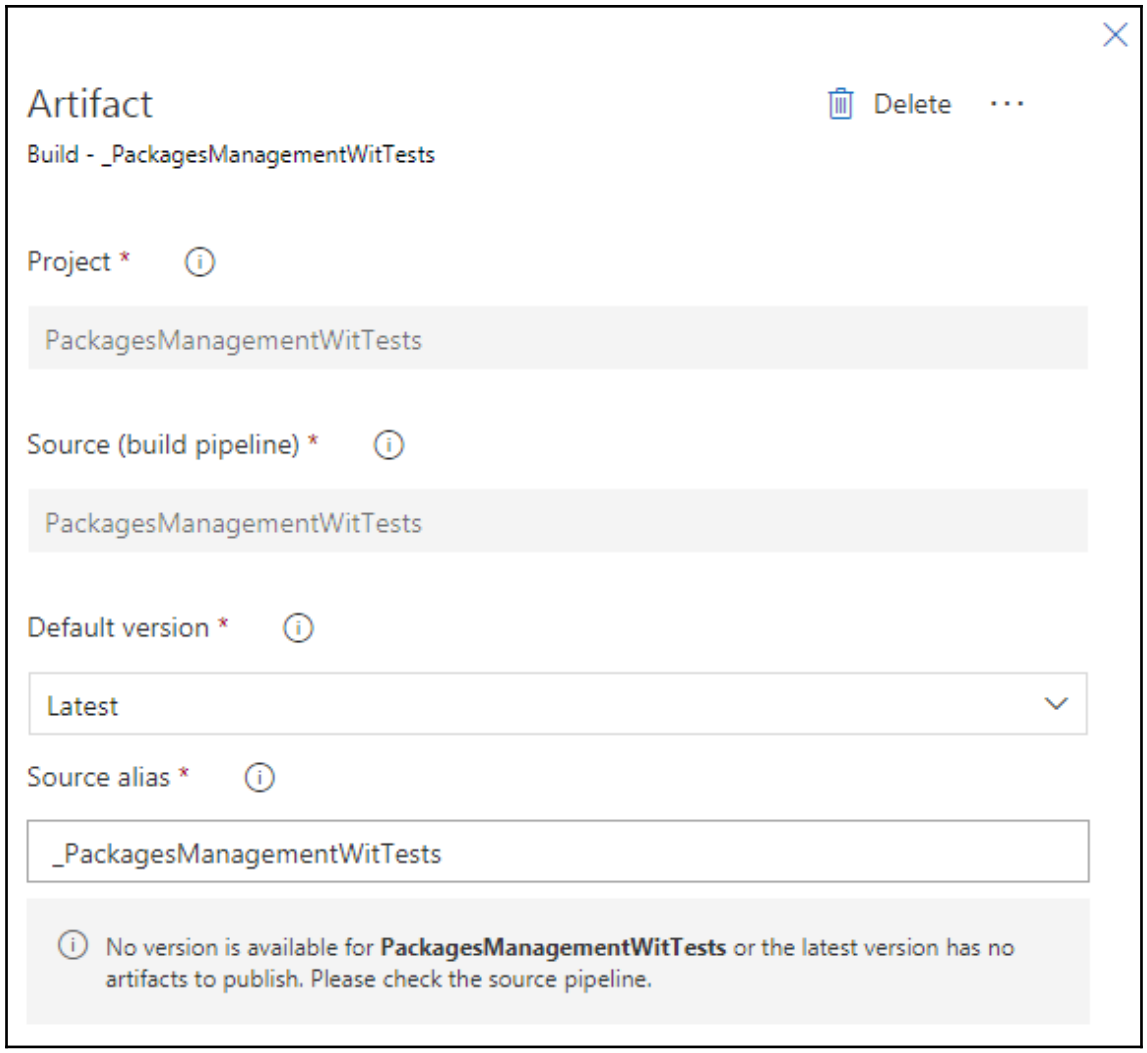

sonarcloud
Explore
Search for projects and files...
Log in
GL
Gabriel Lara Baptista / WWTravelClub master
September 1, 2019, 11:02 PM Version 1.0
Overview
Issues
Measures
Code
Activity
Quality Gate
Passed
Reliability Measures
New code: last 30 days
23 D
Bugs
started 5 months ago
0 A
New Bugs
Security Measures
0 A
Vulnerabilities
52
Security Hotspots
0 A
New Vulnerabilities
0
New Security Hotspots
Maintainability Measures
1d A
Debt
110
Code Smells
0 A
New Debt
0
New Code Smells
About This Project
No tags
M 18k
Lines of Code
JavaScript 9.9k
CSS 7.4k
HTML 123
C# 102
Project Activity
September 1, 2019
1.0
September 1, 2019
Project Analyzed
September 1, 2019
Project Analyzed
Show More

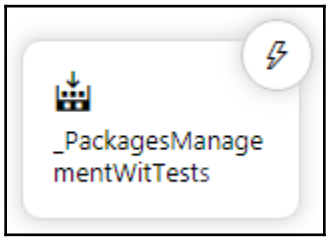
Chapter 17: Deploying Your Application with Azure DevOps



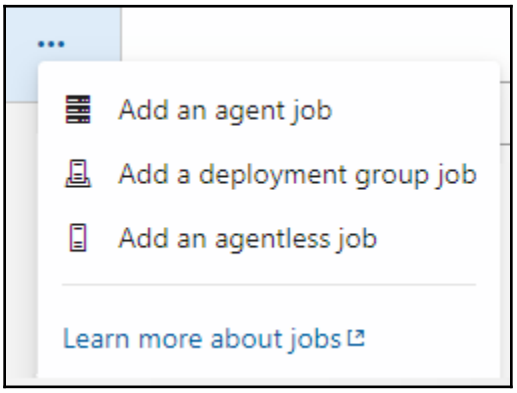

Publish build artifacts
Path to publish *
$(Build.ArtifactStagingDirectory)
Artifact name *
PackagesManagement
Artifact publish location *
Azure Pipelines
Stage 1
Some settings need attention

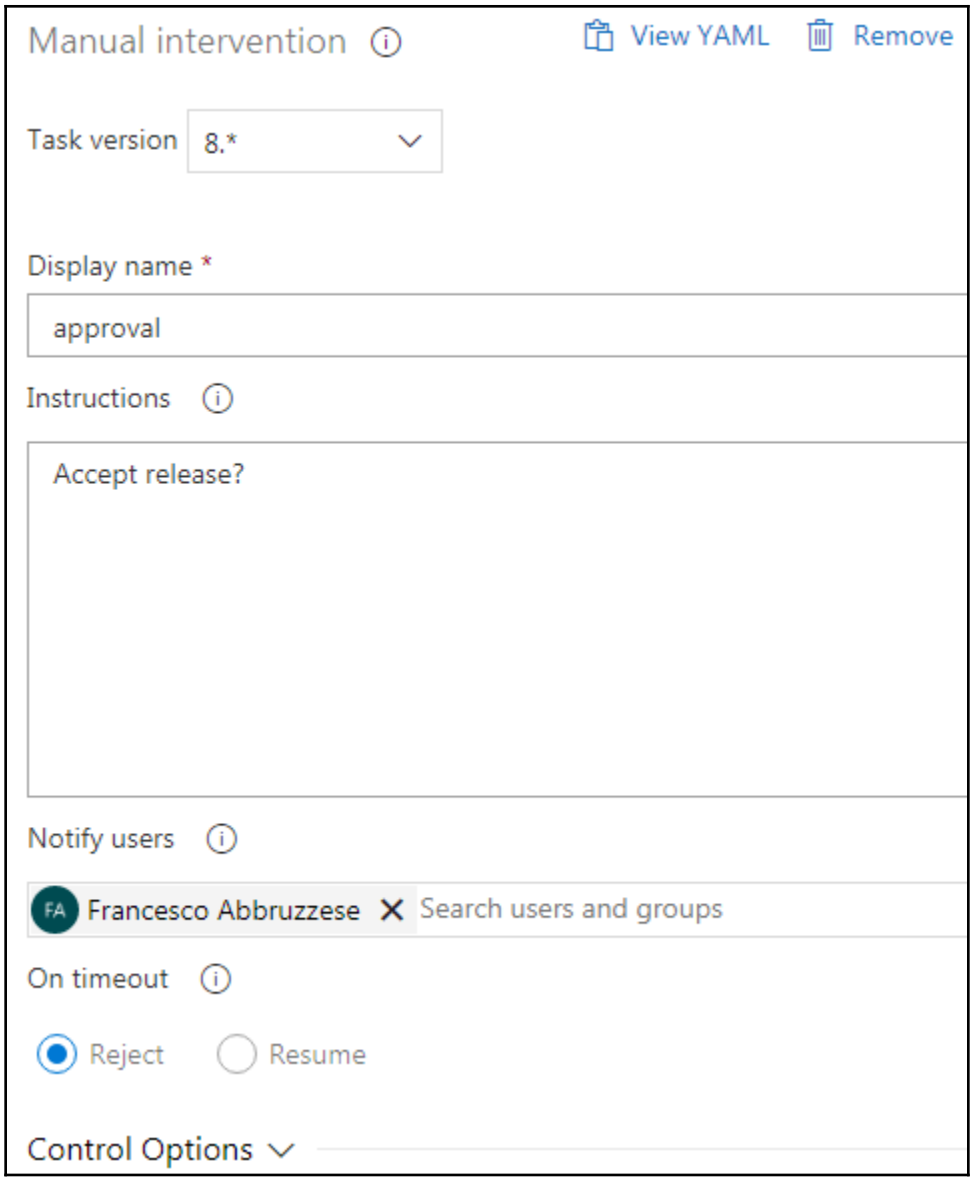

Stage name
Stage 1
Parameters
Unlink all
Azure subscription *
Manage
Visual Studio Ultimate con MSDN(ad55e9fd-c1c2-4de9-9547-e13e0d3496a7)
Scoped to subscription 'Visual Studio Ultimate con MSDN'
App type
Web App on Windows
App service name *
PackagesManagement

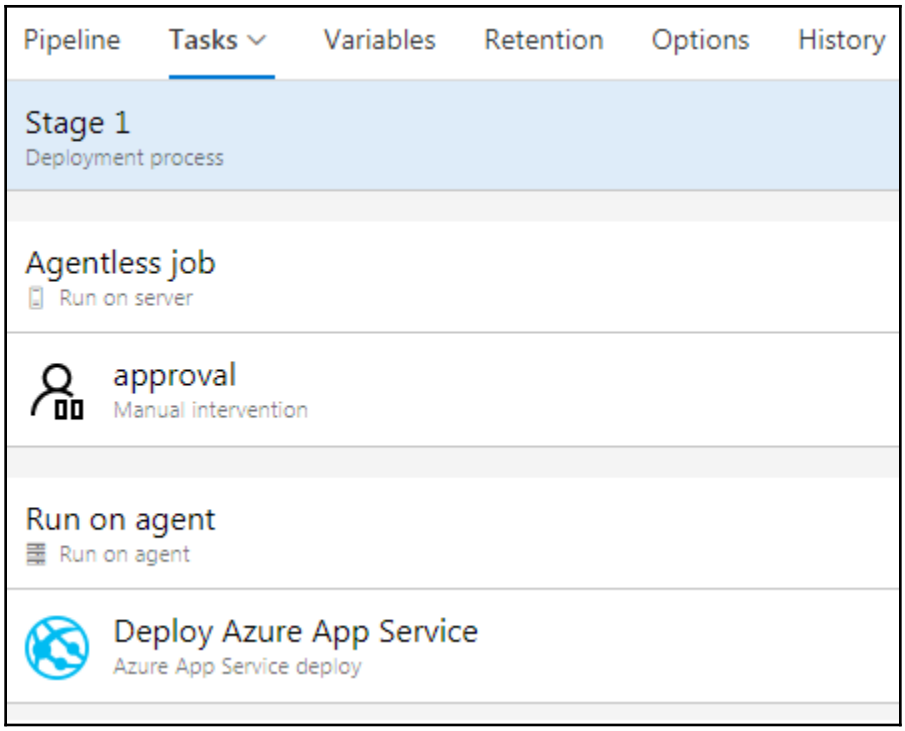

Artifact
Delete
Build - _PackagesManagementWitTests
Project *
PackagesManagementWitTests
Source (build pipeline) *
PackagesManagementWitTests
Default version *
Latest
Source alias *
_PackagesManagementWitTests
No version is available for PackagesManagementWitTests or the latest version has no artifacts to publish. Please check the source pipeline.

