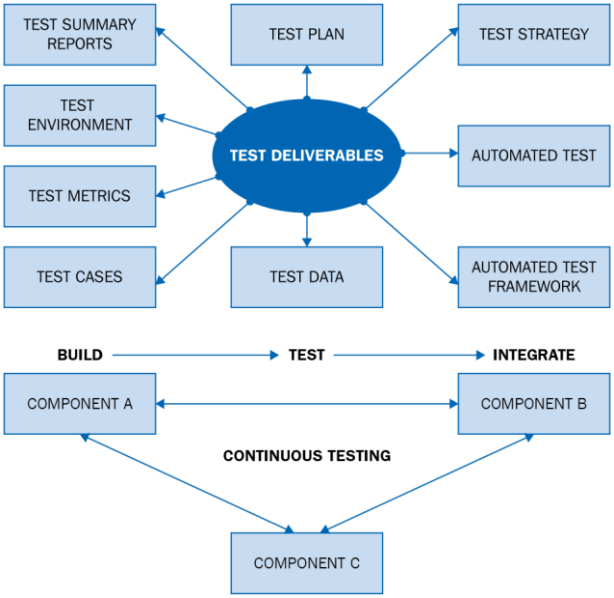
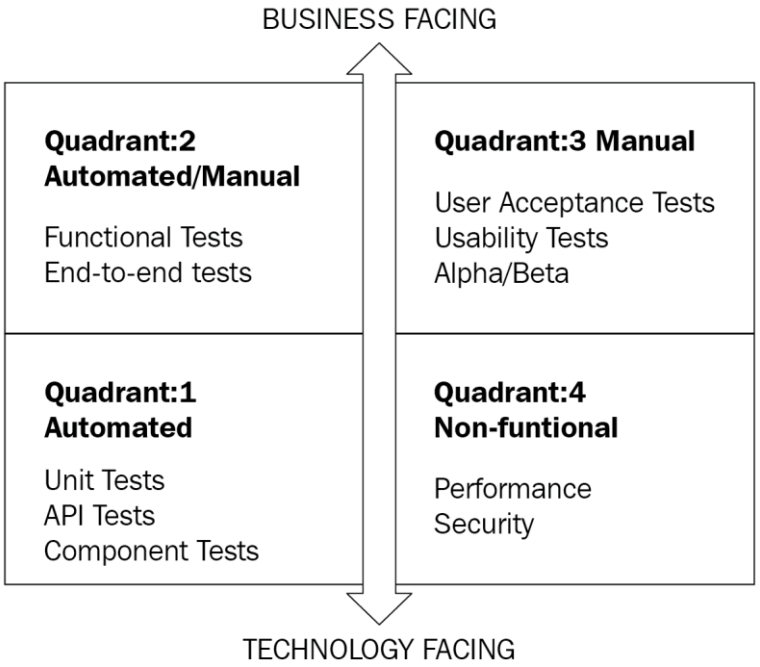
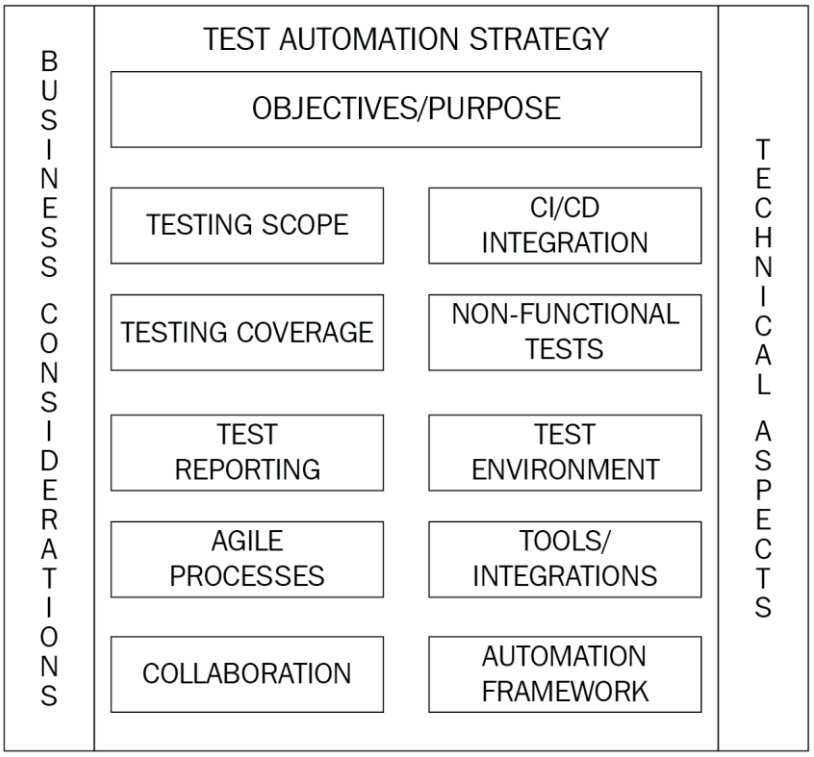
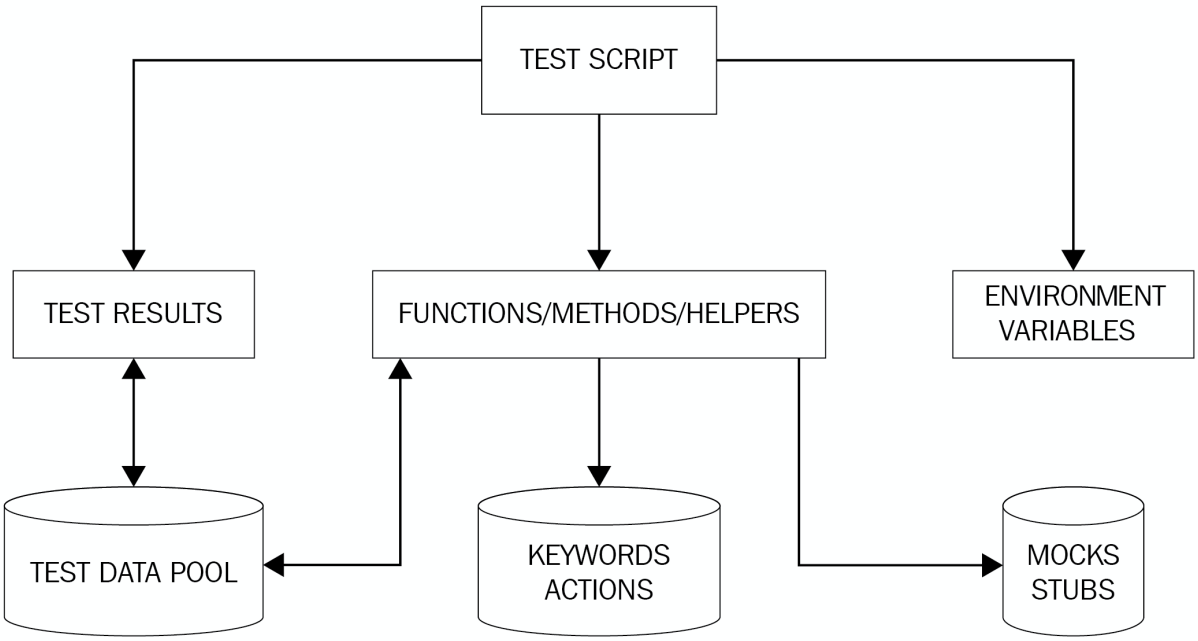
Chapter 1: Introduction to Test Automation

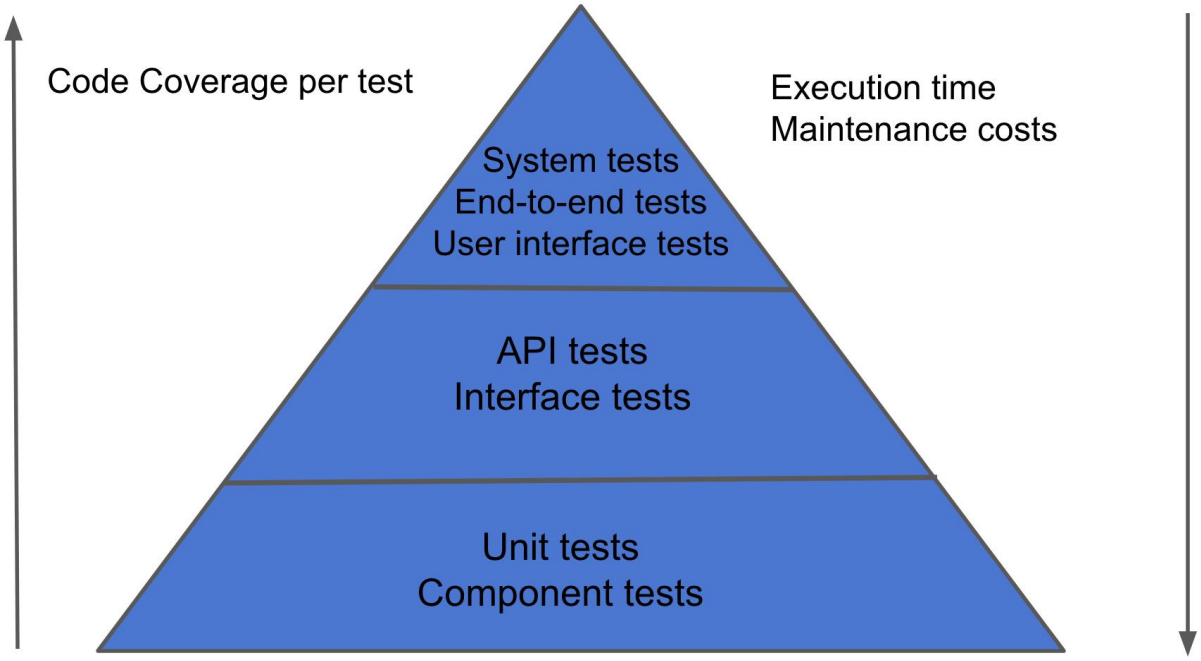


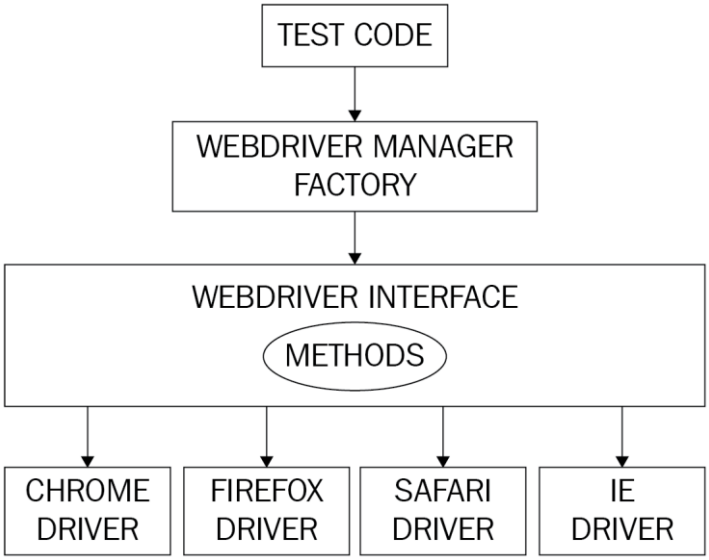
Chapter 2: Test Automation Strategy



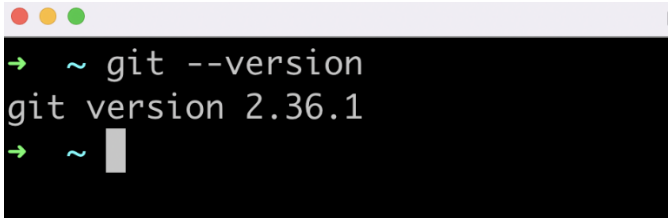



TEST SCRIPT
TEST RESULTS
FUNCTIONS/METHODS/HELPERS
ENVIRONMENT VARIABLES
TEST DATA POOL
KEYWORDS ACTIONS
MOCKS STUBS


Code Coverage per test
Execution time
Maintenance costs
System tests
End-to-end tests
User interface tests
API tests
Interface tests
Unit tests
Component tests

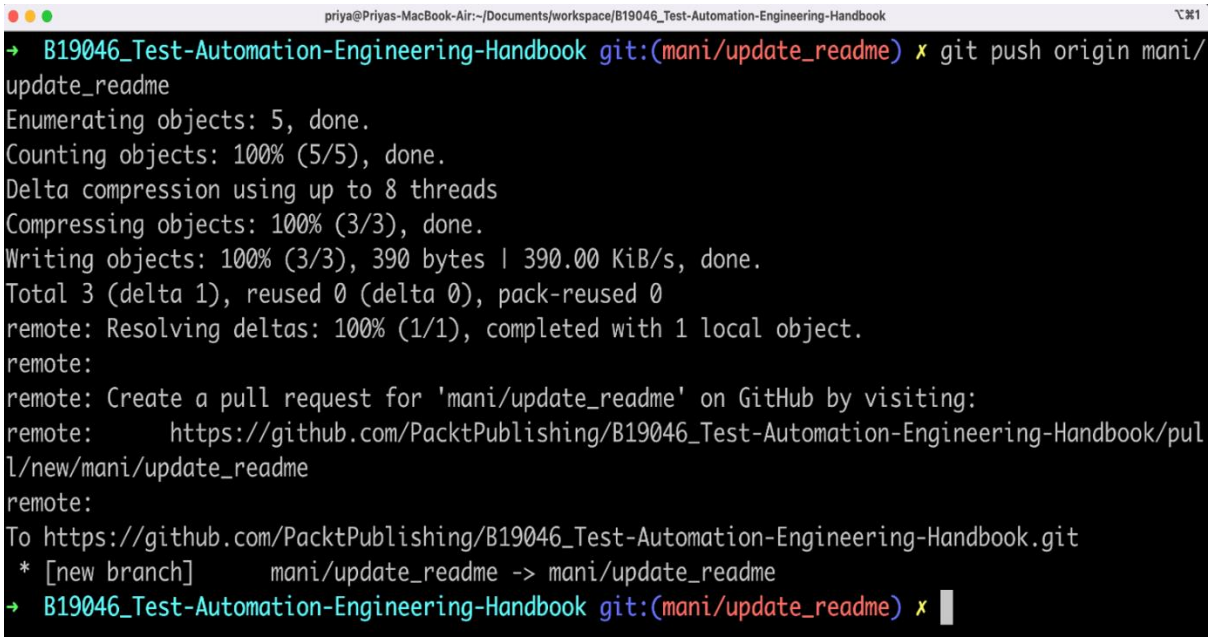

TEST CODE
WEBDRIVER MANAGER FACTORY
WEBDRIVER INTERFACE
METHODS
CHROME DRIVER
FIREFOX DRIVER
SAFARI DRIVER
IE DRIVER

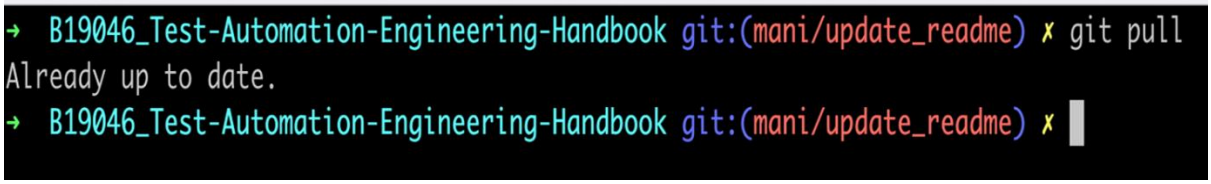
Chapter 3: Common Tools and Frameworks

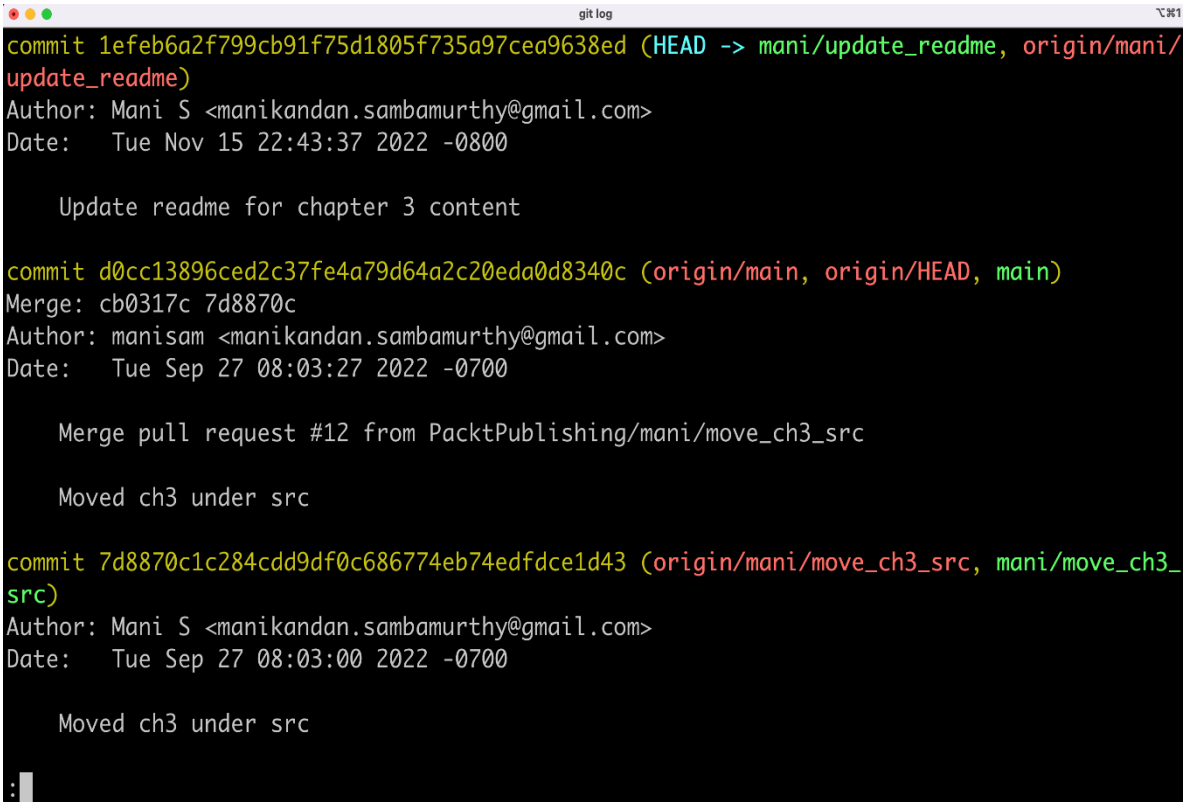


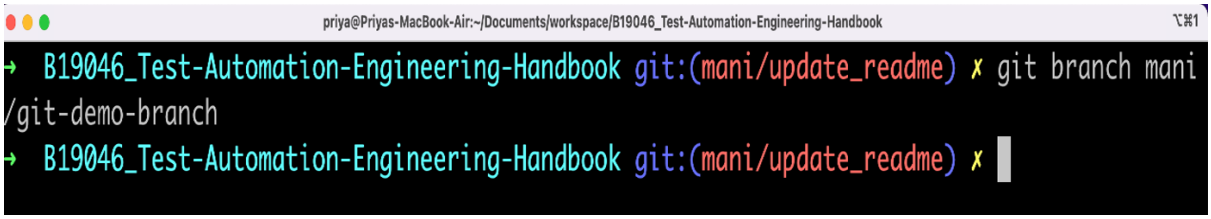

```
➜  git_demo git:(master) ✗ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/priya/Documents/git_demo/.git/
➜  git_demo git:(master)
```

```
priya@Priyas-MacBook-Air:~/Documents/git_demo
➜  git_demo git:(master) git clone https://github.com/PacktPublishing/B19046_Test-Automation-En
gineering-Handbook.git
Cloning into 'B19046_Test-Automation-Engineering-Handbook'...
remote: Enumerating objects: 116, done.
remote: Counting objects: 100% (116/116), done.
remote: Compressing objects: 100% (90/90), done.
remote: Total 116 (delta 20), reused 89 (delta 9), pack-reused 0
Receiving objects: 100% (116/116), 3.73 MiB | 5.49 MiB/s, done.
Resolving deltas: 100% (20/20), done.
➜  git_demo git:(master) ✗
```

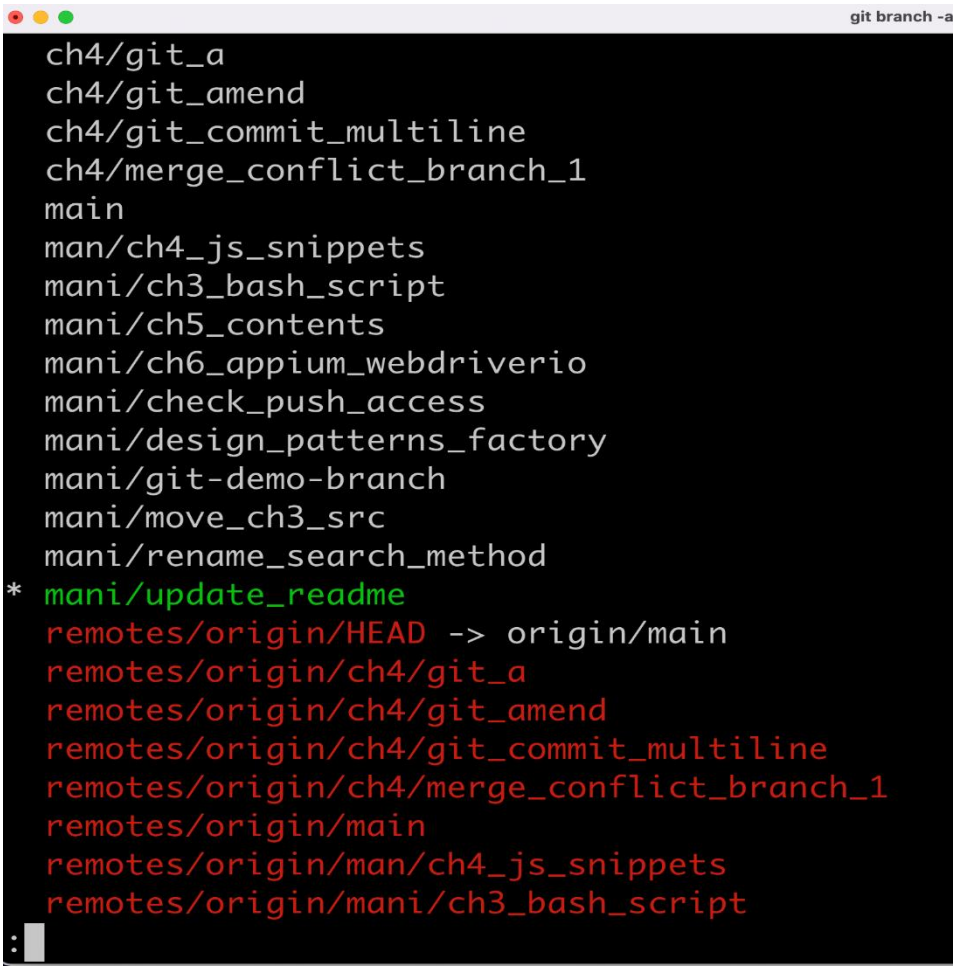

priya@Priyas-MacBook-Air:~/Documents/workspace/B19046_Test-Automation-Engineering-Handbook
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git push origin mani/update_readme
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 390 bytes | 390.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'mani/update_readme' on GitHub by visiting:
remote: https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook/pull/new/mani/update_readme
remote:
To https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook.git
* [new branch] mani/update_readme -> mani/update_readme
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗

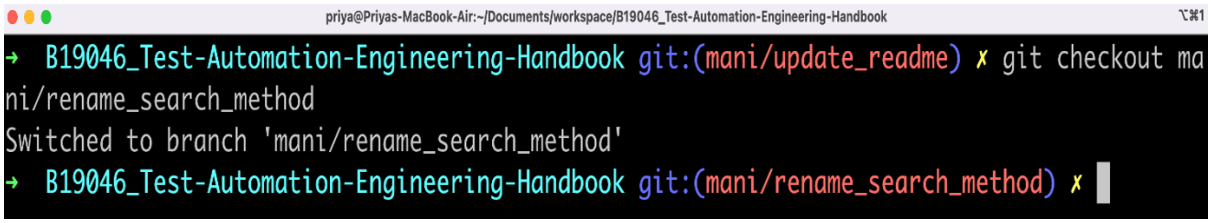

→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git pull
Already up to date.
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗


git log
commit 1efeb6a2f799cb91f75d1805f735a97cea9638ed (HEAD -> mani/update_readme, origin/mani/update_readme)
Author: Mani S <manikandan.sambamurthy@gmail.com>
Date: Tue Nov 15 22:43:37 2022 -0800
Update readme for chapter 3 content
commit d0cc13896ced2c37fe4a79d64a2c20eda0d8340c (origin/main, origin/HEAD, main)
Merge: cb0317c 7d8870c
Author: manisam <manikandan.sambamurthy@gmail.com>
Date: Tue Sep 27 08:03:27 2022 -0700
Merge pull request #12 from PacktPublishing/mani/move_ch3_src
Moved ch3 under src
commit 7d8870c1c284cdd9df0c686774eb74edfdce1d43 (origin/mani/move_ch3_src, mani/move_ch3_src)
Author: Mani S <manikandan.sambamurthy@gmail.com>
Date: Tue Sep 27 08:03:00 2022 -0700
Moved ch3 under src
:


priya@Priyas-MacBook-Air:~/Documents/workspace/B19046_Test-Automation-Engineering-Handbook
⌥⌘1
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git branch mani/git-demo-branch
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗


ch4/git_a
ch4/git_amend
ch4/git_commit_multiline
ch4/merge_conflict_branch_1
main
man/ch4_js_snippets
mani/ch3_bash_script
mani/ch5_contents
mani/ch6_appium_webdriverio
mani/check_push_access
mani/design_patterns_factory
mani/git-demo-branch
mani/move_ch3_src
mani/rename_search_method
* mani/update_readme
(END)


git branch -a
ch4/git_a
ch4/git_amend
ch4/git_commit_multiline
ch4/merge_conflict_branch_1
main
man/ch4_js_snippets
mani/ch3_bash_script
mani/ch5_contents
mani/ch6_appium_webdriverio
mani/check_push_access
mani/design_patterns_factory
mani/git-demo-branch
mani/move_ch3_src
mani/rename_search_method
* mani/update_readme
remotes/origin/HEAD -> origin/main
remotes/origin/ch4/git_a
remotes/origin/ch4/git_amend
remotes/origin/ch4/git_commit_multiline
remotes/origin/ch4/merge_conflict_branch_1
remotes/origin/main
remotes/origin/man/ch4_js_snippets
remotes/origin/mani/ch3_bash_script
:

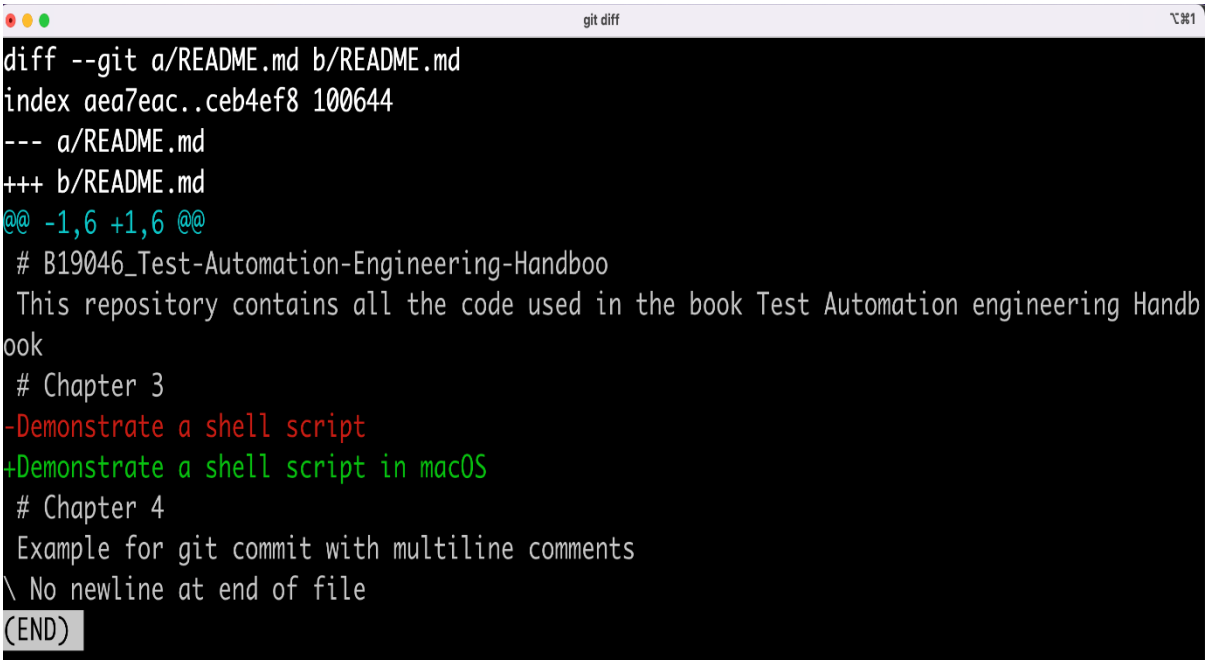

priya@Priyas-MacBook-Air:~/Documents/workspace/B19046_Test-Automation-Engineering-Handbook
→ B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git checkout mani/rename_search_method
Switched to branch 'mani/rename_search_method'
→ B19046_Test-Automation-Engineering-Handbook git:(mani/rename_search_method) ✗

```
→  B19046_Test-Automation-Engineering-Handbook git:(main) ✗ git status
On branch main
Your branch is up to date with 'origin/main'.

You are currently bisecting, started from branch 'main'.
  (use "git bisect reset" to get back to the original branch)

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        src/ch5/cypress.config.js
        src/ch5/cypress/
        src/ch8/

nothing added to commit but untracked files present (use "git add" to track)
→  B19046_Test-Automation-Engineering-Handbook git:(main) ✗
```



```
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git add .
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git status
On branch mani/update_readme
Your branch is up to date with 'origin/mani/update_readme'.

You are currently bisecting, started from branch 'main'.
  (use "git bisect reset" to get back to the original branch)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md
        new file:   src/ch5/cypress.config.js
        new file:   src/ch5/cypress/fixtures/example.json
        new file:   src/ch5/cypress/support/commands.js
        new file:   src/ch5/cypress/support/e2e.js
        new file:   src/ch8/Account.java
        new file:   src/ch8/AccountObjects.java
        new file:   src/ch8/first_java_program.java

→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗
```

```
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git commit -m "
GIT Demo commit"
[mani/update_readme 6960800] GIT Demo commit
 8 files changed, 100 insertions(+), 1 deletion(-)
 create mode 100644 src/ch5/cypress.config.js
 create mode 100644 src/ch5/cypress/fixtures/example.json
 create mode 100644 src/ch5/cypress/support/commands.js
 create mode 100644 src/ch5/cypress/support/e2e.js
 create mode 100644 src/ch8/Account.java
 create mode 100644 src/ch8/AccountObjects.java
 create mode 100644 src/ch8/first_java_program.java
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme)
```

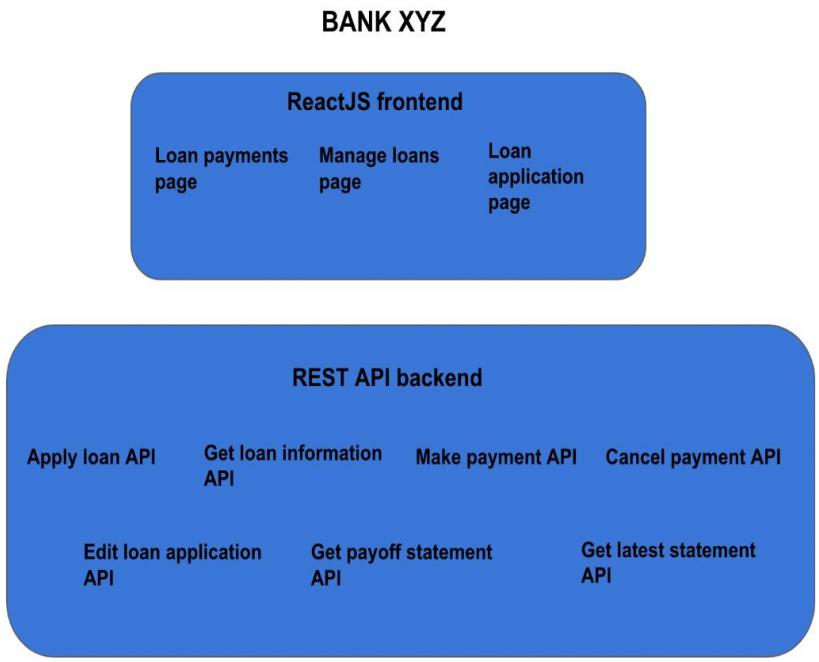
```
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git stash
Saved working directory and index state WIP on mani/update_readme: 6960800 GIT Demo commi
t
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) git stash pop
On branch mani/update_readme
Your branch is up to date with 'origin/mani/update_readme'.

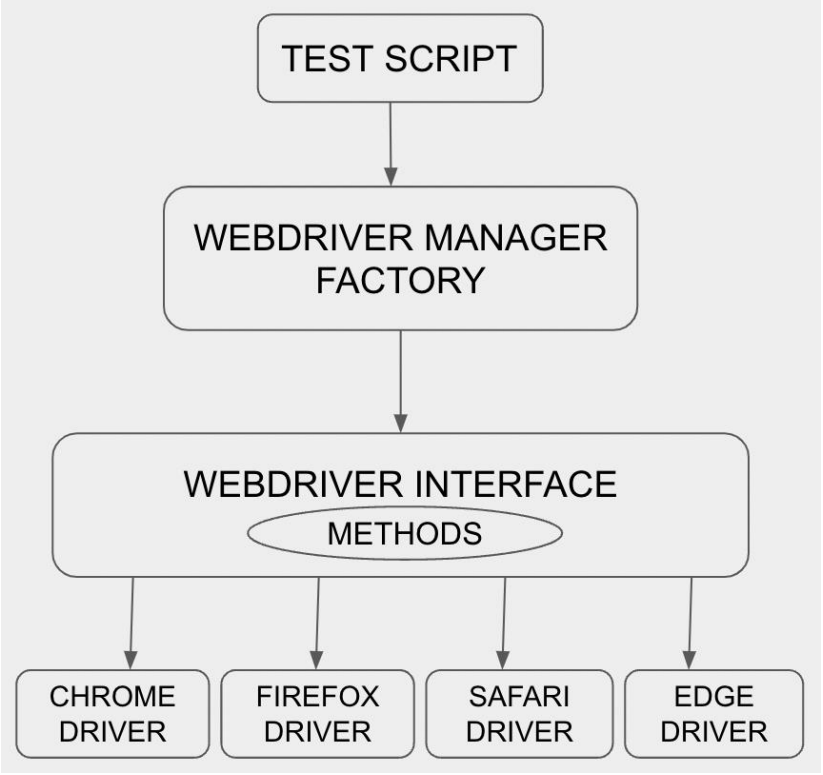
You are currently bisecting, started from branch 'main'.
  (use "git bisect reset" to get back to the original branch)

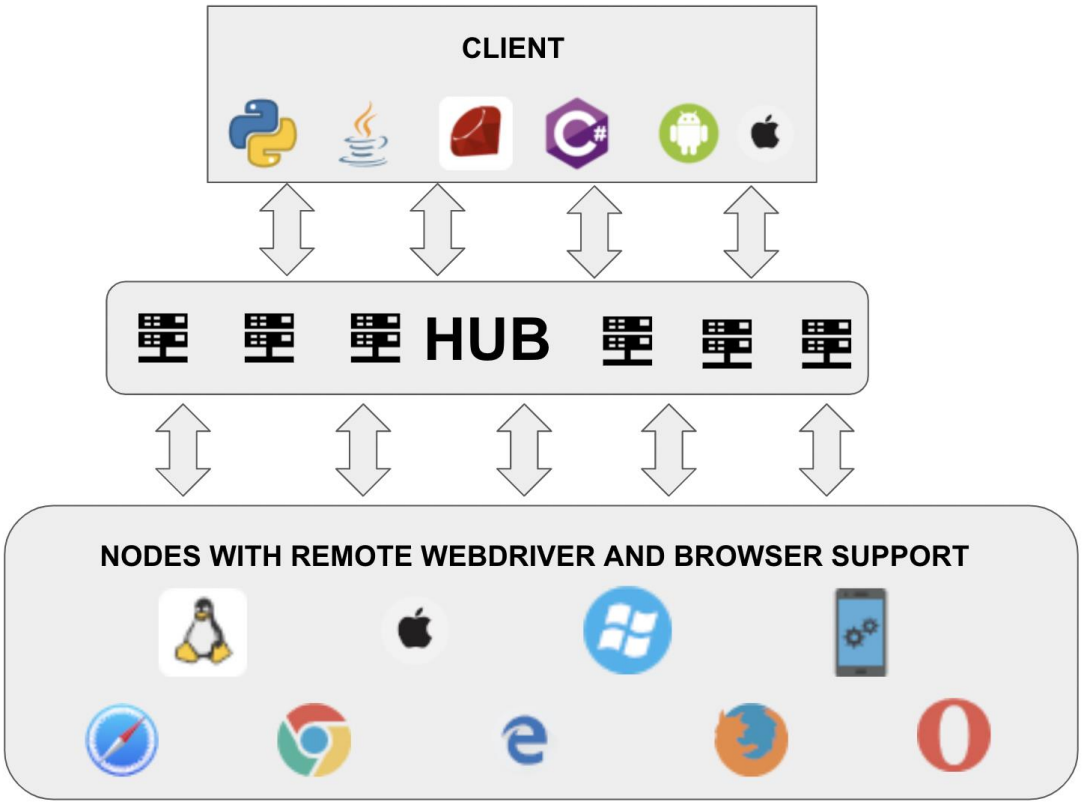
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

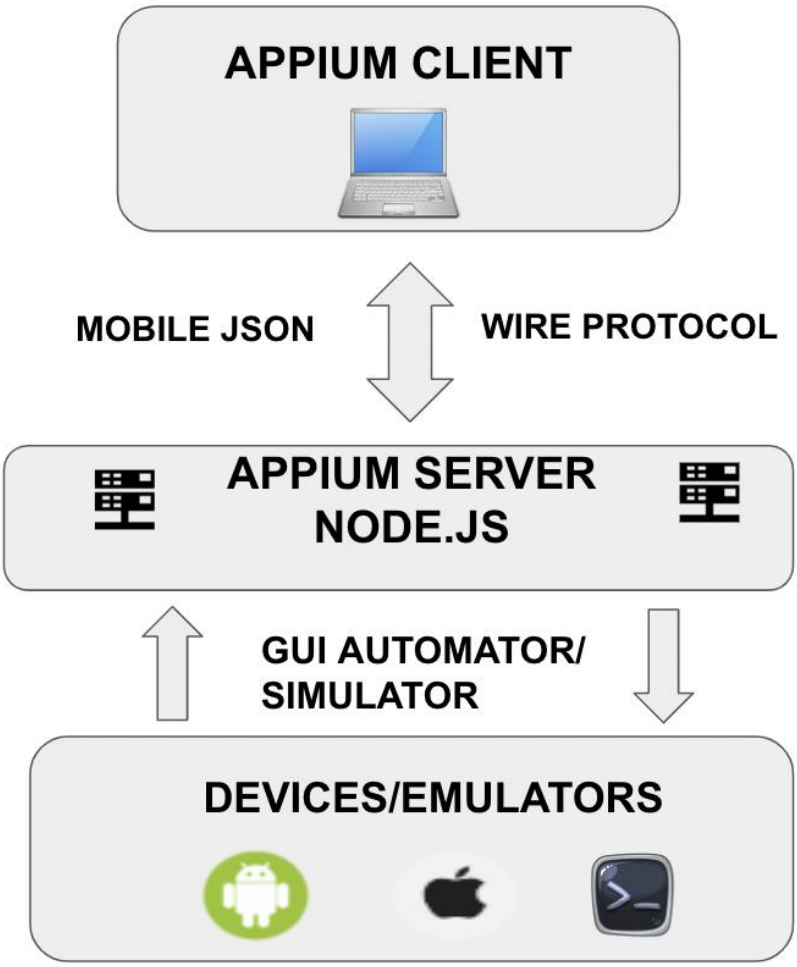
no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (2f6325fb0bab45d2de37bf59e80a01f74af80a35)
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗
```