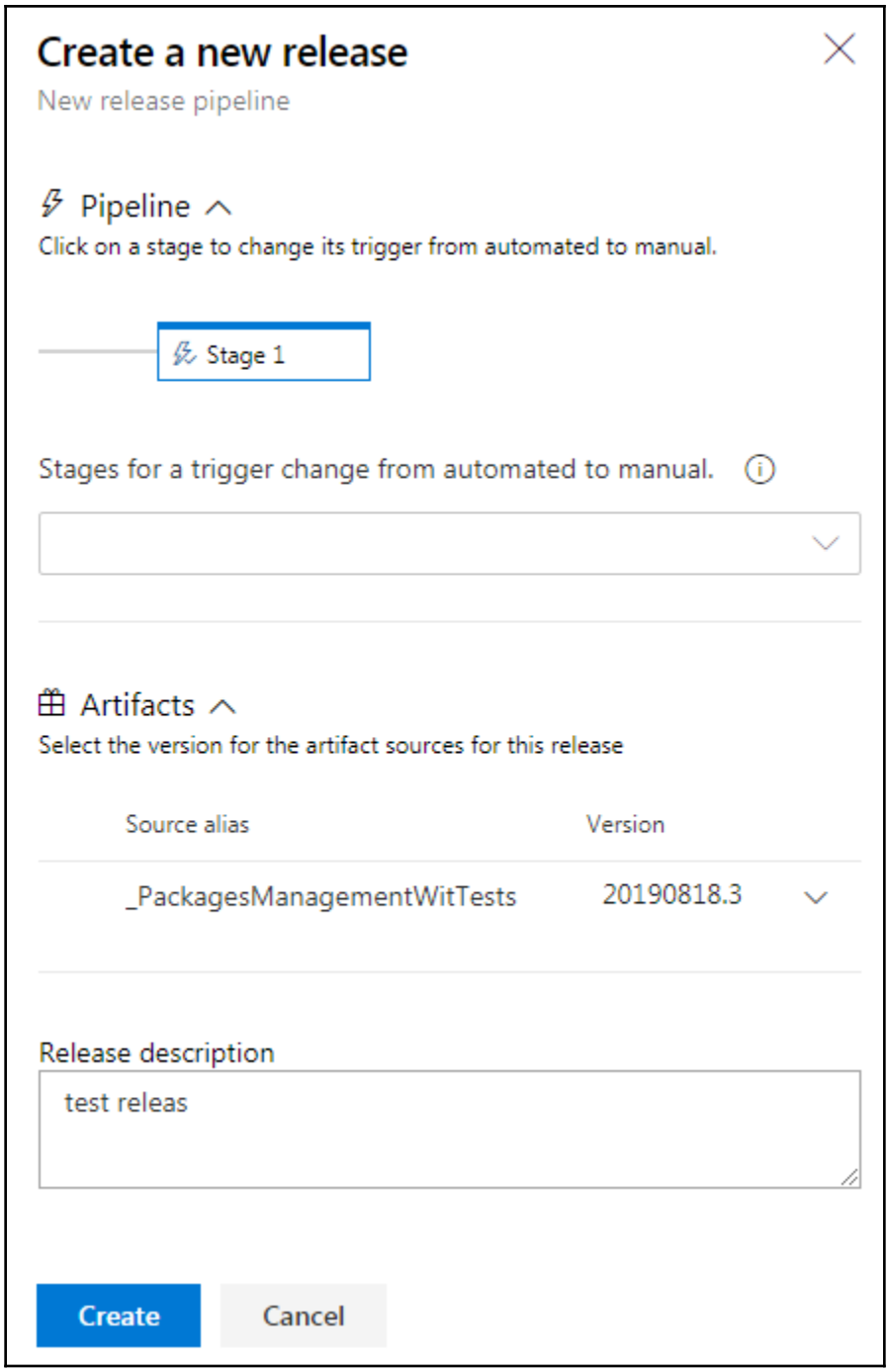

_PackagesManagementWitTests

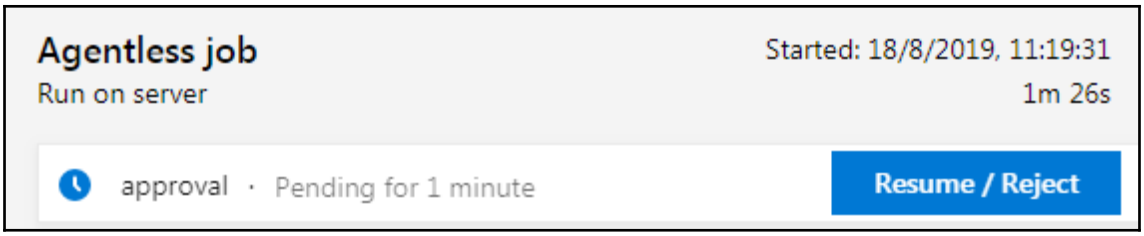

Continuous deployment trigger
Build: _PackagesManagementWitTests
Disabled
Enabling the trigger will create a new release every time a new build is available.

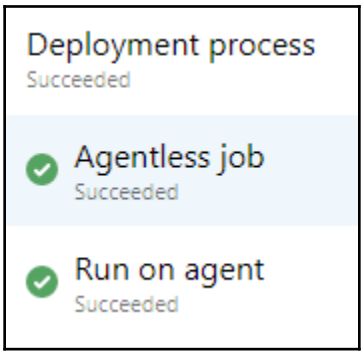

Add an agent job
Add a deployment group job
Add an agentless job
Learn more about jobs


Manual intervention
View YAML
Remove
Task version
8.*
Display name *
approval
Instructions
Accept release?
Notify users
FA
Francesco Abbruzzese
Search users and groups
On timeout
Reject
Resume
Control Options

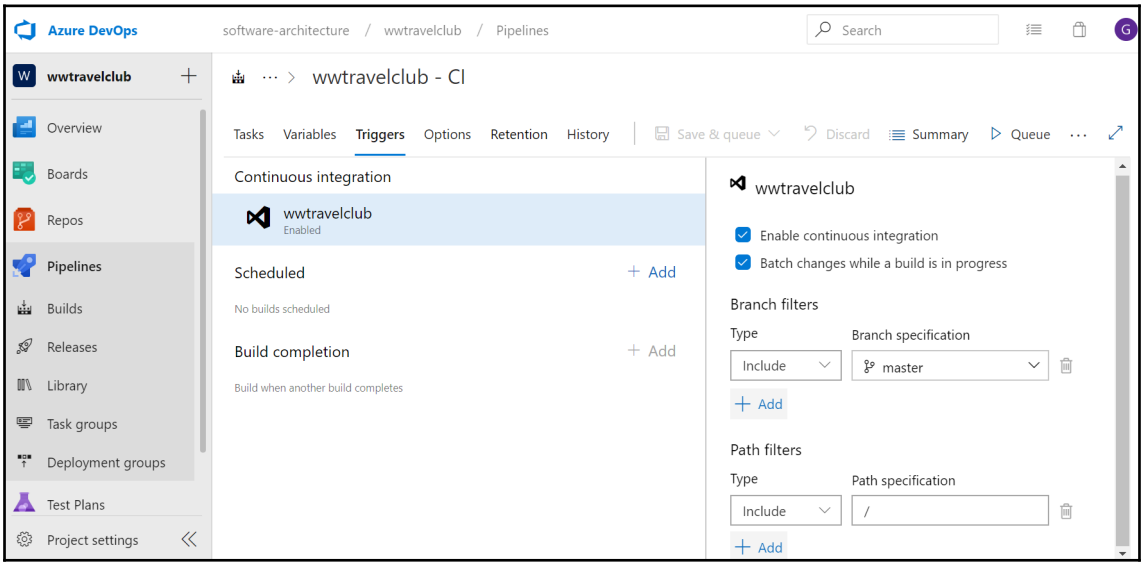

Pipeline
Tasks
Variables
Retention
Options
History
Stage 1
Deployment process
Agentless job
Run on server
approval
Manual intervention
Run on agent
Run on agent
Deploy Azure App Service
Azure App Service deploy

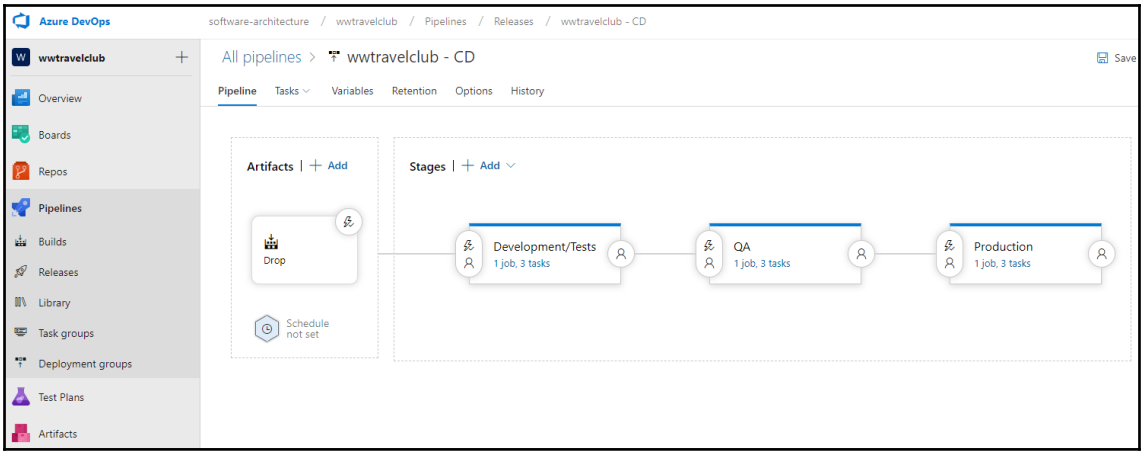

Create a new release
New release pipeline
Pipeline
Click on a stage to change its trigger from automated to manual.
Stage 1
Stages for a trigger change from automated to manual.
Artifacts
Select the version for the artifact sources for this release
Source alias
Version
_PackagesManagementWitTests
20190818.3
Release description
test releas
Create
Cancel

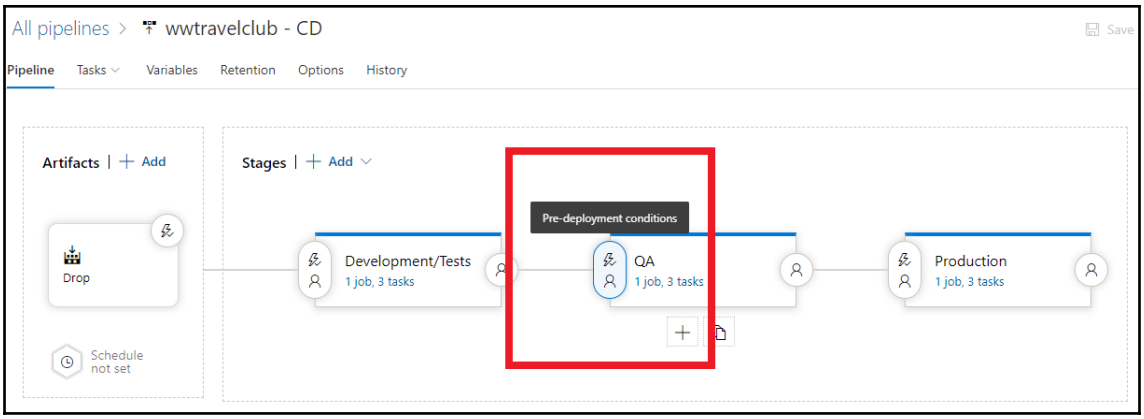

Agentless job
Run on server
Started: 18/8/2019, 11:19:31
1m 26s
approval · Pending for 1 minute
Resume / Reject