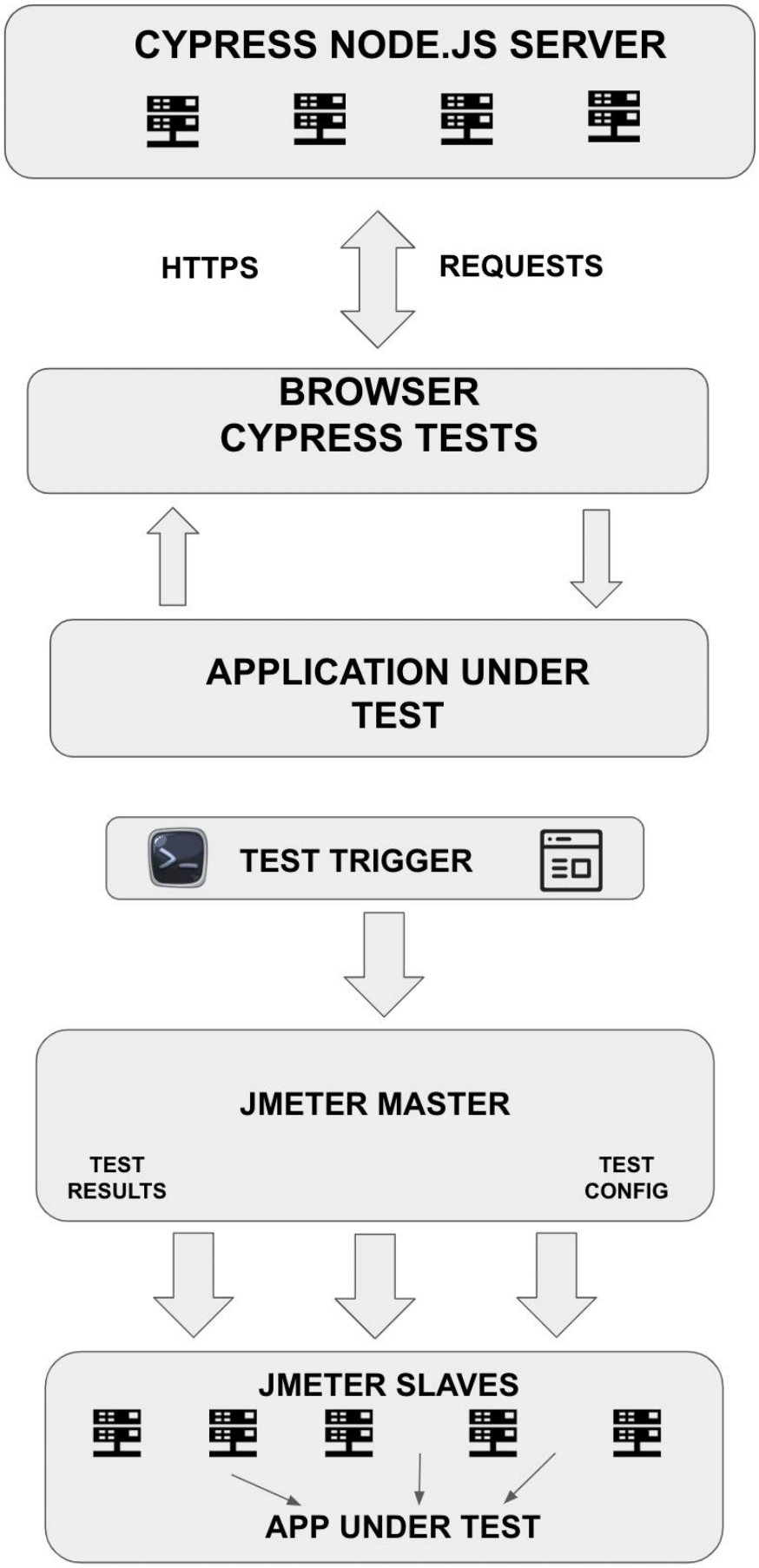
```
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗ git remote -v
origin  https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook.gi
t (fetch)
origin  https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook.gi
t (push)
→  B19046_Test-Automation-Engineering-Handbook git:(mani/update_readme) ✗
```




TEST SCRIPT
WEBDRIVER MANAGER FACTORY
WEBDRIVER INTERFACE
METHODS
CHROME DRIVER
FIREFOX DRIVER
SAFARI DRIVER
EDGE DRIVER


CLIENT
HUB
NODES WITH REMOTE WEBDRIVER AND BROWSER SUPPORT

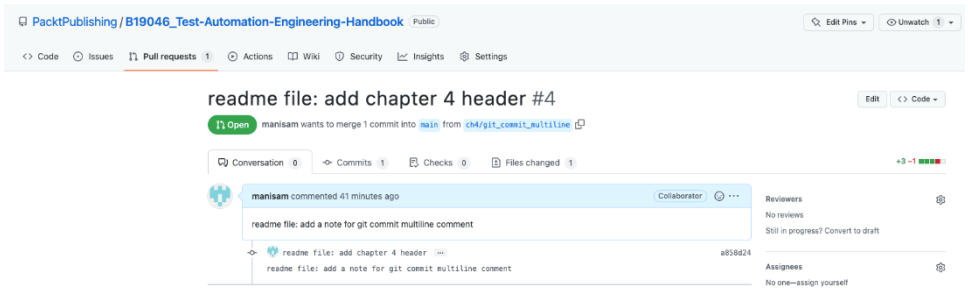

APPIUM CLIENT
MOBILE JSON
WIRE PROTOCOL
APPIUM SERVER
NODE.JS
GUI AUTOMATOR/
SIMULATOR
DEVICES/EMULATORS


CYPRESS NODE.JS SERVER
HTTPS
REQUESTS
BROWSER
CYPRESS TESTS
APPLICATION UNDER
TEST
TEST TRIGGER
JMETER MASTER
TEST
RESULTS
TEST
CONFIG
JMETER SLAVES
APP UNDER TEST

Chapter 4: Getting Started

```
➜  B19046_Test-Automation-Engineering-Handbook git:(main) git checkout -b ch4/git_commit_multiline
Switched to a new branch 'ch4/git_commit_multiline'
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_commit_multiline) git status
On branch ch4/git_commit_multiline
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_commit_multiline) ✗ git add README.md
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_commit_multiline) ✗ git commit -m "readme file: add chapter 4 header
" -m "readme file: add a note for git commit multiline comment"
[ch4/git_commit_multiline a858d24] readme file: add chapter 4 header
 1 file changed, 3 insertions(+), 1 deletion(-)
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_commit_multiline) git push origin ch4/git_commit_multiline
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 437 bytes | 437.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'ch4/git_commit_multiline' on GitHub by visiting:
remote:      https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook/pull/new/ch4/git_commit_multiline
remote:
To https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook.git
 * [new branch]      ch4/git_commit_multiline -> ch4/git_commit_multiline
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_commit_multiline)
```




```
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) ✗ git status
On branch ch4/git_amend
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        src/ch4/

nothing added to commit but untracked files present (use "git add" to track)
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) ✗ git add src/ch4/
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) ✗ git commit -m "Add ch4 folder"
[ch4/git_amend 03f2f9e] Add ch4 folder
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 src/ch4/git_amend_1.txt
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) git status
On branch ch4/git_amend
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        src/ch4/git_amend_2.txt

nothing added to commit but untracked files present (use "git add" to track)
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) ✗ git add src/ch4/git_amend_2.txt
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend) ✗ git commit --amend --no-edit
[ch4/git_amend 6d88963] Add ch4 folder
 Date: Sat Aug 20 21:54:38 2022 -0700
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 src/ch4/git_amend_1.txt
 create mode 100644 src/ch4/git_amend_2.txt
➜  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_amend)
```

```
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a) git status
On branch ch4/git_a
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/ch4/git_amend_1.txt
        deleted:    src/ch4/git_amend_2.txt

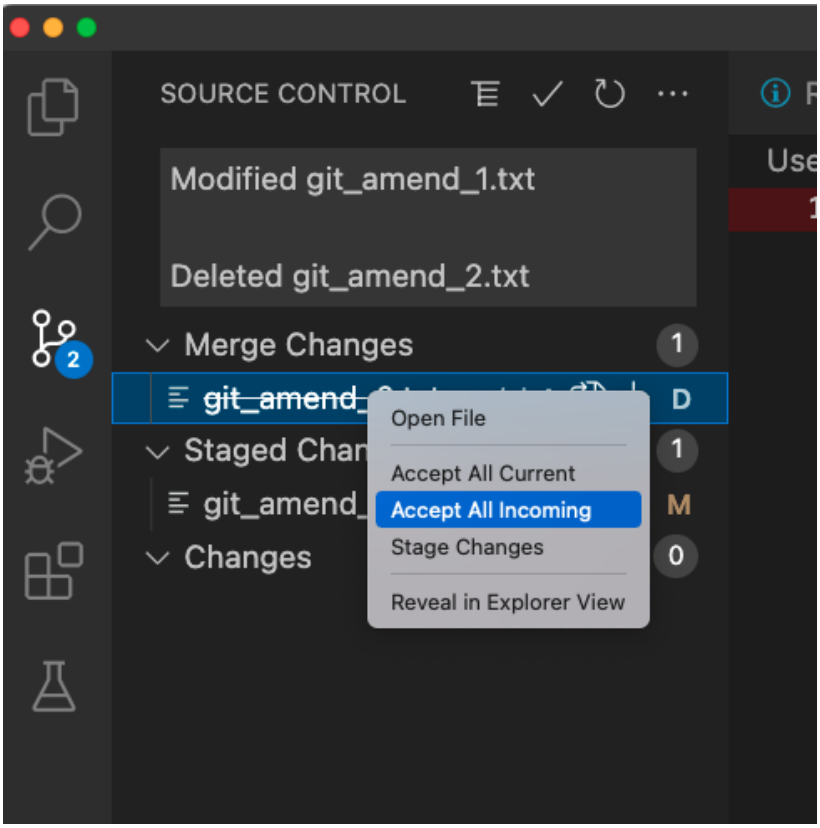
no changes added to commit (use "git add" and/or "git commit -a")
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a) ✗ git commit -a -m "Modified git_amend_1.txt" -m "Deleted git_amend_2.txt"
[ch4/git_a 2f40807] Modified git_amend_1.txt
 2 files changed, 1 insertion(+)
 delete mode 100644 src/ch4/git_amend_2.txt
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a) git status
On branch ch4/git_a
nothing to commit, working tree clean
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a)
```