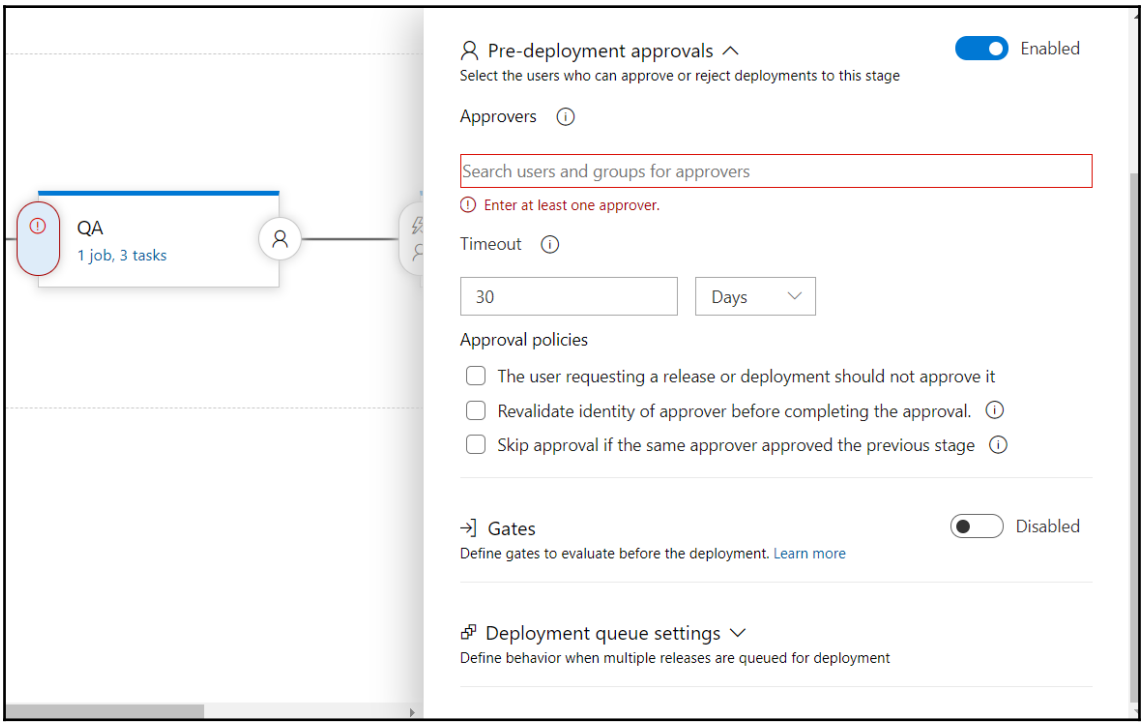

Deployment process
Succeeded
Agentless job
Succeeded
Run on agent
Succeeded

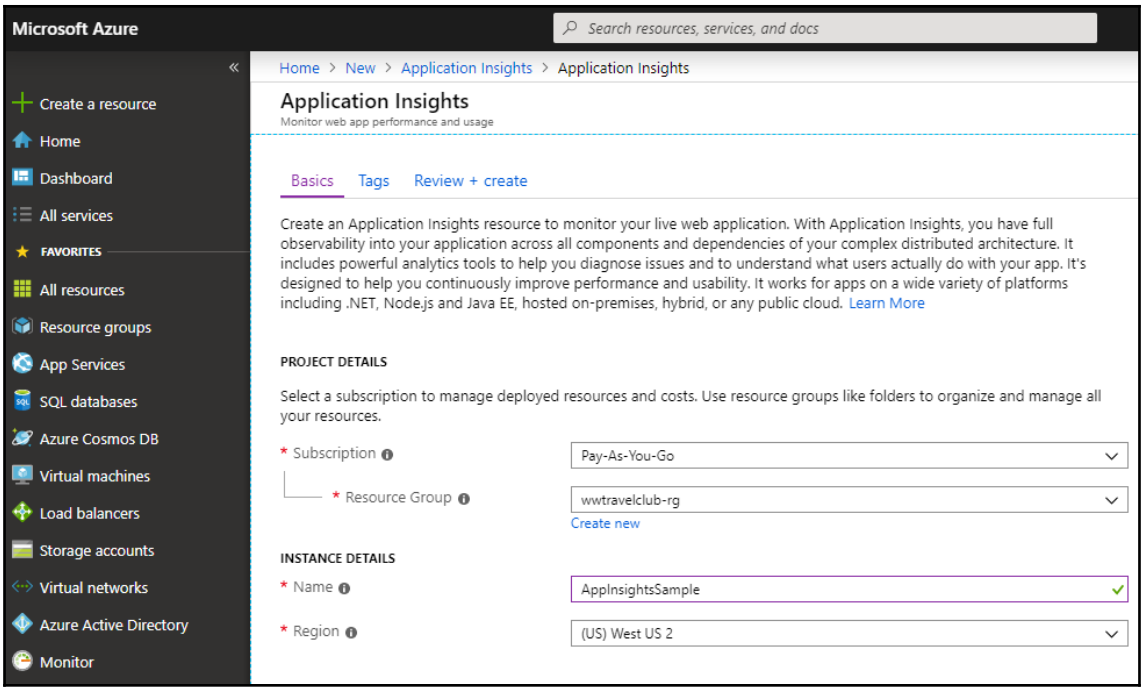
Chapter 18: Understanding DevOps Principles

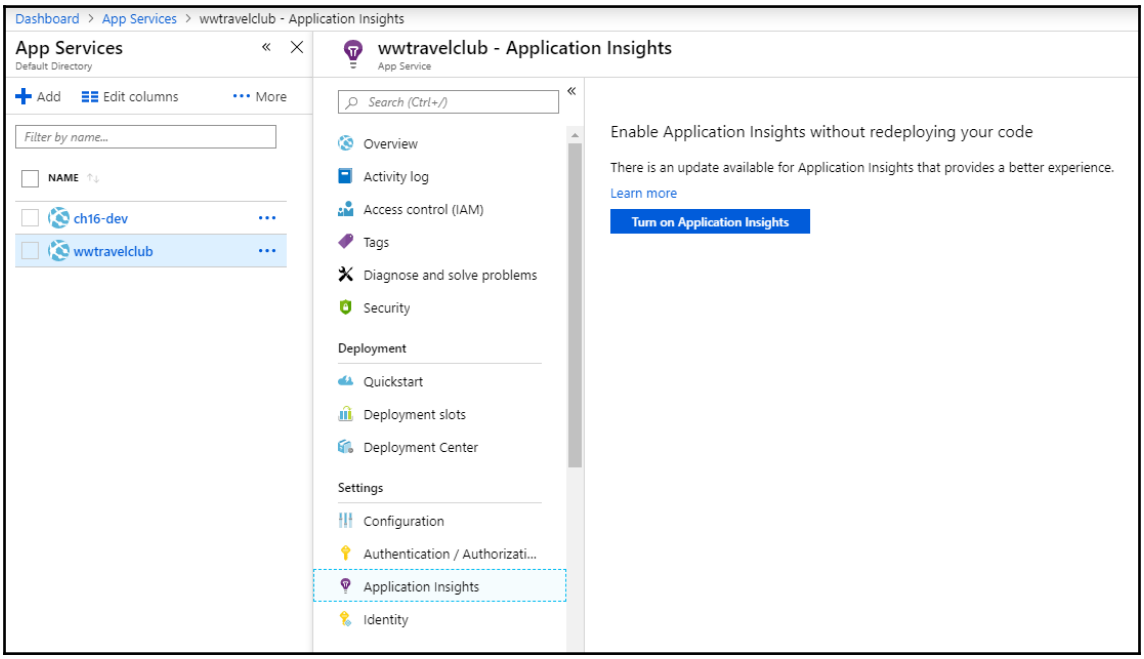


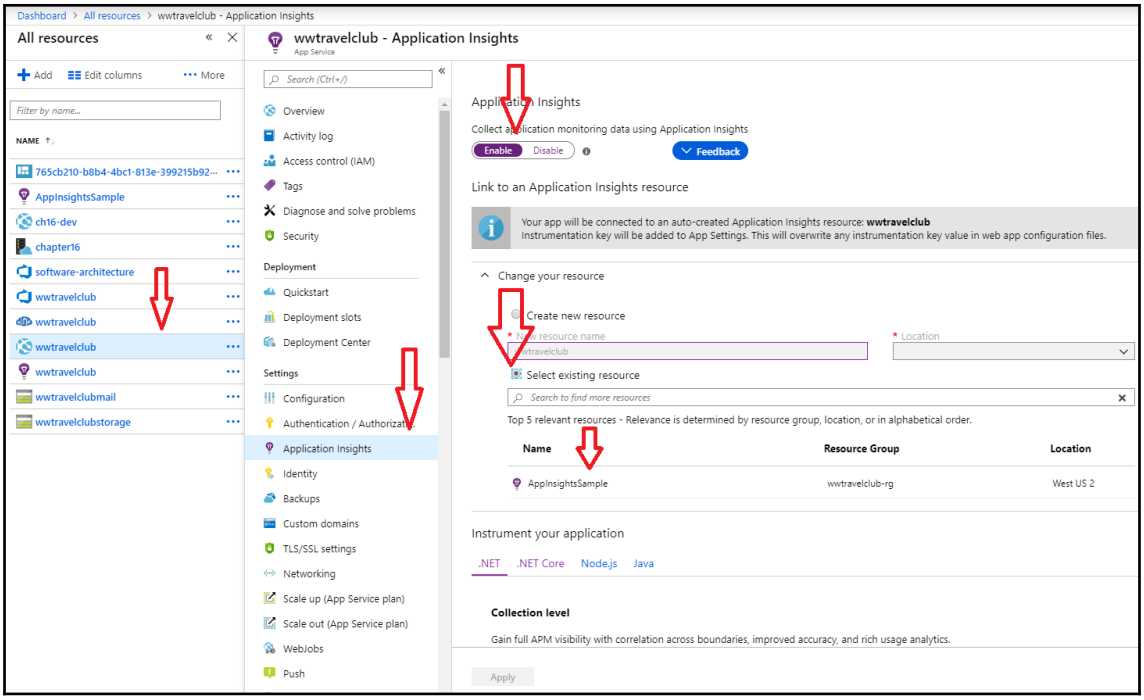


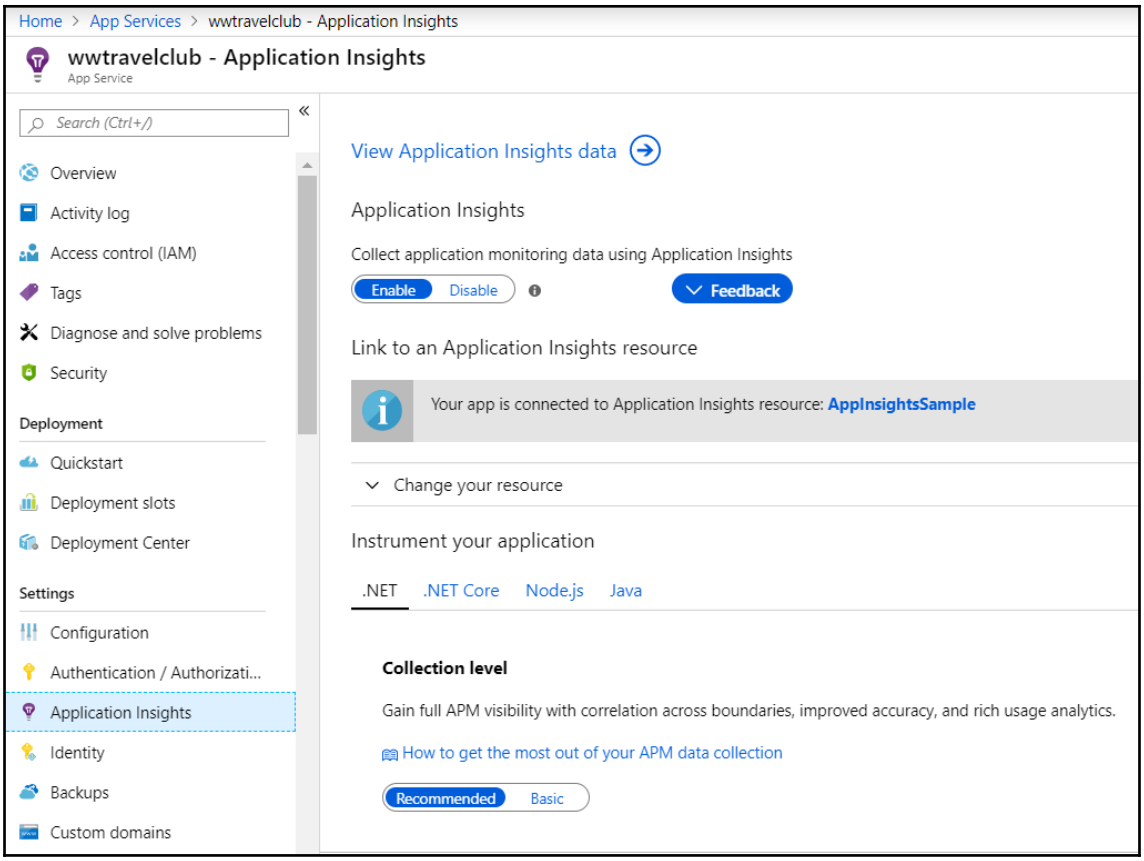

All pipelines
wwtravelclub - CD
Save
Pipeline
Tasks
Variables
Retention
Options
History
Artifacts | Add
Drop
Schedule not set
Stages | Add
Development/Tests
1 job, 3 tasks
Pre-deployment conditions
QA
1 job, 3 tasks
Production
1 job, 3 tasks

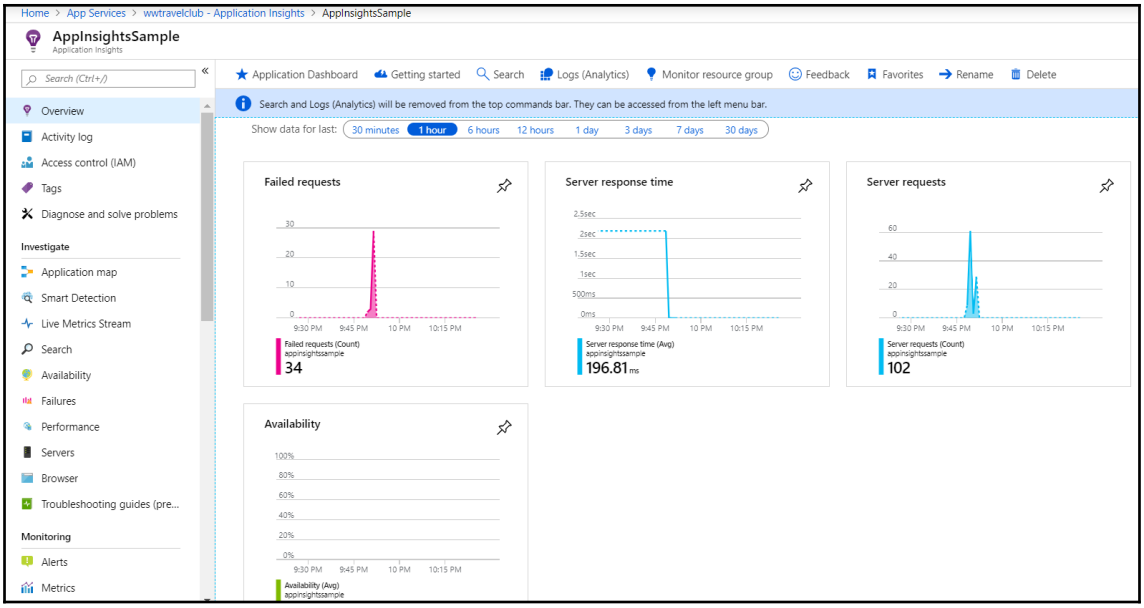

QA
1 job, 3 tasks
Pre-deployment approvals
Enabled
Select the users who can approve or reject deployments to this stage
Approvers
Search users and groups for approvers
Enter at least one approver.
Timeout
30
Days
Approval policies
The user requesting a release or deployment should not approve it
Revalidate identity of approver before completing the approval.
Skip approval if the same approver approved the previous stage
Gates
Disabled
Define gates to evaluate before the deployment. Learn more
Deployment queue settings
Define behavior when multiple releases are queued for deployment

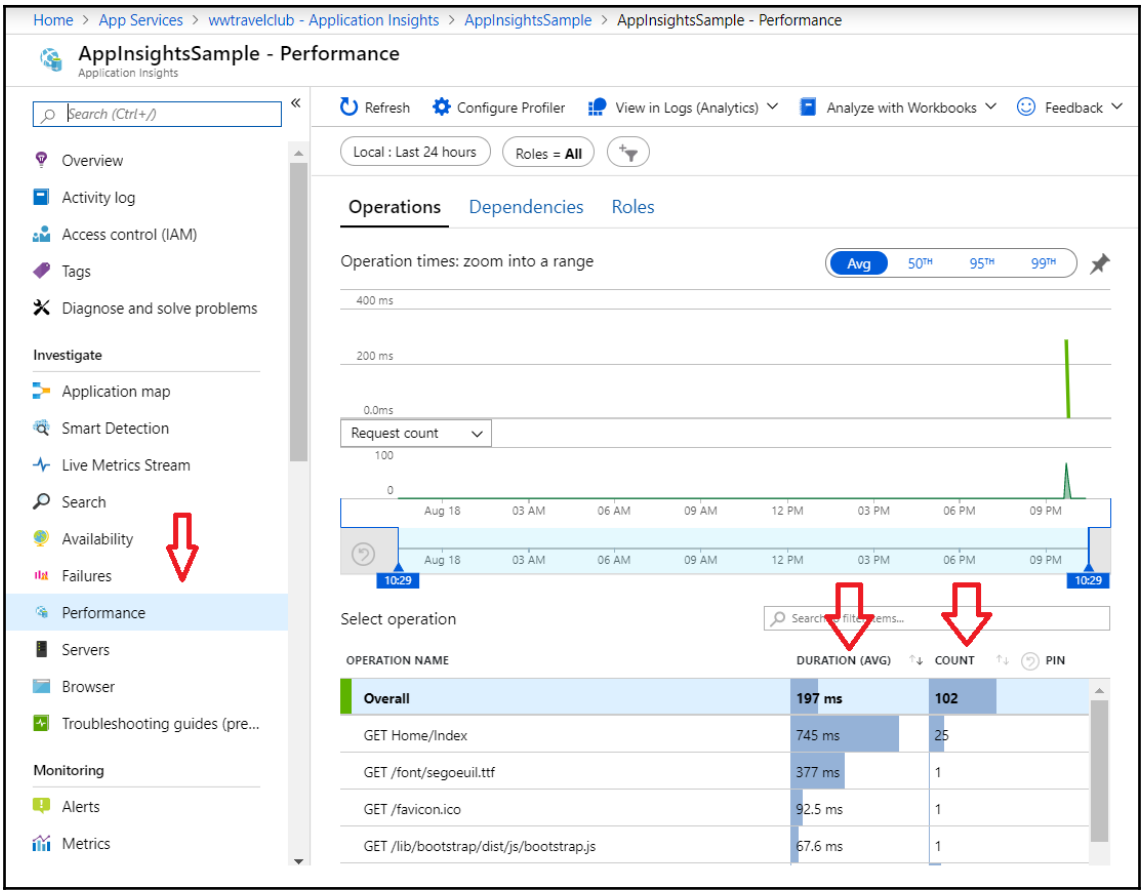

Microsoft Azure
Search resources, services, and docs
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Home > New > Application Insights > Application Insights
Application Insights
Monitor web app performance and usage
Basics
Tags
Review + create
Create an Application Insights resource to monitor your live web application. With Application Insights, you have full observability into your application across all components and dependencies of your complex distributed architecture. It includes powerful analytics tools to help you diagnose issues and to understand what users actually do with your app. It's designed to help you continuously improve performance and usability. It works for apps on a wide variety of platforms including .NET, Node.js and Java EE, hosted on-premises, hybrid, or any public cloud. Learn More
PROJECT DETAILS
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
* Subscription
Pay-As-You-Go
* Resource Group
wwtravelclub-rg
Create new
INSTANCE DETAILS
* Name
AppInsightsSample
* Region
(US) West US 2

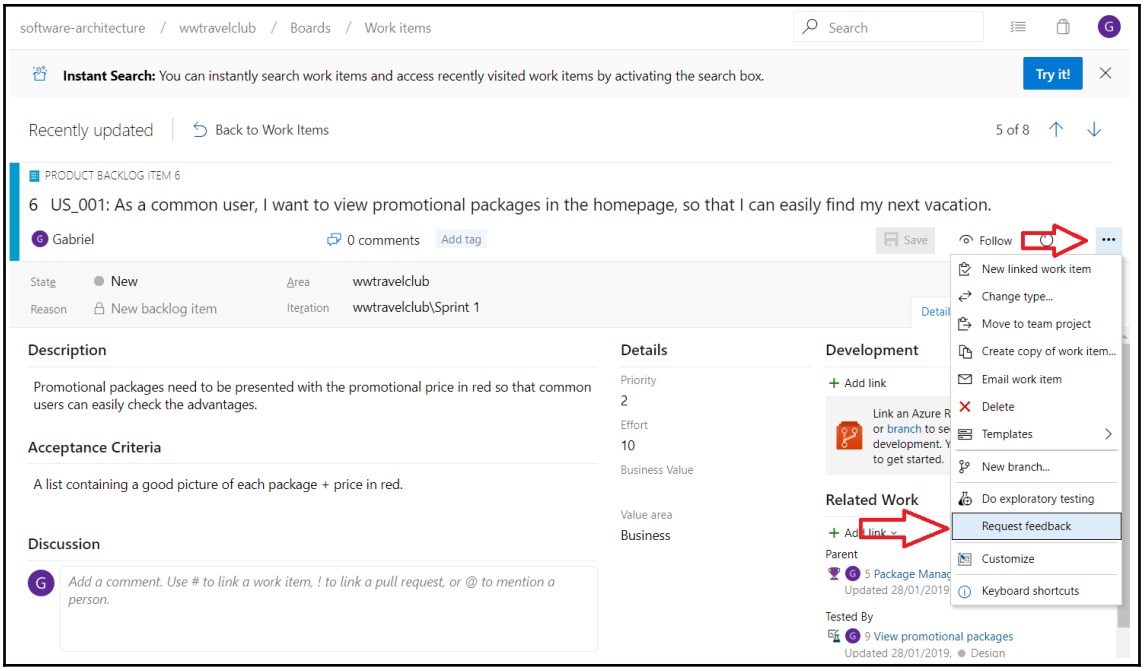

Dashboard > App Services > wwtravelclub - Application Insights
App Services
Default Directory
Add
Edit columns
More
Filter by name...
NAME
ch16-dev
wwtravelclub
wwtravelclub - Application Insights
App Service
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Deployment
Quickstart
Deployment slots
Deployment Center
Settings
Configuration
Authentication / Authorizati...
Application Insights
Identity
Enable Application Insights without redeploying your code
There is an update available for Application Insights that provides a better experience.
Learn more
Turn on Application Insights