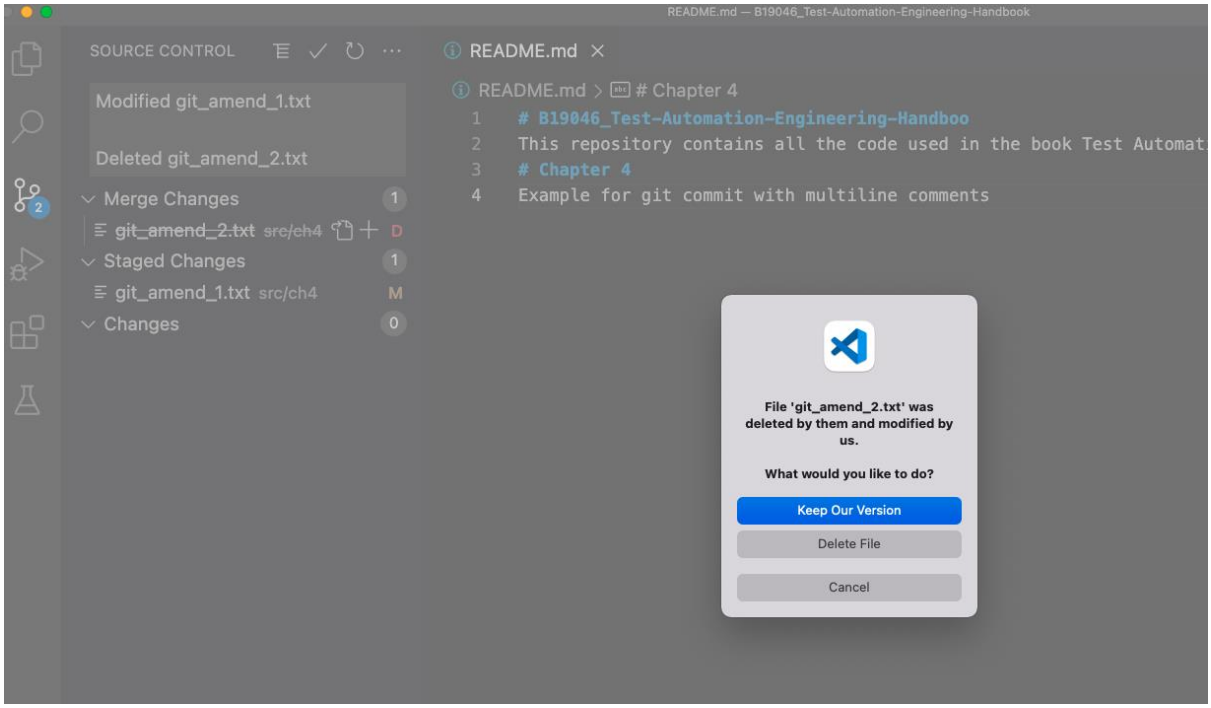
```
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/merge_conflict_branch_1) git status
On branch ch4/merge_conflict_branch_1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/ch4/git_amend_2.txt

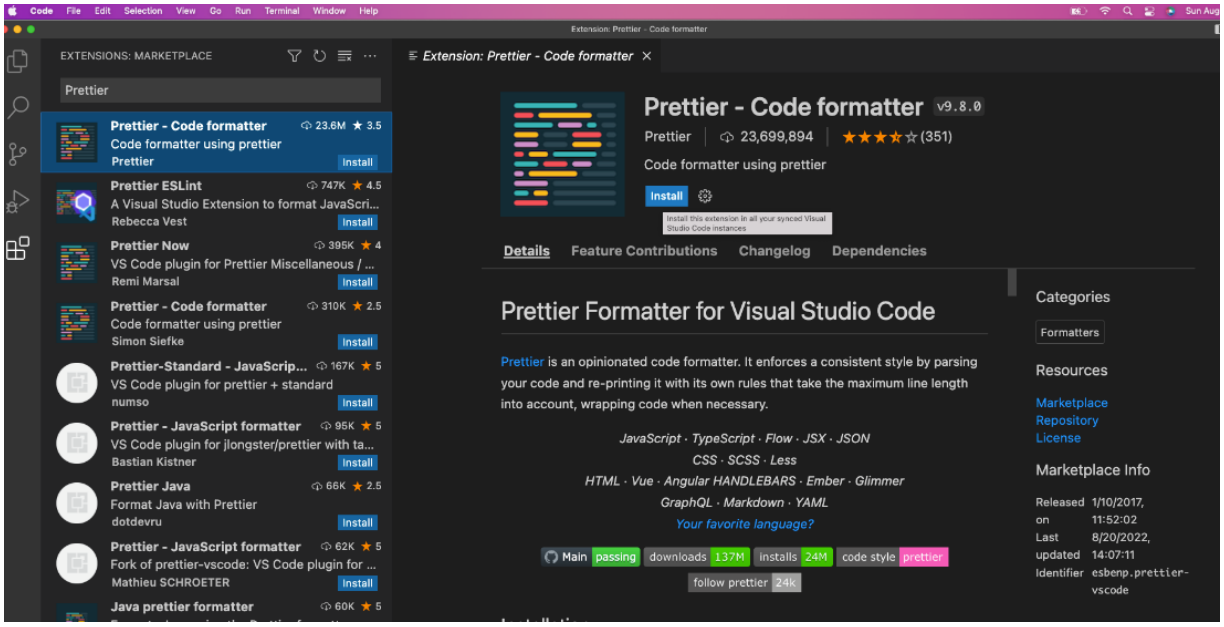
no changes added to commit (use "git add" and/or "git commit -a")
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/merge_conflict_branch_1) ✗ git add src/ch4/git_amend_2.txt
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/merge_conflict_branch_1) ✗ git commit -m "Update git_amend_2.txt"
[ch4/merge_conflict_branch_1 ed13825] Update git_amend_2.txt
 1 file changed, 1 insertion(+)
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/merge_conflict_branch_1) git push origin ch4/merge_conflict_branch_1
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 445 bytes | 445.00 KiB/s, done.
Total 5 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'ch4/merge_conflict_branch_1' on GitHub by visiting:
remote:      https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook/pull/new/ch4/merge_conflict_branch_1
remote:
To https://github.com/PacktPublishing/B19046_Test-Automation-Engineering-Handbook.git
```

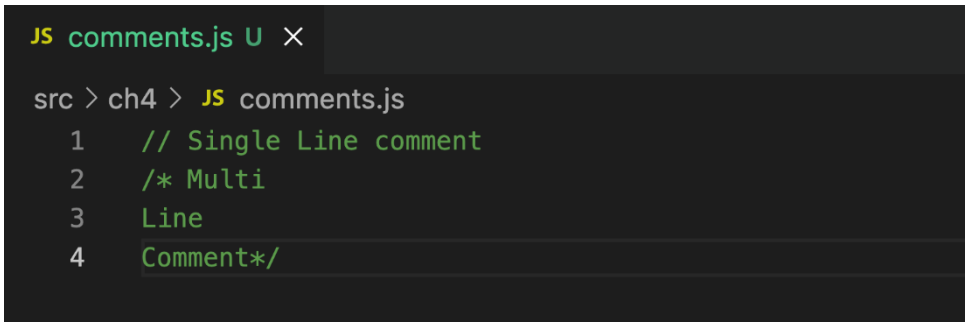
```
priya@Priyas-MacBook-Air:~/Documents/workspace/B19046_Test-Automation-Engineering-Handbook
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a) git checkout main
Switched to branch 'main'
Your branch is behind 'origin/main' by 2 commits, and can be fast-forwarded.
  (use "git pull" to update your local branch)
→  B19046_Test-Automation-Engineering-Handbook git:(main) git pull
Updating 2f2ed33..6e8dcf8
Fast-forward
 src/ch4/git_amend_2.txt | 1 +
 1 file changed, 1 insertion(+)
→  B19046_Test-Automation-Engineering-Handbook git:(main) git checkout ch4/git_a
Switched to branch 'ch4/git_a'
```

```
→  B19046_Test-Automation-Engineering-Handbook git:(ch4/git_a) git rebase main
CONFLICT (modify/delete): src/ch4/git_amend_2.txt deleted in 2f40807 (Modified git_amend_1.txt) and modified in HEAD.  Version
HEAD of src/ch4/git_amend_2.txt left in tree.
error: could not apply 2f40807... Modified git_amend_1.txt
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted_files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 2f40807... Modified git_amend_1.txt
→  B19046_Test-Automation-Engineering-Handbook git:(6e8dcf8) ✗
```




README.md — B19046_Test-Automation-Engineering-Handbook
SOURCE CONTROL
Modified git_amend_1.txt
Deleted git_amend_2.txt
Merge Changes 1
git_amend_2.txt src/ch4 D
Staged Changes 1
git_amend_1.txt src/ch4 M
Changes 0
README.md
README.md > # Chapter 4
1 # B19046_Test-Automation-Engineering-Handboo
2 This repository contains all the code used in the book Test Automat
3 # Chapter 4
4 Example for git commit with multiline comments
File 'git_amend_2.txt' was deleted by them and modified by us.
What would you like to do?
Keep Our Version
Delete File
Cancel


EXTENSIONS: MARKETPLACE
Prettier
Prettier - Code formatter 23.6M 3.5
Code formatter using prettier
Prettier Install
Prettier ESLint 747K 4.5
A Visual Studio Extension to format JavaScri...
Rebecca Vest Install
Prettier Now 395K 4
VS Code plugin for Prettier Miscellaneous / ...
Remi Marsal Install
Prettier - Code formatter 310K 2.5
Code formatter using prettier
Simon Siefke Install
Prettier-Standard - JavaScrip... 167K 5
VS Code plugin for prettier + standard
numso Install
Prettier - JavaScript formatter 95K 5
VS Code plugin for jlongster/prettier with ta...
Bastian Kistner Install
Prettier Java 66K 2.5
Format Java with Prettier
dotdevru Install
Prettier - JavaScript formatter 62K 5
Fork of prettier-vscode: VS Code plugin for ...
Mathieu SCHROETER Install
Java prettier formatter 60K 5
Extension: Prettier - Code formatter
Prettier - Code formatter v9.8.0
Prettier 23,699,894 (351)
Code formatter using prettier
Install
Details Feature Contributions Changelog Dependencies
Prettier Formatter for Visual Studio Code
Prettier is an opinionated code formatter. It enforces a consistent style by parsing your code and re-printing it with its own rules that take the maximum line length into account, wrapping code when necessary.
JavaScript · TypeScript · Flow · JSX · JSON
CSS · SCSS · Less
HTML · Vue · Angular HANDLEBARS · Ember · Glimmer
GraphQL · Markdown · YAML
Your favorite language?
Main passing downloads 137M installs 24M code style prettier
follow prettier 24k
Categories
Formatters
Resources
Marketplace
Repository
License
Marketplace Info
Released on 1/10/2017, 11:52:02
Last updated 8/20/2022, 14:07:11
Identifier esbenp.prettier-vscode


JS comments.js U
src > ch4 > JS comments.js
1 // Single Line comment
2 /* Multi
3 Line
4 Comment*/

JS var_data.js U

src > ch4 > JS var_data.js > ...

```
1   //let, const
2
3   let temperature=75;
4   const city = 'San Francisco';
5   console.log(city);
6   console.log(temperature);
7   temperature=80;
8   console.log(temperature);
9   city = 'San Diego';
10
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
75
80
/Users/priya/Documents/workspace/B19046_Test-Automation-Engineering-Handbook/src/ch4/var_data.js:
9
city = 'San Diego'
     ^

TypeError: Assignment to constant variable.
    at Object.<anonymous> (/Users/priya/Documents/workspace/B19046_Test-Automation-Engineering-Ha
ndbook/src/ch4/var_data.js:9:6)
    at Module._compile (node:internal/modules/cjs/loader:1126:14)
    at Object.Module._extensions..js (node:internal/modules/cjs/loader:1180:10)
    at Module.load (node:internal/modules/cjs/loader:1004:32)
    at Function.Module._load (node:internal/modules/cjs/loader:839:12)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:81:12)
    at node:internal/main/run_main_module:17:47
➜  ch4 git:(main) ✗
```