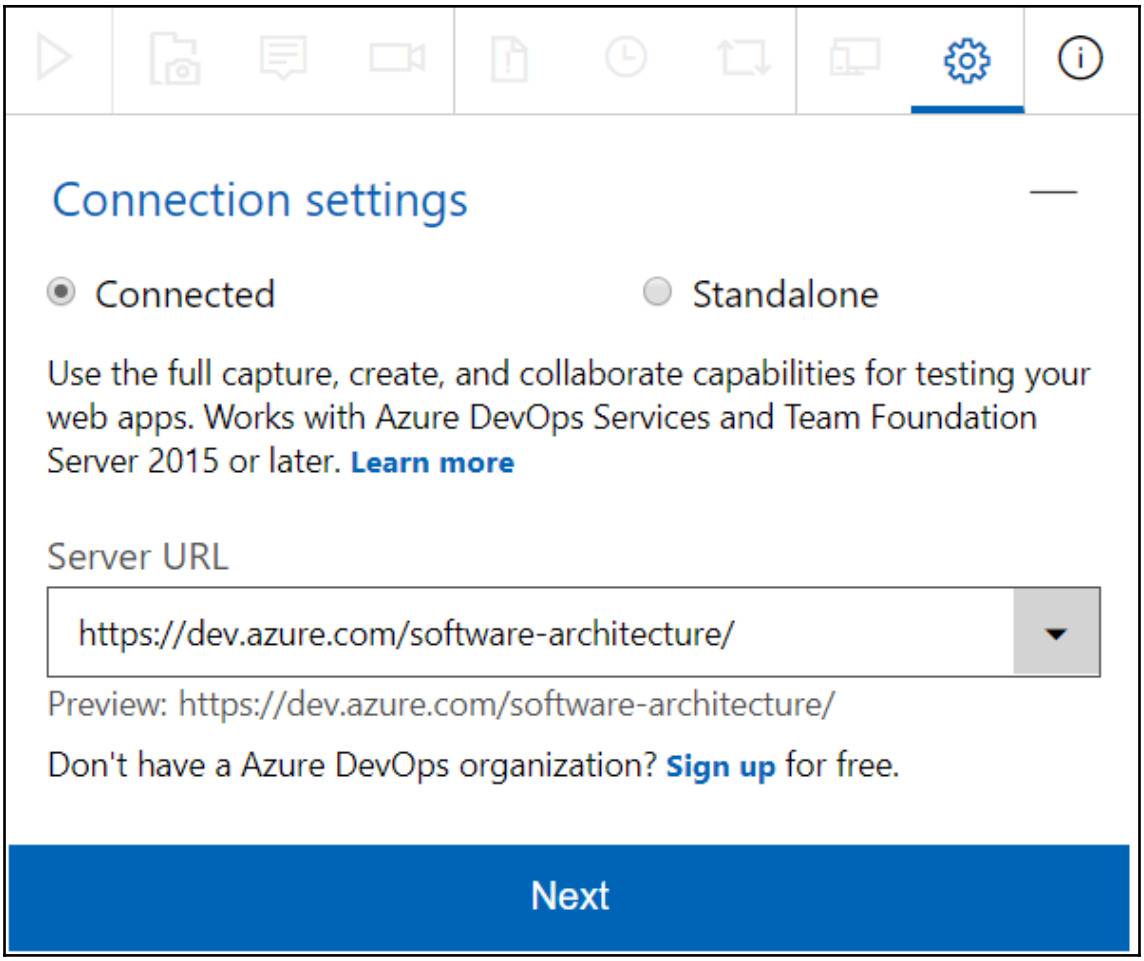

Dashboard > All resources > wwtravelclub - Application Insights
All resources
Add
Edit columns
More
Filter by name...
NAME
765cb210-b8b4-4bc1-813e-399215b92...
AppInsightsSample
ch16-dev
chapter16
software-architecture
wwtravelclub
wwtravelclub
wwtravelclub
wwtravelclub
wwtravelclubmail
wwtravelclubstorage
wwtravelclub - Application Insights
App Service
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Deployment
Quickstart
Deployment slots
Deployment Center
Settings
Configuration
Authentication / Authorization
Application Insights
Identity
Backups
Custom domains
TLS/SSL settings
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Push
Application Insights
Collect application monitoring data using Application Insights
Enable
Disable
Feedback
Link to an Application Insights resource
Your app will be connected to an auto-created Application Insights resource: wwtravelclub
Instrumentation key will be added to App Settings. This will overwrite any instrumentation key value in web app configuration files.
Change your resource
Create new resource
* New resource name
wwtravelclub
* Location
Select existing resource
Search to find more resources
Top 5 relevant resources - Relevance is determined by resource group, location, or in alphabetical order.
Name
Resource Group
Location
AppInsightsSample
wwtravelclub-rg
West US 2
Instrument your application
.NET
.NET Core
Node.js
Java
Collection level
Gain full APM visibility with correlation across boundaries, improved accuracy, and rich usage analytics.
Apply

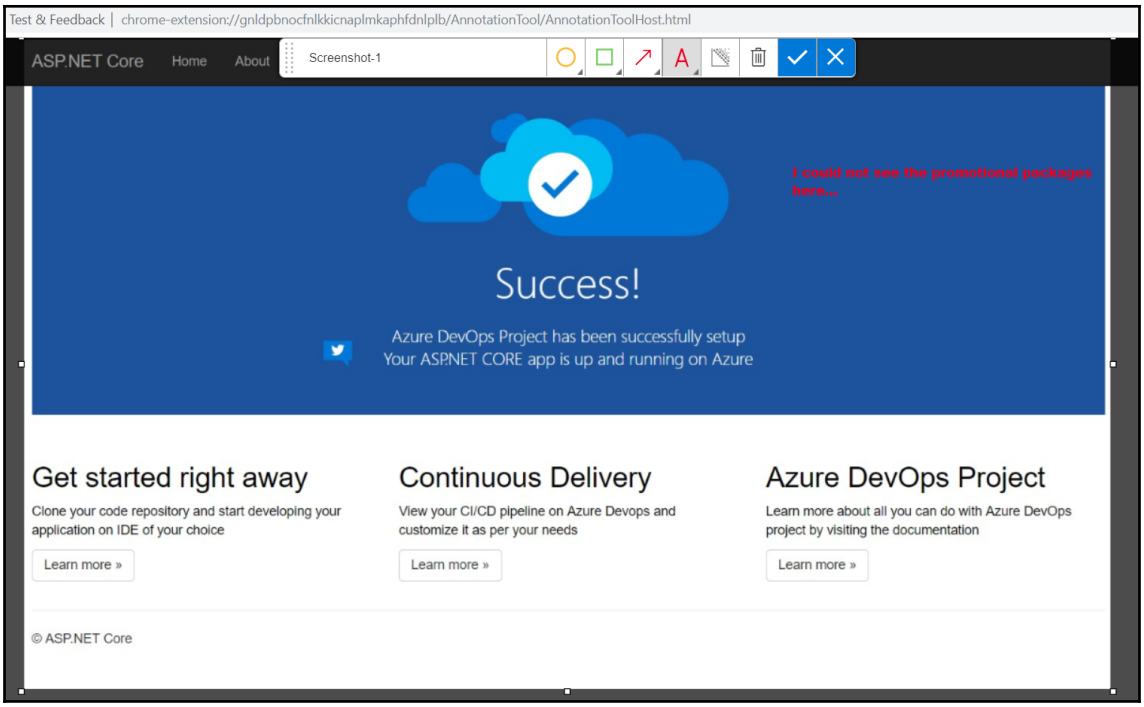

Home > App Services > wwtravelclub - Application Insights
wwtravelclub - Application Insights
App Service
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Security
Deployment
Quickstart
Deployment slots
Deployment Center
Settings
Configuration
Authentication / Authorizati...
Application Insights
Identity
Backups
Custom domains
View Application Insights data
Application Insights
Collect application monitoring data using Application Insights
Enable
Disable
Feedback
Link to an Application Insights resource
Your app is connected to Application Insights resource: AppInsightsSample
Change your resource
Instrument your application
.NET
.NET Core
Node.js
Java
Collection level
Gain full APM visibility with correlation across boundaries, improved accuracy, and rich usage analytics.
How to get the most out of your APM data collection
Recommended
Basic

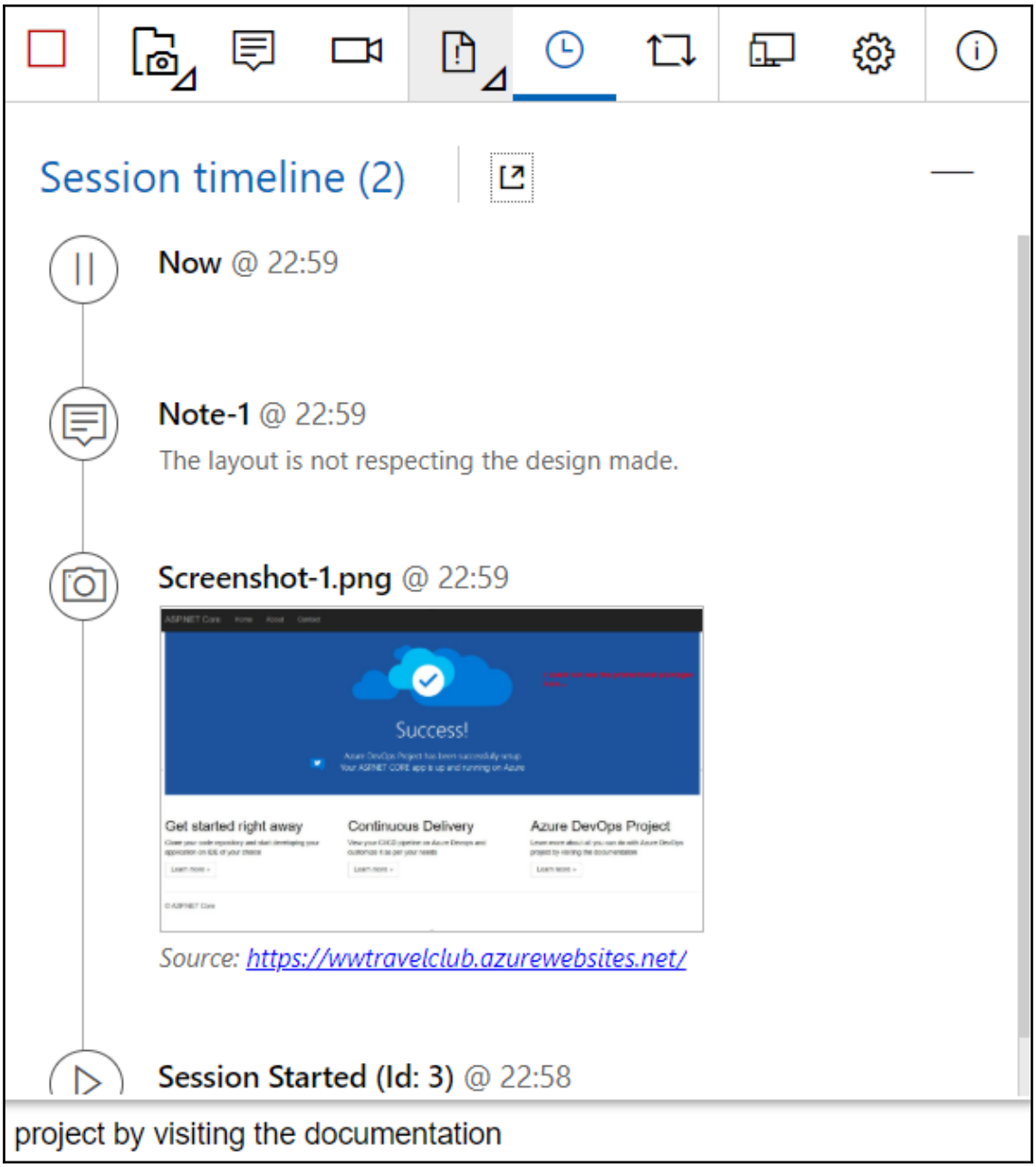

Home > App Services > wwtravelclub - Application Insights > AppInsightsSample
AppInsightsSample
Application Insights
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Investigate
Application map
Smart Detection
Live Metrics Stream
Search
Availability
Failures
Performance
Servers
Browser
Troubleshooting guides (pre...
Monitoring
Alerts
Metrics
Application Dashboard
Getting started
Search
Logs (Analytics)
Monitor resource group
Feedback
Favorites
Rename
Delete
Search and Logs (Analytics) will be removed from the top commands bar. They can be accessed from the left menu bar.
Show data for last:
30 minutes
1 hour
6 hours
12 hours
1 day
3 days
7 days
30 days
Failed requests
Failed requests (Count)
appinsightssample
34
Server response time
Server response time (Avg)
appinsightssample
196.81 ms
Server requests
Server requests (Count)
appinsightssample
102
Availability
Availability (Avg)
appinsightssample

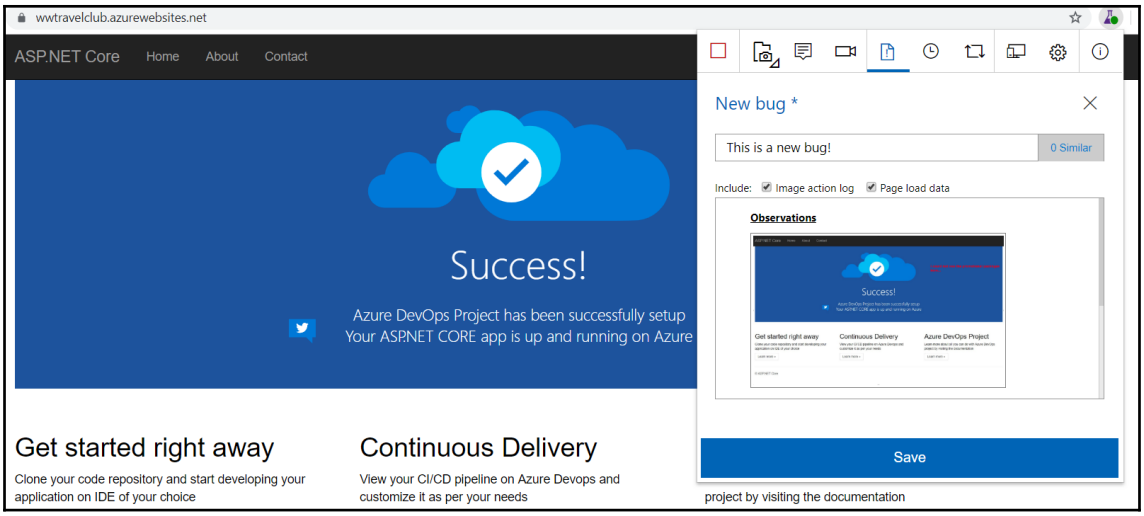

Home > App Services > wwtravelclub - Application Insights > AppInsightsSample > AppInsightsSample - Performance
AppInsightsSample - Performance
Application Insights
Search (Ctrl+/)
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Investigate
Application map
Smart Detection
Live Metrics Stream
Search
Availability
Failures
Performance
Servers
Browser
Troubleshooting guides (pre...
Monitoring
Alerts
Metrics
Refresh
Configure Profiler
View in Logs (Analytics)
Analyze with Workbooks
Feedback
Local : Last 24 hours
Roles = All
Operations
Dependencies
Roles
Operation times: zoom into a range
Avg
50TH
95TH
99TH
400 ms
200 ms
0.0ms
Request count
100
0
Aug 18
03 AM
06 AM
09 AM
12 PM
03 PM
06 PM
09 PM
10:29
Select operation
OPERATION NAME
DURATION (AVG)
COUNT
PIN
Overall
197 ms
102
GET Home/Index
745 ms
25
GET /font/segoeuil.ttf
377 ms
1
GET /favicon.ico
92.5 ms
1
GET /lib/bootstrap/dist/js/bootstrap.js
67.6 ms
1

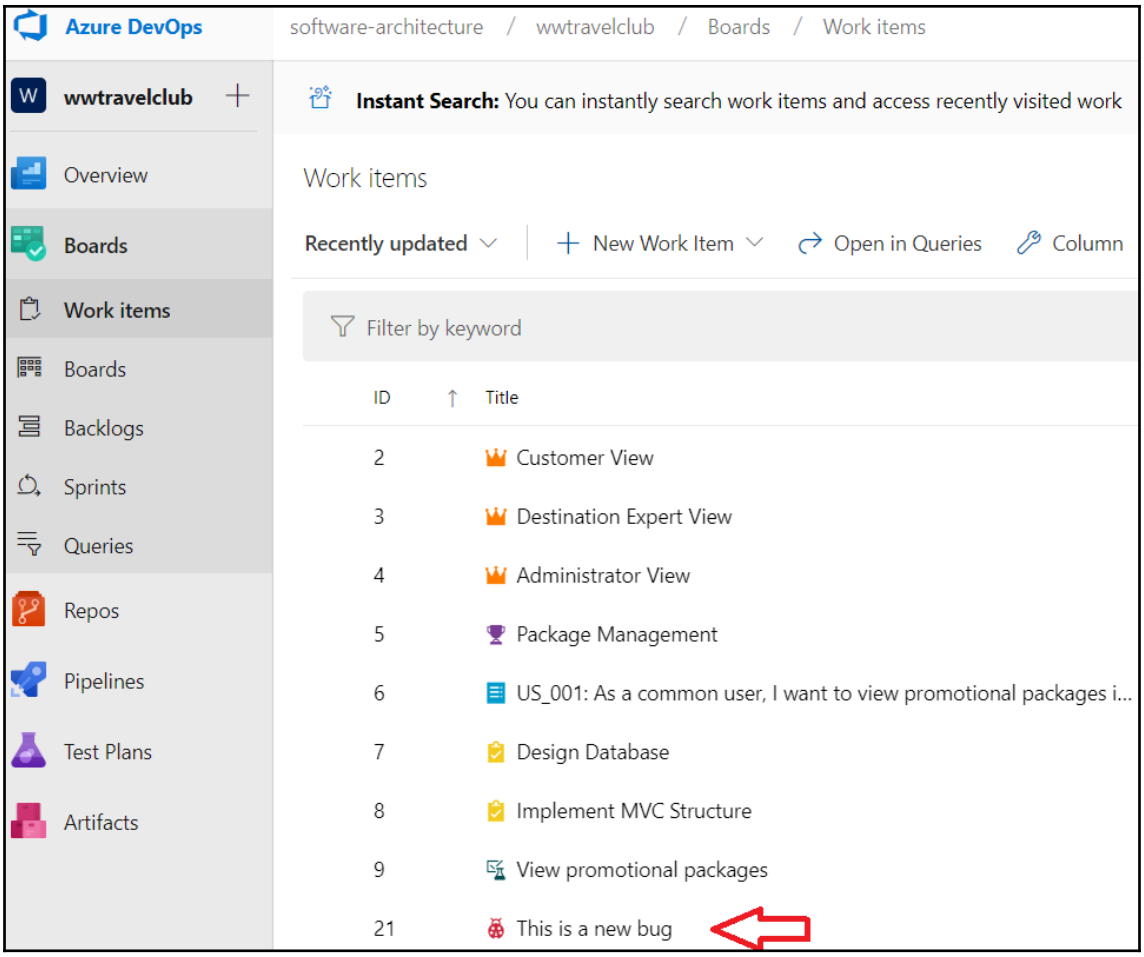

software-architecture / wwtravelclub / Boards / Work items
Search
Instant Search: You can instantly search work items and access recently visited work items by activating the search box.
Try it!
Recently updated
Back to Work Items
5 of 8
PRODUCT BACKLOG ITEM 6
6 US_001: As a common user, I want to view promotional packages in the homepage, so that I can easily find my next vacation.
Gabriel
0 comments
Add tag
Save
Follow
State New
Reason New backlog item
Area wwtravelclub
Iteration wwtravelclub\Sprint 1
Description
Promotional packages need to be presented with the promotional price in red so that common users can easily check the advantages.
Acceptance Criteria
A list containing a good picture of each package + price in red.
Discussion
Add a comment. Use # to link a work item, ! to link a pull request, or @ to mention a person.
Details
Priority
2
Effort
10
Business Value
Value area
Business
Development
Add link
Related Work
Parent
Updated 28/01/2019
Tested By
9 View promotional packages
Updated 28/01/2019, Design
New linked work item
Change type...
Move to team project
Create copy of work item...
Email work item
Delete
Templates
New branch...
Do exploratory testing
Request feedback
Customize
Keyboard shortcuts


Connection settings
Connected
Standalone
Use the full capture, create, and collaborate capabilities for testing your web apps. Works with Azure DevOps Services and Team Foundation Server 2015 or later. Learn more
Server URL
https://dev.azure.com/software-architecture/
Preview: https://dev.azure.com/software-architecture/
Don't have a Azure DevOps organization? Sign up for free.
Next

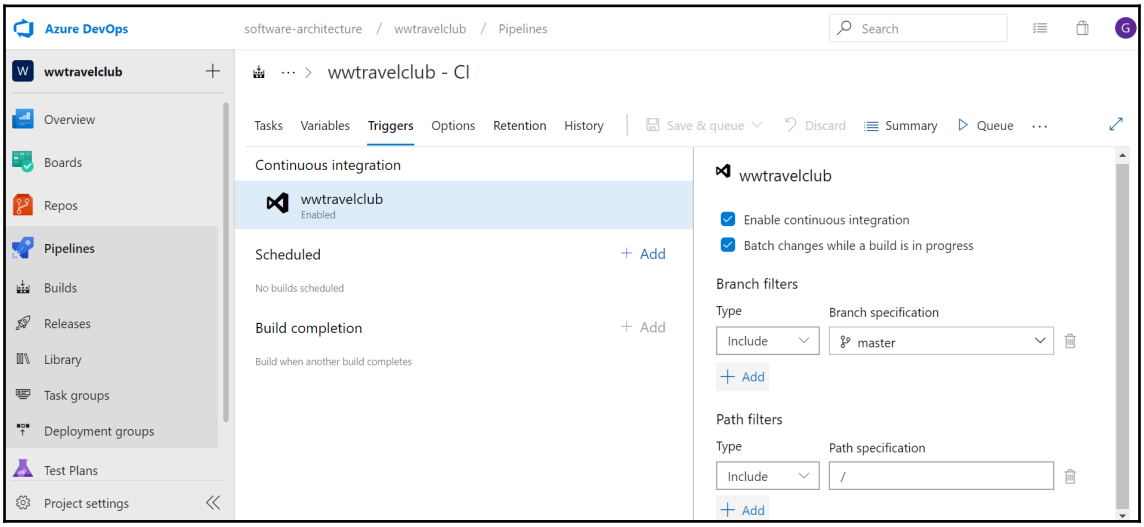

Test & Feedback | chrome-extension://gnldpbnocfnlkkicnaplmkaphfdnlplb/AnnotationTool/AnnotationToolHost.html
ASP.NET Core
Home
About
Screenshot-1
I could not see the promotional packages here...
Success!
Azure DevOps Project has been successfully setup
Your ASP.NET CORE app is up and running on Azure
Get started right away
Clone your code repository and start developing your application on IDE of your choice
Learn more »
Continuous Delivery
View your CI/CD pipeline on Azure Devops and customize it as per your needs
Learn more »
Azure DevOps Project
Learn more about all you can do with Azure DevOps project by visiting the documentation
Learn more »
© ASP.NET Core

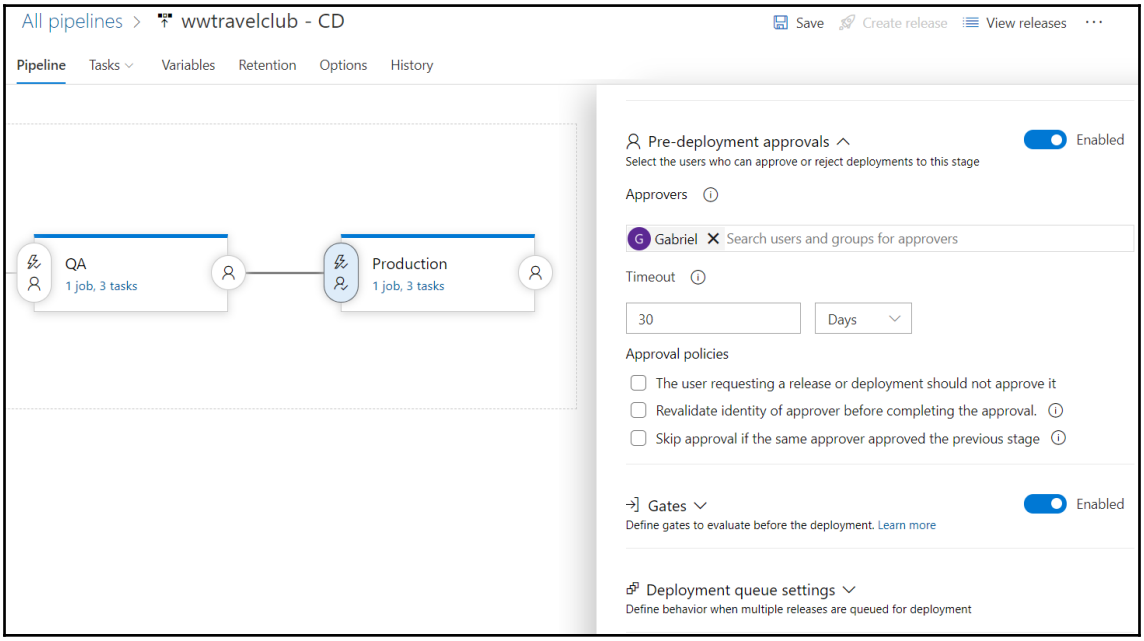

Session timeline (2)
Now @ 22:59
Note-1 @ 22:59
The layout is not respecting the design made.
Screenshot-1.png @ 22:59
Success!
Get started right away
Continuous Delivery
Azure DevOps Project
Source: https://wwtravelclub.azurewebsites.net/
Session Started (Id: 3) @ 22:58
project by visiting the documentation

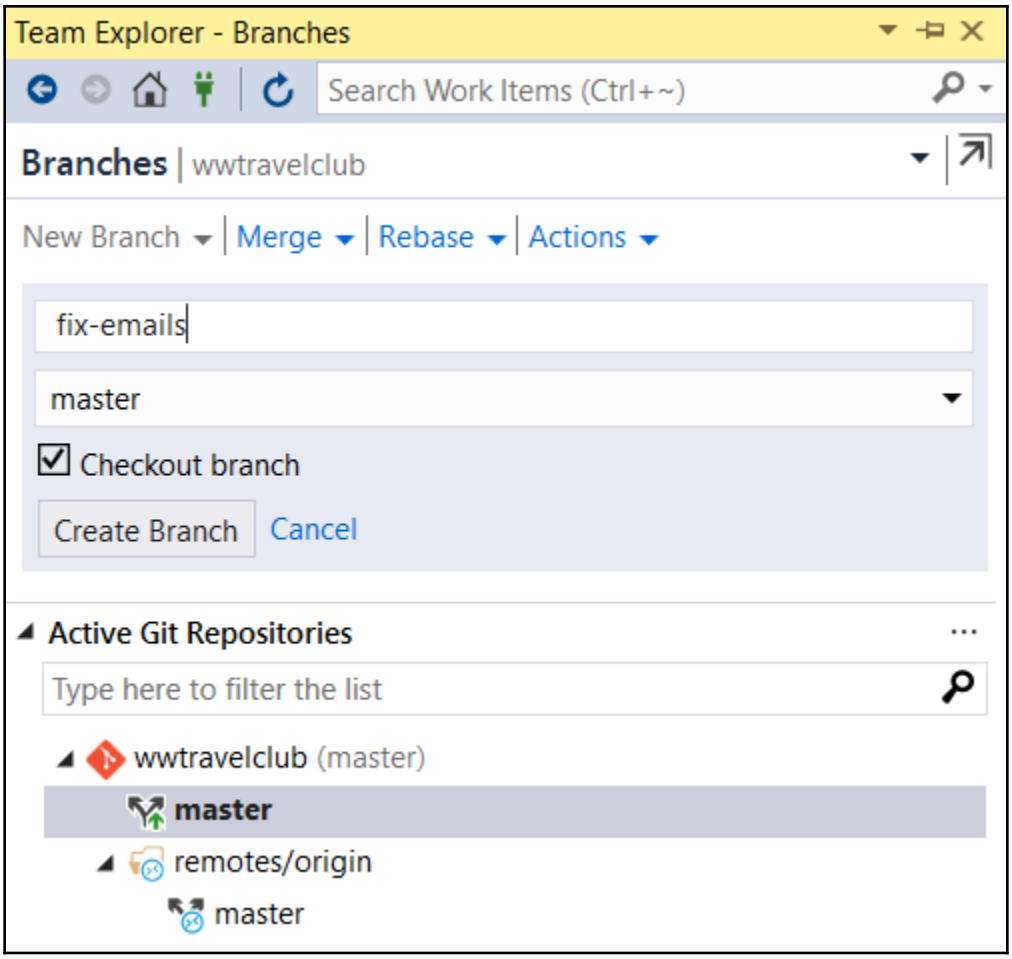

wwtravelclub.azurewebsites.net
ASP.NET Core
Home
About
Contact
Success!
Azure DevOps Project has been successfully setup
Your ASP.NET CORE app is up and running on Azure
Get started right away
Clone your code repository and start developing your application on IDE of your choice
Continuous Delivery
View your CI/CD pipeline on Azure Devops and customize it as per your needs
New bug *
This is a new bug!
0 Similar
Include:
Image action log
Page load data
Observations
Save
project by visiting the documentation