JS primitives.js U

src > ch4 > JS primitives.js > ...

```
1   const city = 'San Francisco'; //string
2   const population = 815000; //number
3   const crime_rate = 50.72; //number
4   const isWarm = false; //boolean
5   const x = null; //null
6   let y; //undefined
7   console.log(typeof(city))
8   console.log(typeof(population))
9   console.log(typeof(crime_rate))
10  console.log(typeof(isWarm))
11  console.log(typeof(x))
12  console.log(typeof(y))
```

TERMINAL

```
→  ch4 git:(main) ✗ node primitives.js
string
number
number
boolean
object
undefined
→  ch4 git:(main) ✗
```

JS strings.js U

src > ch4 > JS strings.js > ...

```
1   const city = 'San Francisco';
2   const population = 815000;
3   //concatenation
4   sfo = `${city} has a population of ${population}`;
5   console.log(sfo);
6
```

TERMINAL

```
→  ch4 git:(main) ✗ node strings.js
San Francisco has a population of 815000
→  ch4 git:(main) ✗
```

JS strings.js U

src > ch4 > JS strings.js > ...

```
1   const city = 'San Francisco';
2   const population = 815000;
3   //concatenation
4   sfo = `${city} has a population of ${population}`;
5   console.log(sfo);
6   //properties and methods
7   console.log(sfo.length);
8   console.log(city.toUpperCase());
9   console.log(city.toLowerCase());
10  console.log(sfo.substring(0,14))
11  console.log(sfo.split(' '))
```

TERMINAL

```
➜  ch4 git:(main) ✗ node strings.js
San Francisco has a population of 815000
40
SAN FRANCISCO
san francisco
San Francisco
[ 'San', 'Francisco', 'has', 'a', 'population', 'of', '815000' ]
➜  ch4 git:(main) ✗
```

JS arrays.js U

src > ch4 > JS arrays.js > ...

```
1   //Arrays
2   const cities = ['San Francisco', 'Los Angeles', 'San Diego', 'Irvine'];
3   console.log(cities);
4   console.log(cities[1]);
5   cities.push('Oakland');
6   console.log(cities);
7   cities.unshift('Sunnyvale');
8   console.log(cities);
9   cities.push(1);
10  console.log(cities);
11  cities.pop();
12  console.log(cities);
13  console.log(cities.indexOf('San Diego'));
14  console.log(cities.indexOf(1));
15  console.log(cities.length);
```

```
TERMINAL

➜  ch4 git:(main) ✗ node arrays.js
[ 'San Francisco', 'Los Angeles', 'San Diego', 'Irvine' ]
Los Angeles
[ 'San Francisco', 'Los Angeles', 'San Diego', 'Irvine', 'Oakland' ]
[
  'Sunnyvale',
  'San Francisco',
  'Los Angeles',
  'San Diego',
  'Irvine',
  'Oakland'
]
[
  'Sunnyvale',
  'San Francisco',
  'Los Angeles',
  'San Diego',
  'Irvine',
  'Oakland',
  1
]
[
  'Sunnyvale',
  'San Francisco',
  'Los Angeles',
  'San Diego',
  'Irvine',
  'Oakland'
]
3
-1
6
```

objects_declare.js U

src > ch4 > objects_declare.js > movie

```js
//Objects Declaration and access
const movie = { name: 'Pulp Fiction',
                director: 'Quentin Tanrantino',
                year_of_release: 1994,
                cast: {
                        'Vincent Vega': 'John Travolta',
                        'Jules': 'Samuel Jackson',
                        'Mia': 'Uma Thurman'
                       },
                awards: ['Academy Awards 1995', 'Golden Globes 1995', 'Cannes 1994', 'SAG 1995']
                }
console.log(movie);
console.log(movie.name, movie.year_of_release);
console.log(movie.awards[0]);
console.log(movie.cast.Jules)
```

TERMINAL

```
➜  ch4 git:(main) ✗ node objects_declare.js
{
  name: 'Pulp Fiction',
  director: 'Quentin Tanrantino',
  year_of_release: 1994,
  cast: {
    'Vincent Vega': 'John Travolta',
    Jules: 'Samuel Jackson',
    Mia: 'Uma Thurman',
    Butch: 'Bruce Willis'
  },
  awards: [
    'Academy Awards 1995',
    'Golden Globes 1995',
    'Cannes 1994',
    'SAG 1995'
  ]
}
Pulp Fiction 1994
Academy Awards 1995
Samuel Jackson
```

objects_destructure.js U

src > ch4 > objects_destructure.js > awards

```
1   //Objects Declaration and access
2   const movie = { name: 'Pulp Fiction',
3                   director: 'Quentin Tanrantino',
4                   year_of_release: 1994,
5                   cast: {
6                           'Vincent Vega': 'John Travolta',
7                           'Jules': 'Samuel Jackson',
8                           'Mia': 'Uma Thurman'
9                           },
10                  awards: ['Academy Awards 1995', 'Golden Globes 1995', 'Cannes 1994', 'SAG 1995'
11                  }
12  const  {name, awards} = movie;
13  console.log(name, awards);
14  const  {cast: {Jules}} = movie;
15  console.log(Jules);
```

TERMINAL

```
➜  ch4 git:(main) ✗ node objects_destructure.js
Pulp Fiction [
  'Academy Awards 1995',
  'Golden Globes 1995',
  'Cannes 1994',
  'SAG 1995'
]
Samuel Jackson
➜  ch4 git:(main) ✗
```

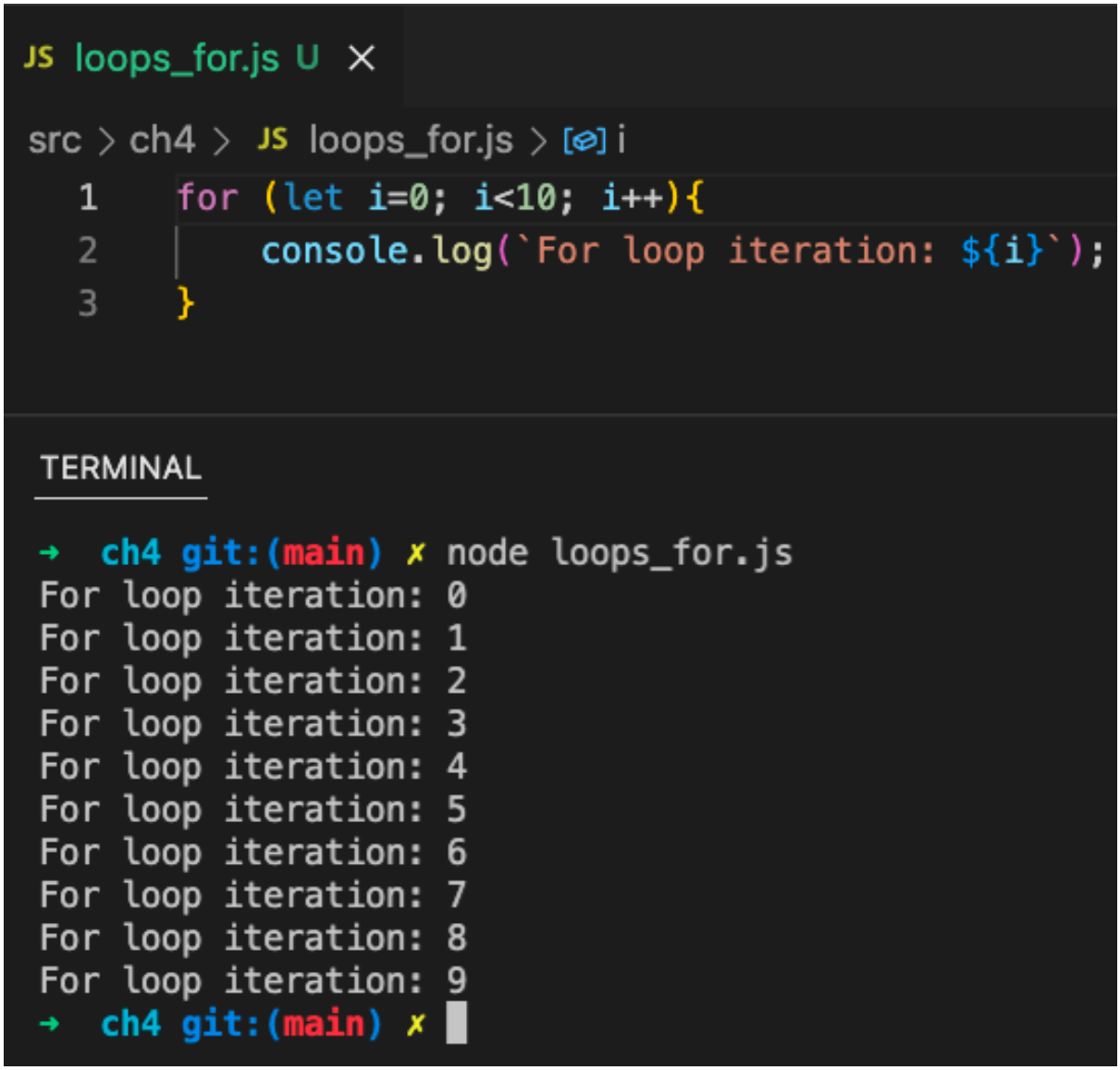
arrays_of_objects.js

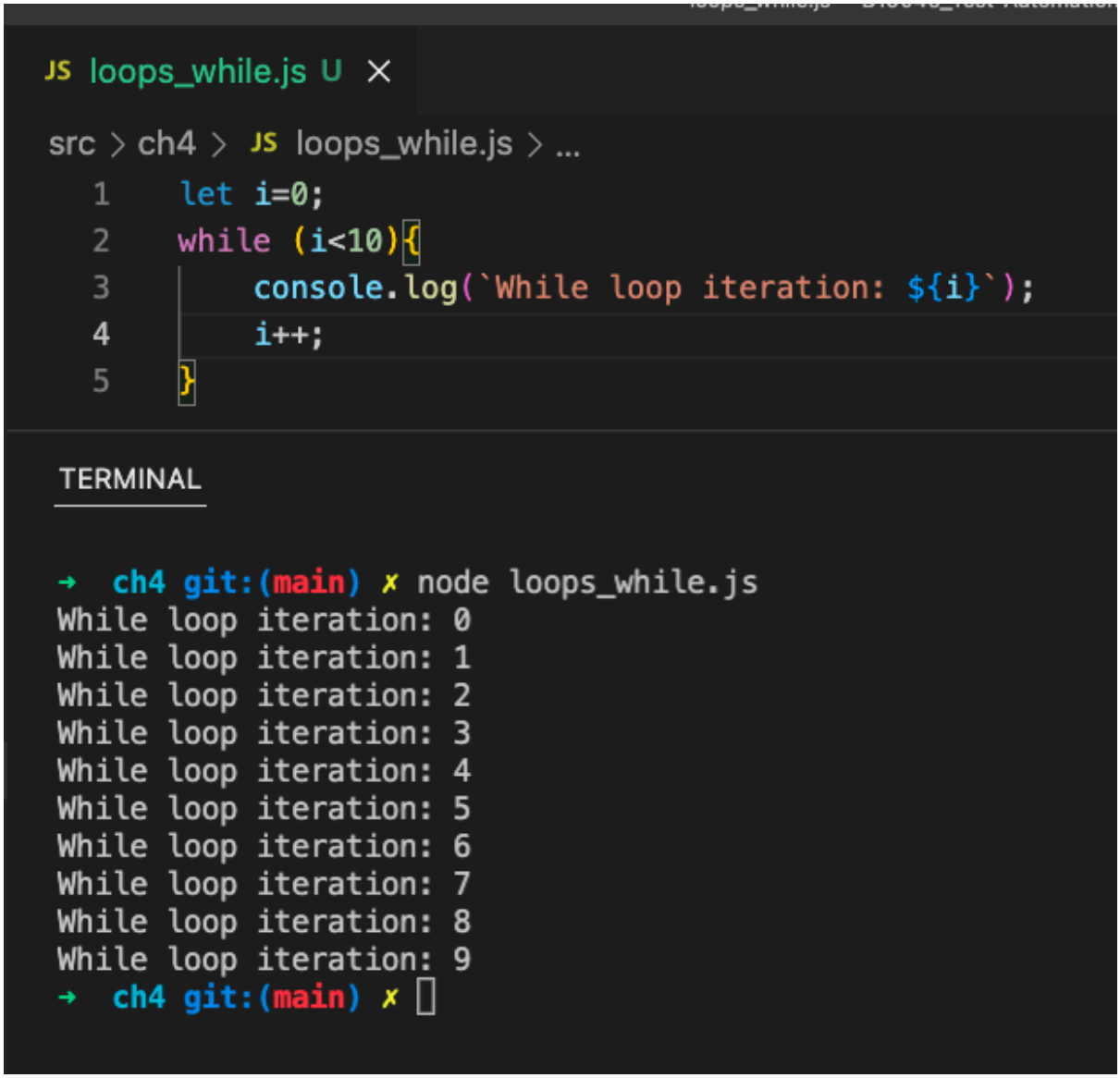
src > ch4 > arrays_of_objects.js > ...

```
6                   director: 'Quentin Tarantino'
7           },
8           {
9                   id:2,
10                  name: 'Inception',
11                  director: 'Christopher Nolan'
12          },
13          {
14                  id:3,
15                  name: 'The Shawshank Redemption',
16                  director: 'Frank Darabont'
17          }
18  ];
19  console.log(movies[1].name, movies[1].director);
20  console.log(JSON.stringify(movies));
```