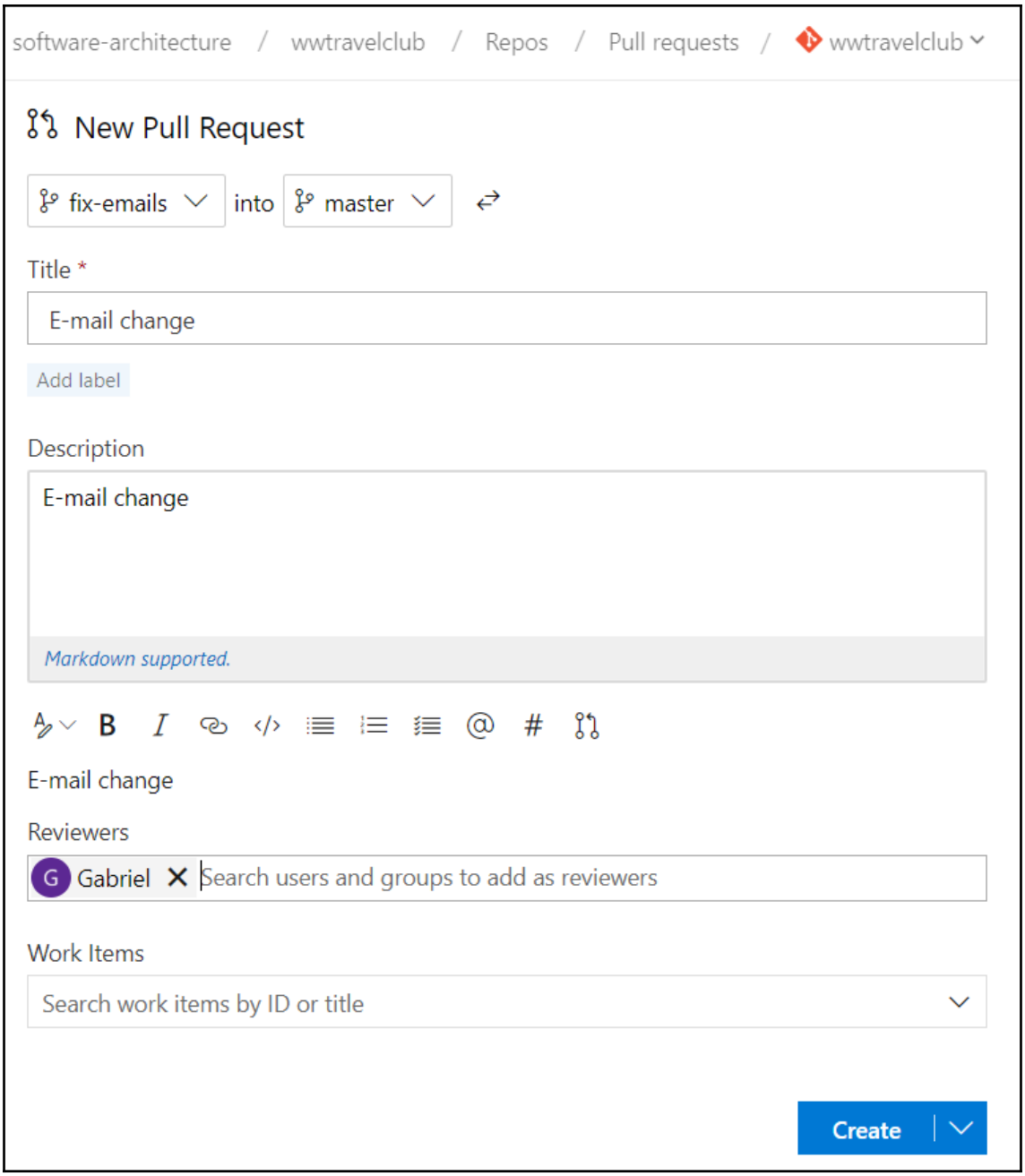

Azure DevOps
software-architecture / wwtravelclub / Boards / Work items
wwtravelclub
Instant Search: You can instantly search work items and access recently visited work
Overview
Boards
Work items
Boards
Backlogs
Sprints
Queries
Repos
Pipelines
Test Plans
Artifacts
Work items
Recently updated
New Work Item
Open in Queries
Column
Filter by keyword
ID
Title
2 Customer View
3 Destination Expert View
4 Administrator View
5 Package Management
6 US_001: As a common user, I want to view promotional packages i...
7 Design Database
8 Implement MVC Structure
9 View promotional packages
21 This is a new bug

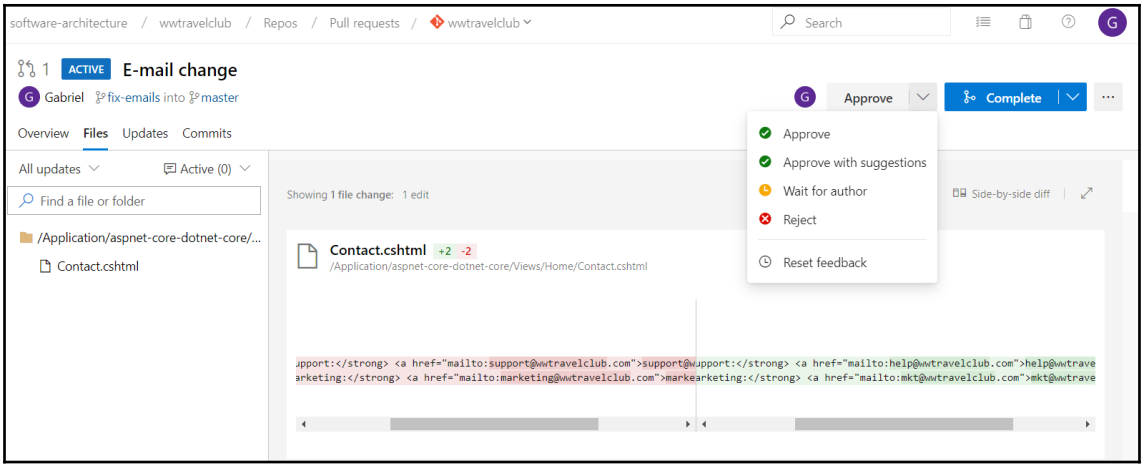
Chapter 19: Challenges of Applying CI Scenarios in DevOps

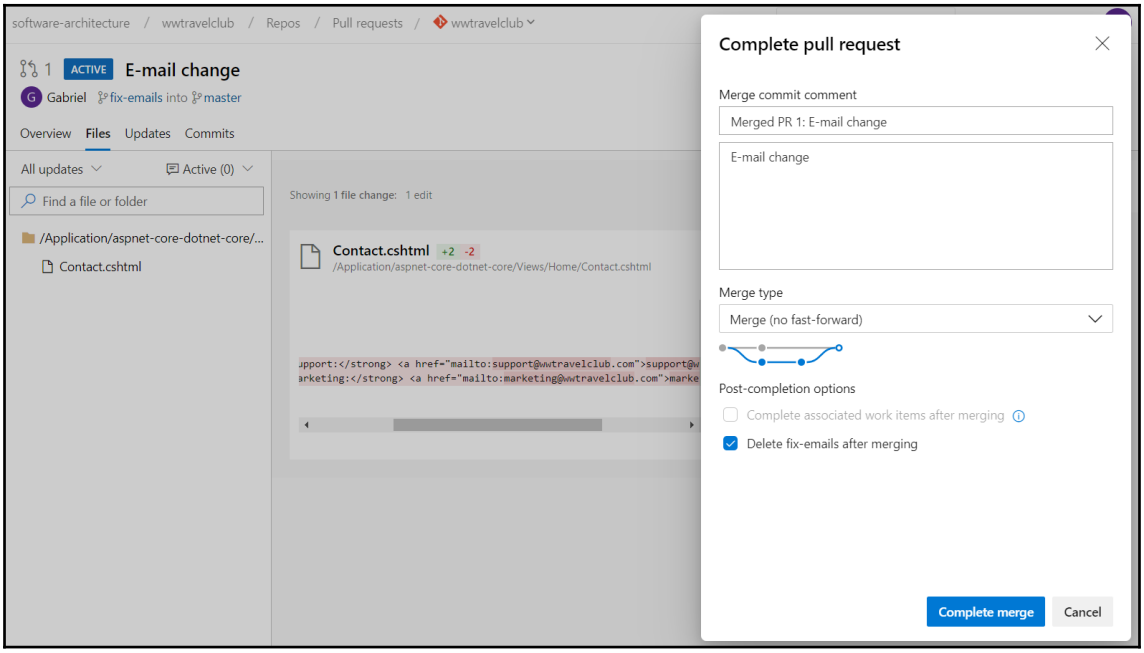


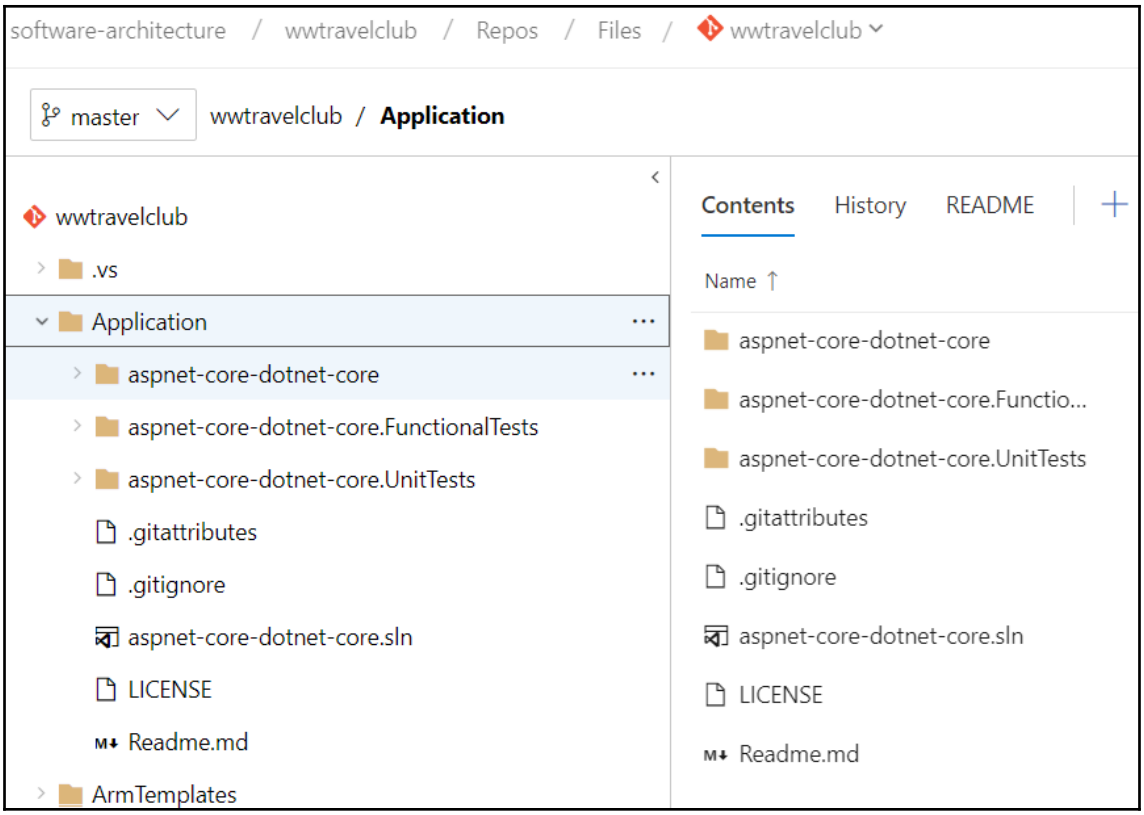


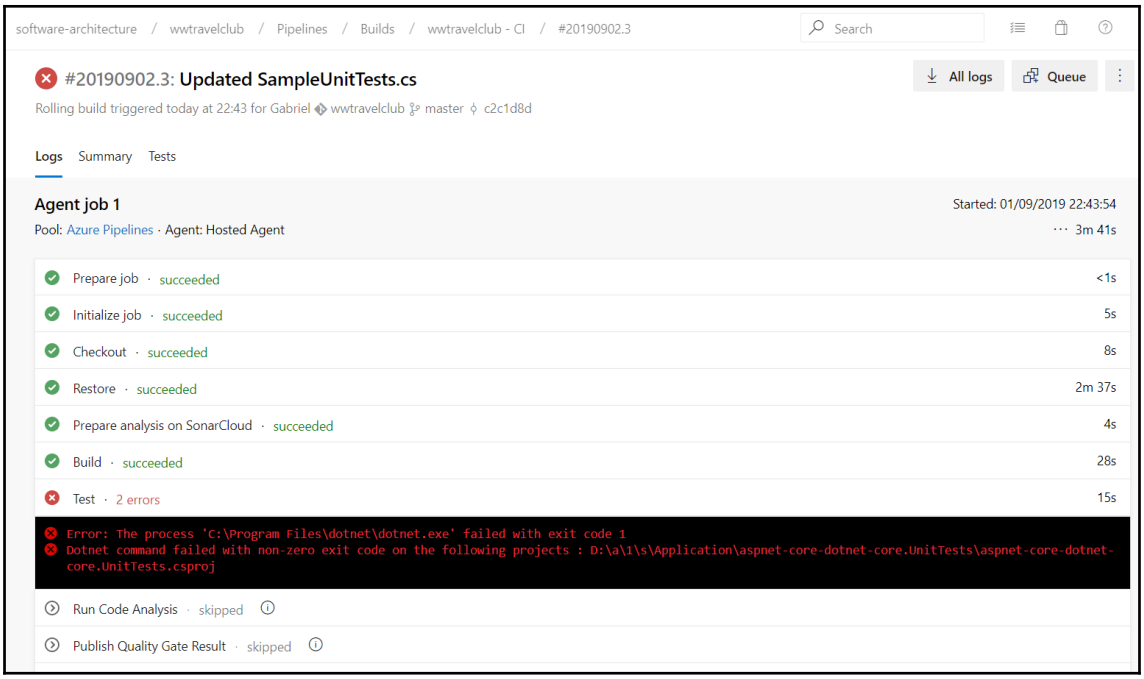

Team Explorer - Branches
Search Work Items (Ctrl+~)
Branches | wwtravelclub
New Branch
Merge
Rebase
Actions
fix-emails
master
Checkout branch
Create Branch
Cancel
Active Git Repositories
Type here to filter the list
wwtravelclub (master)
master
remotes/origin
master

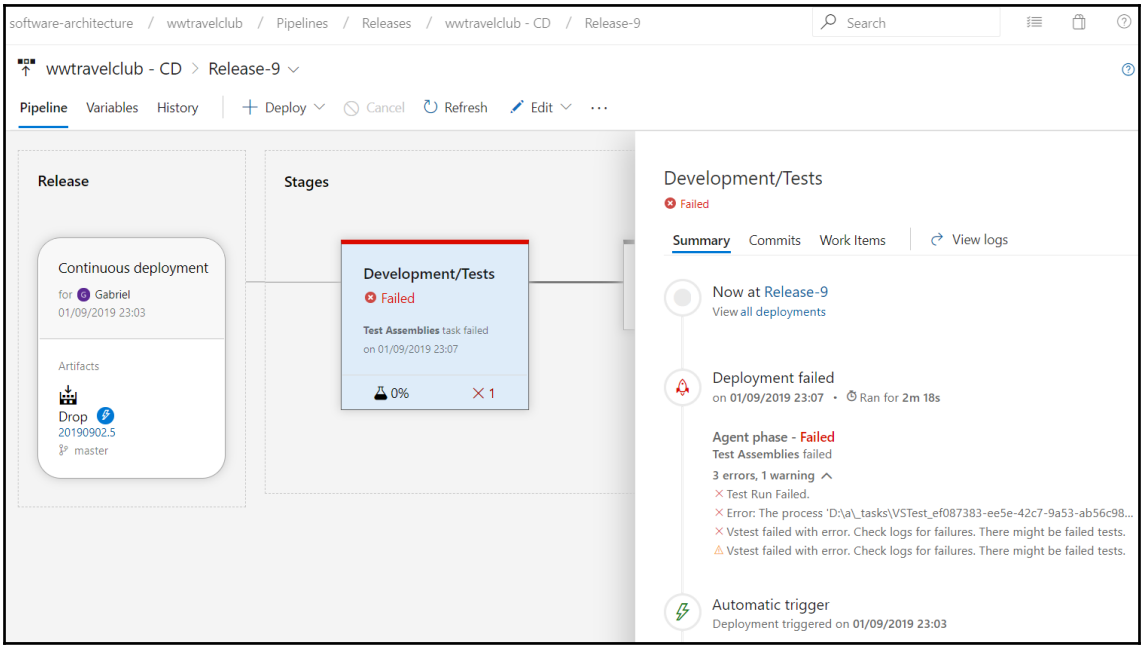

software-architecture / wwtravelclub / Repos / Pull requests / wwtravelclub
New Pull Request
fix-emails
into
master
Title *
E-mail change
Add label
Description
E-mail change
Markdown supported.
E-mail change
Reviewers
Gabriel
Search users and groups to add as reviewers
Work Items
Search work items by ID or title
Create

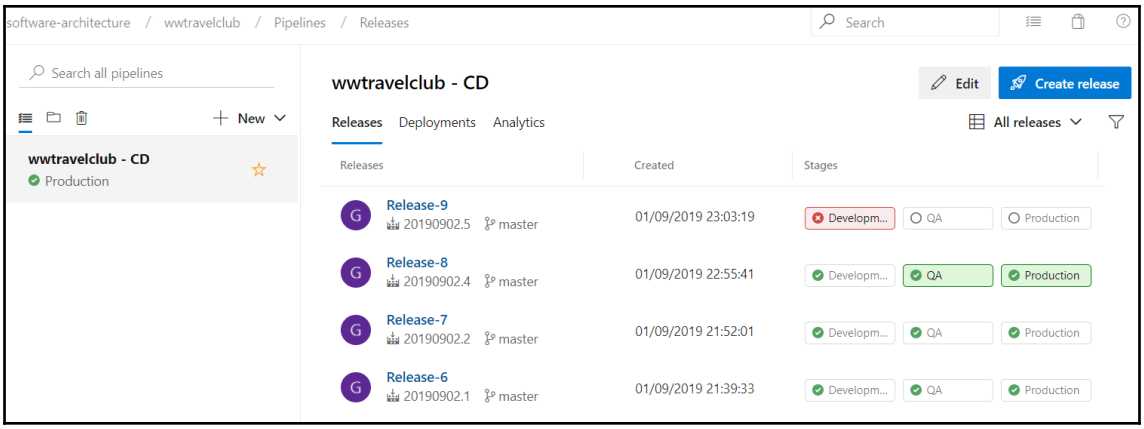

software-architecture / wwtravelclub / Repos / Pull requests / wwtravelclub
Search
1 ACTIVE E-mail change
Gabriel fix-emails into master
Approve
Complete
Overview Files Updates Commits
Approve
Approve with suggestions
Wait for author
Reject
Reset feedback
All updates
Active (0)
Find a file or folder
/Application/aspnet-core-dotnet-core/...
Contact.cshtml
Showing 1 file change: 1 edit
Side-by-side diff
Contact.cshtml +2 -2
/Application/aspnet-core-dotnet-core/Views/Home/Contact.cshtml


software-architecture / wwtravelclub / Repos / Pull requests / wwtravelclub
1 ACTIVE E-mail change
Gabriel fix-emails into master
Overview Files Updates Commits
All updates
Active (0)
Find a file or folder
/Application/aspnet-core-dotnet-core/...
Contact.cshtml
Showing 1 file change: 1 edit
Contact.cshtml +2 -2
/Application/aspnet-core-dotnet-core/Views/Home/Contact.cshtml
Complete pull request
Merge commit comment
Merged PR 1: E-mail change
E-mail change
Merge type
Merge (no fast-forward)
Post-completion options
Complete associated work items after merging
Delete fix-emails after merging
Complete merge
Cancel


software-architecture / wwtravelclub / Repos / Files / wwtravelclub
master
wwtravelclub / Application
wwtravelclub
.vs
Application
aspnet-core-dotnet-core
aspnet-core-dotnet-core.FunctionalTests
aspnet-core-dotnet-core.UnitTests
.gitattributes
.gitignore
aspnet-core-dotnet-core.sln
LICENSE
Readme.md
ArmTemplates
Contents
History
README
Name
aspnet-core-dotnet-core
aspnet-core-dotnet-core.Functio...
aspnet-core-dotnet-core.UnitTests
.gitattributes
.gitignore
aspnet-core-dotnet-core.sln
LICENSE
Readme.md


software-architecture / wwtravelclub / Pipelines / Builds / wwtravelclub - CI / #20190902.3
Search
#20190902.3: Updated SampleUnitTests.cs
All logs
Queue
Rolling build triggered today at 22:43 for Gabriel wwtravelclub master c2c1d8d
Logs Summary Tests
Agent job 1
Started: 01/09/2019 22:43:54
Pool: Azure Pipelines · Agent: Hosted Agent
3m 41s
Prepare job · succeeded <1s
Initialize job · succeeded 5s
Checkout · succeeded 8s
Restore · succeeded 2m 37s
Prepare analysis on SonarCloud · succeeded 4s
Build · succeeded 28s
Test · 2 errors 15s
Error: The process 'C:\Program Files\dotnet\dotnet.exe' failed with exit code 1
Dotnet command failed with non-zero exit code on the following projects : D:\a\1\s\Application\aspnet-core-dotnet-core.UnitTests\aspnet-core-dotnet-core.UnitTests.csproj
Run Code Analysis · skipped
Publish Quality Gate Result · skipped


software-architecture / wwtravelclub / Pipelines / Releases / wwtravelclub - CD / Release-9
Search
wwtravelclub - CD > Release-9
Pipeline Variables History
Deploy Cancel Refresh Edit
Release
Stages
Continuous deployment
for Gabriel
01/09/2019 23:03
Artifacts
Drop
20190902.5
master
Development/Tests
Failed
Test Assemblies task failed
on 01/09/2019 23:07
0%
1
Development/Tests
Failed
Summary Commits Work Items
View logs
Now at Release-9
View all deployments
Deployment failed
on 01/09/2019 23:07 • Ran for 2m 18s
Agent phase - Failed
Test Assemblies failed
3 errors, 1 warning
Test Run Failed.
Error: The process 'D:\a_tasks\VSTest_ef087383-ee5e-42c7-9a53-ab56c98...
Vstest failed with error. Check logs for failures. There might be failed tests.
Vstest failed with error. Check logs for failures. There might be failed tests.
Automatic trigger
Deployment triggered on 01/09/2019 23:03


software-architecture / wwtravelclub / Pipelines / Releases
Search
Search all pipelines
New
wwtravelclub - CD
Production
wwtravelclub - CD
Edit
Create release
Releases
Deployments
Analytics
All releases
Releases
Created
Stages
Release-9
20190902.5
master
01/09/2019 23:03:19
Developm...
QA
Production
Release-8
20190902.4
master
01/09/2019 22:55:41
Developm...
QA
Production
Release-7
20190902.2
master
01/09/2019 21:52:01
Developm...
QA
Production
Release-6
20190902.1
master
01/09/2019 21:39:33
Developm...
QA
Production