TERMINAL zsh - ch4

```
➜  ch4 git:(mani/update_cypress_version) ✗ node arrays_of_objects.js
Inception Christopher Nolan
[{"id":1,"name":"Pulp Fiction","director":"Quentin Tarantino"},{"id":2,"name":"Inception","director":"Chris
topher Nolan"},{"id":3,"name":"The Shawshank Redemption","director":"Frank Darabont"}]
➜  ch4 git:(mani/update_cypress_version) ✗
```


JS loops_for.js U
src > ch4 > JS loops_for.js > i
1 for (let i=0; i<10; i++){
2 console.log(`For loop iteration: ${i}`);
3 }
TERMINAL
→ ch4 git:(main) ✗ node loops_for.js
For loop iteration: 0
For loop iteration: 1
For loop iteration: 2
For loop iteration: 3
For loop iteration: 4
For loop iteration: 5
For loop iteration: 6
For loop iteration: 7
For loop iteration: 8
For loop iteration: 9
→ ch4 git:(main) ✗


JS loops_while.js U
src > ch4 > JS loops_while.js > ...
1 let i=0;
2 while (i<10){
3 console.log(`While loop iteration: ${i}`);
4 i++;
5 }
TERMINAL
→ ch4 git:(main) ✗ node loops_while.js
While loop iteration: 0
While loop iteration: 1
While loop iteration: 2
While loop iteration: 3
While loop iteration: 4
While loop iteration: 5
While loop iteration: 6
While loop iteration: 7
While loop iteration: 8
While loop iteration: 9
→ ch4 git:(main) ✗

JS for_of.js U

src > ch4 > JS for_of.js > ...

```
const movies = [
    {
        id:1,
        name: 'Pulp Fiction',
        director: 'Quentin Tarantino'
    },
    {
        id:2,
        name: 'Inception',
        director: 'Christopher Nolan'
    },
    {
        id:3,
        name: 'The Shawshank Redemption',
        director: 'Frank Darabont'
    }
];
for(let movie of movies){
        console.log(`Director of ${movie.name} is ${movie.director}`);
}
```

TERMINAL

```
→  ch4 git:(main) ✗ node for_of.js
Director of Pulp Fiction is Quentin Tarantino
Director of Inception is Christopher Nolan
Director of The Shawshank Redemption is Frank Darabont
→  ch4 git:(main) ✗
```

conditionals.js — B19046_Test-Auton

JS conditionals.js U

src > ch4 > JS conditionals.js > ...

```
1   //if...else if...else
2   const score = 79
3   let grade;
4   if (score>90){
5           grade = 'A';
6   }
7   else if (score> 80){
8           grade = 'B';
9   }
10  else if (score>70){
11          grade = 'C';
12  }
13  else if (score>60){
14          grade = 'D';
15  }
16  else {
17          grade = 'F';
18  }
19  console.log(`Student's score is ${grade}`);
20
```

TERMINAL

```
→  ch4 git:(main) ✗ node conditionals.js
student's score is C
→  ch4 git:(main) ✗
```


functions_area.js — B19046_Test-Automation
functions_area.js U
src > ch4 > functions_area.js > compute_area
1 function compute_area() {
2 if (arguments.length==1){
3 area = arguments[0]*arguments[0];
4 }
5 else if (arguments.length==2){
6 area = arguments[0]*arguments[1];
7 }
8 else {
9 area = 'Invalid number of arguments';
10 }
11 return area;
12 }
13 console.log(compute_area(10));
14 console.log(compute_area(10,20));
15 console.log(compute_area());
TERMINAL
→ ch4 git:(main) ✗ node functions_area.js
100
200
Invalid number of arguments
→ ch4 git:(main) ✗

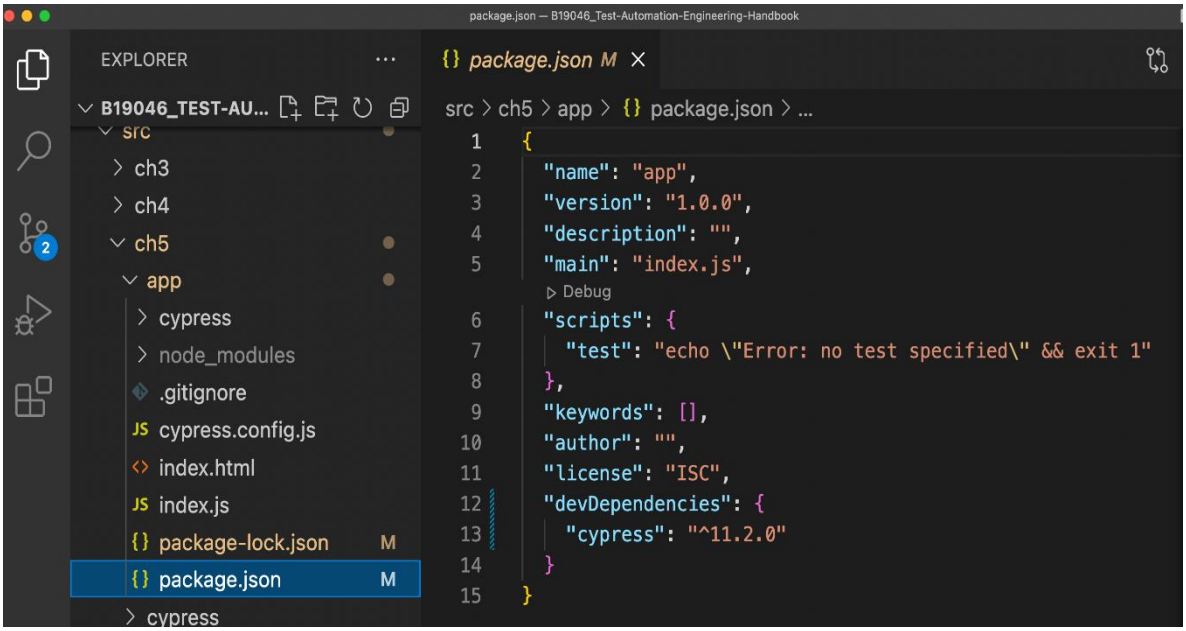
Chapter 5: Test Automation for Web

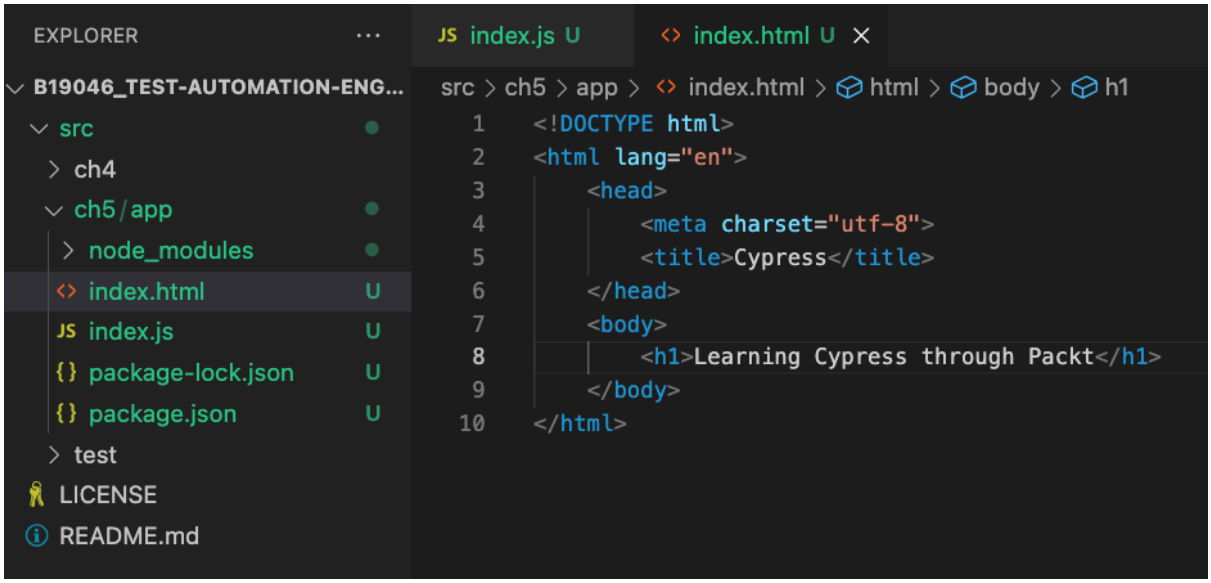
```
➜  ch5 npm -v
8.15.0
➜  ch5
```

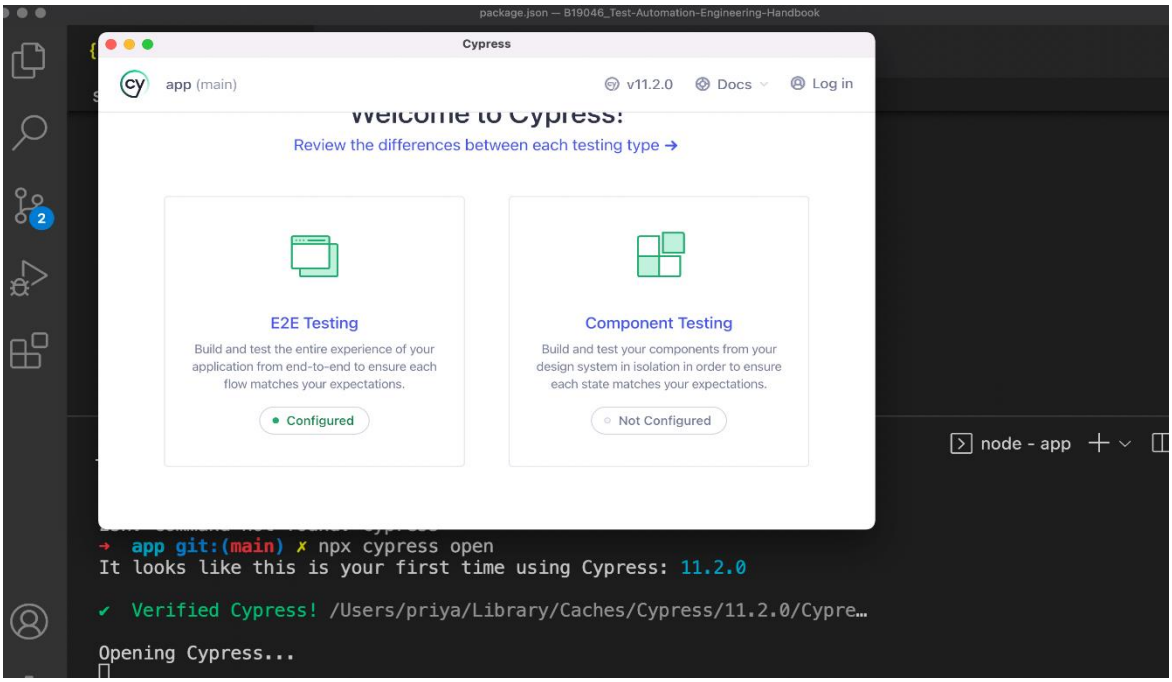
```
➜  B19046_Test-Automation-Engineering-Handbook git:(main) cd src/ch5/app
➜  app git:(main) npm init -y
Wrote to /Users/priya/Documents/workspace/B19046_Test-Automation-Engineering-Handbook/src/ch5/app/package.json:

{
  "name": "app",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}


➜  app git:(main) ✗
```




EXPLORER
index.js U
index.html U
B19046_TEST-AUTOMATION-ENG...
src
ch4
ch5 / app
node_modules
index.html U
index.js U
package-lock.json U
package.json U
test
LICENSE
README.md
src > ch5 > app > index.html > html > body > h1
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Cypress</title>
</head>
<body>
<h1>Learning Cypress through Packt</h1>
</body>
</html>


Cypress
app (main)
v11.2.0
Docs
Log in
Review the differences between each testing type →
E2E Testing
Build and test the entire experience of your application from end-to-end to ensure each flow matches your expectations.
Configured
Component Testing
Build and test your components from your design system in isolation in order to ensure each state matches your expectations.
Not Configured
node - app
app git:(main) ✗ npx cypress open
It looks like this is your first time using Cypress: 11.2.0
✔ Verified Cypress! /Users/priya/Library/Caches/Cypress/11.2.0/Cypre…
Opening Cypress...

Configuration Files

We added the following files to your project:

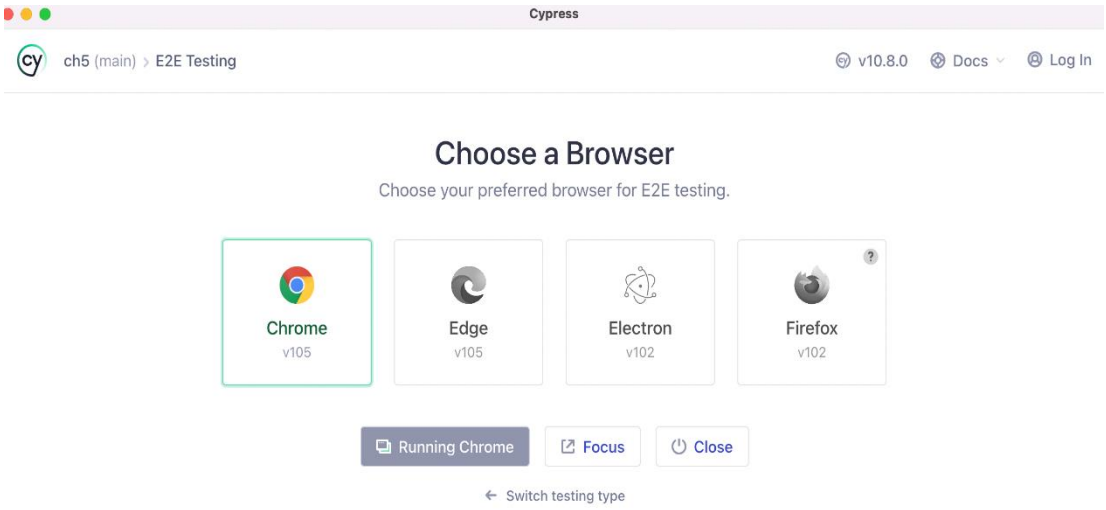
cypress.config.js
The Cypress config file for E2E testing.

cypress/support/e2e.js
The support file that is bundled and loaded before each E2E spec.

cypress/support/commands.js
A support file that is useful for creating custom Cypress commands and overwriting existing ones.

cypress/fixtures/example.json
Added an example fixtures file/folder

Continue



JS arrow.js U

src > ch5 > js > JS arrow.js > addNumbers

```
1  function addNumbers(number1=1, number2=1) {
2      return number1 + number2;
3  }
4
5  console.log(addNumbers(10,15))
```

TERMINAL

```
→  js git:(main) ✗ node arrow.js
25
→  js git:(main) ✗
```

JS arrow.js U

src > ch5 > js > JS arrow.js > ...

```
1  const addNumbers = (number1=1, number2=1) => number1 + number2;
2
3  console.log(addNumbers(10,15));
```

TERMINAL

```
→  js git:(main) ✗ node arrow.js
25
→  js git:(main) ✗
```

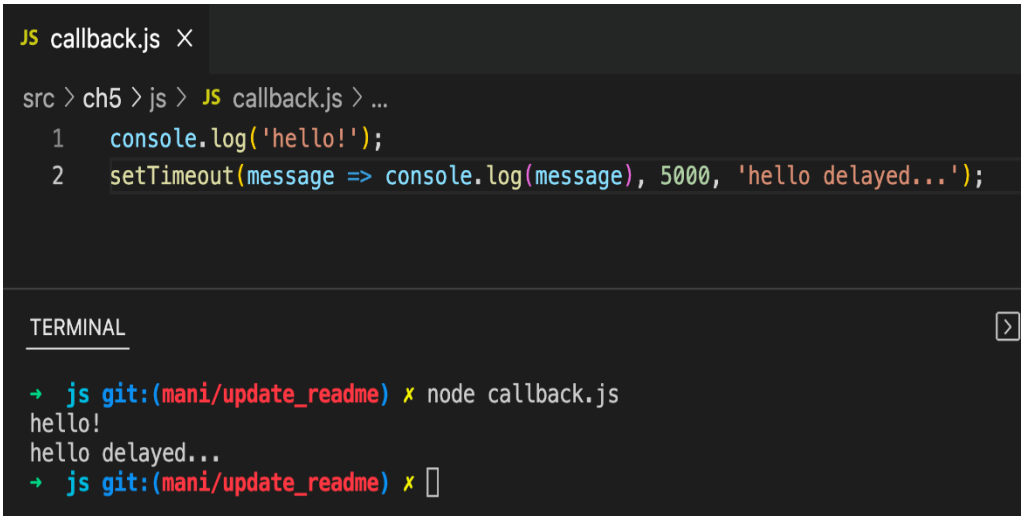
JS callback.js U

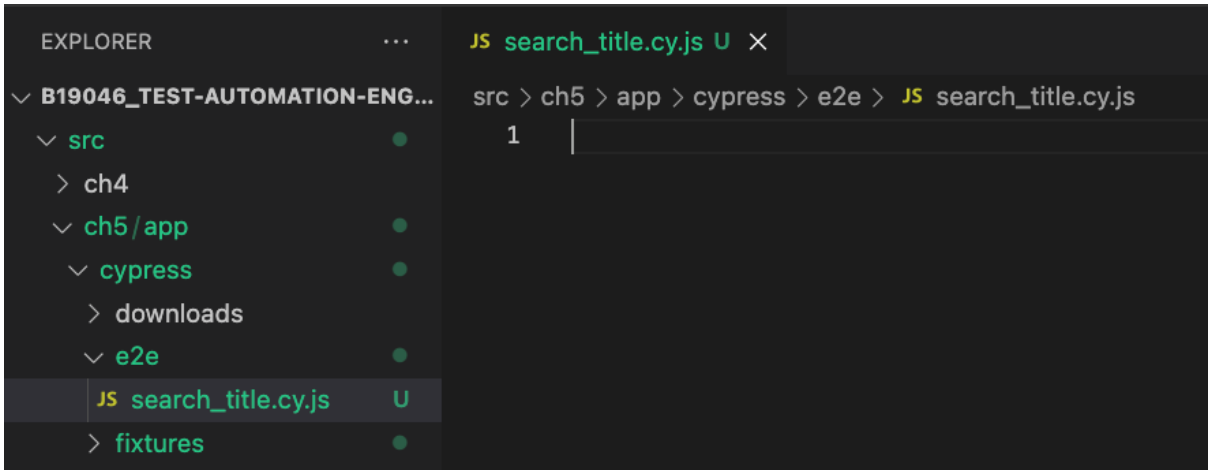
src > ch5 > js > JS callback.js > ...

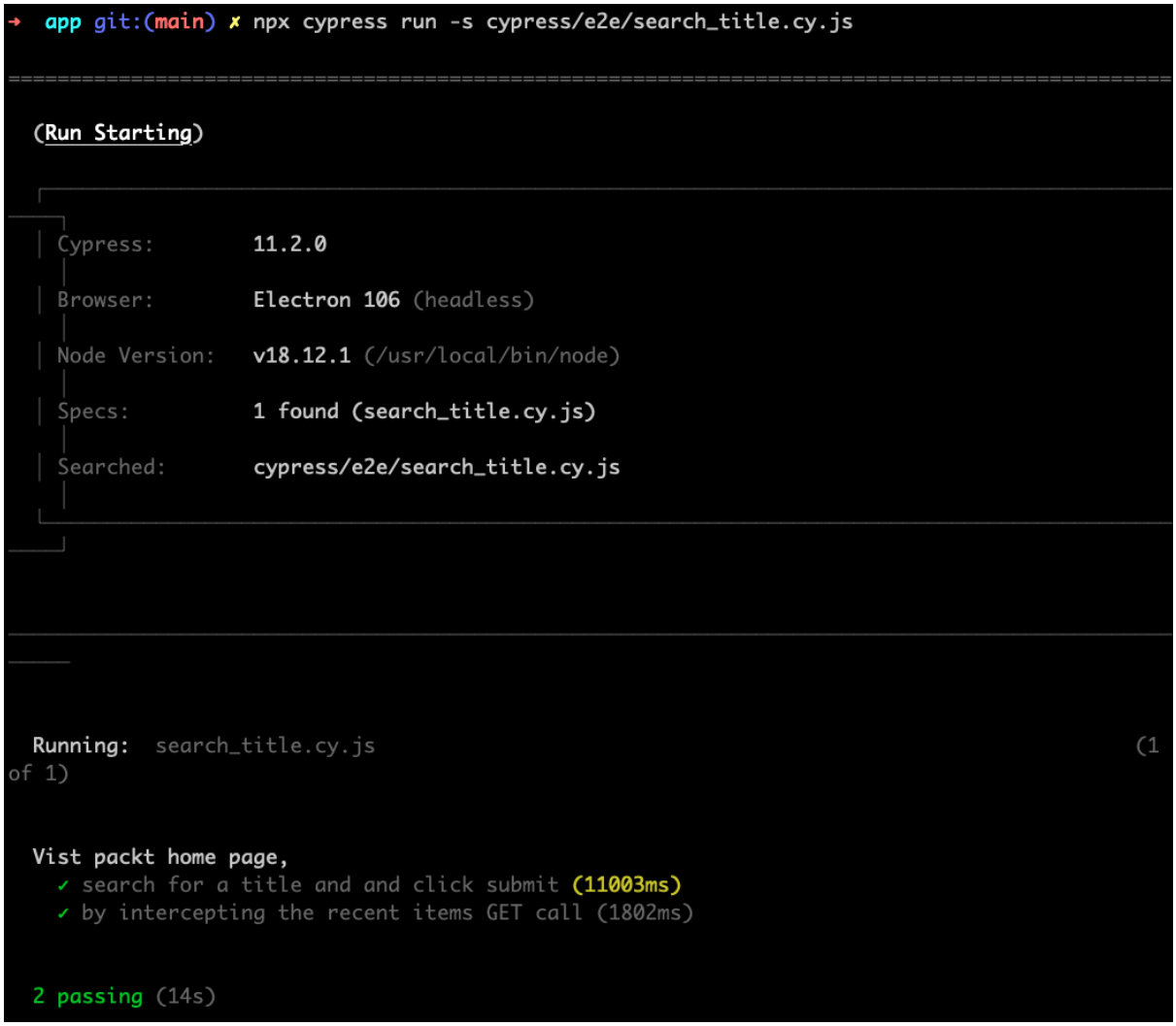
```
1  const printMessage = message => console.log(message);
2  printMessage('hello!');
3  setTimeout(printMessage, 5000, 'hello delayed...');
```

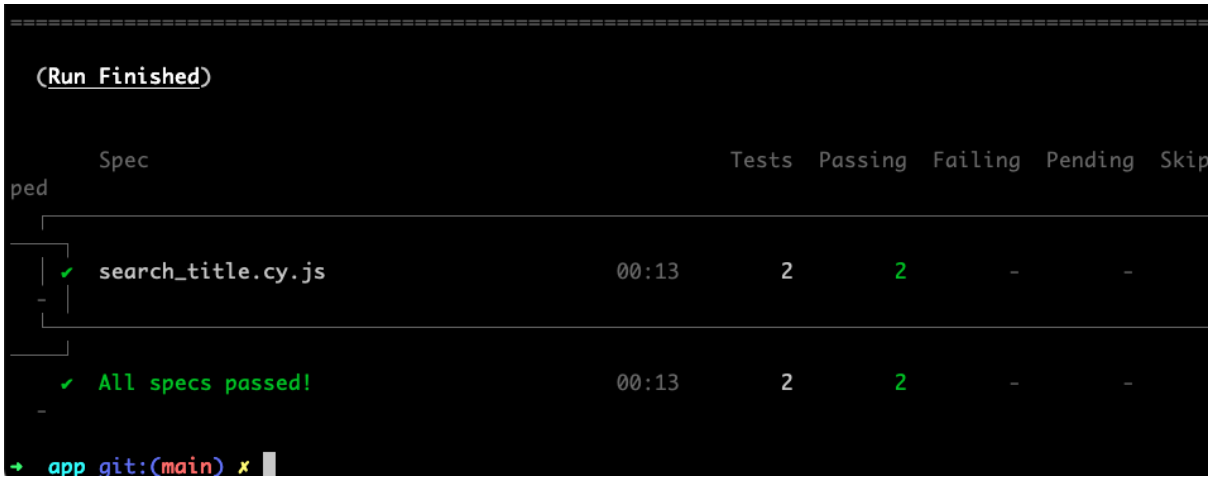
TERMINAL

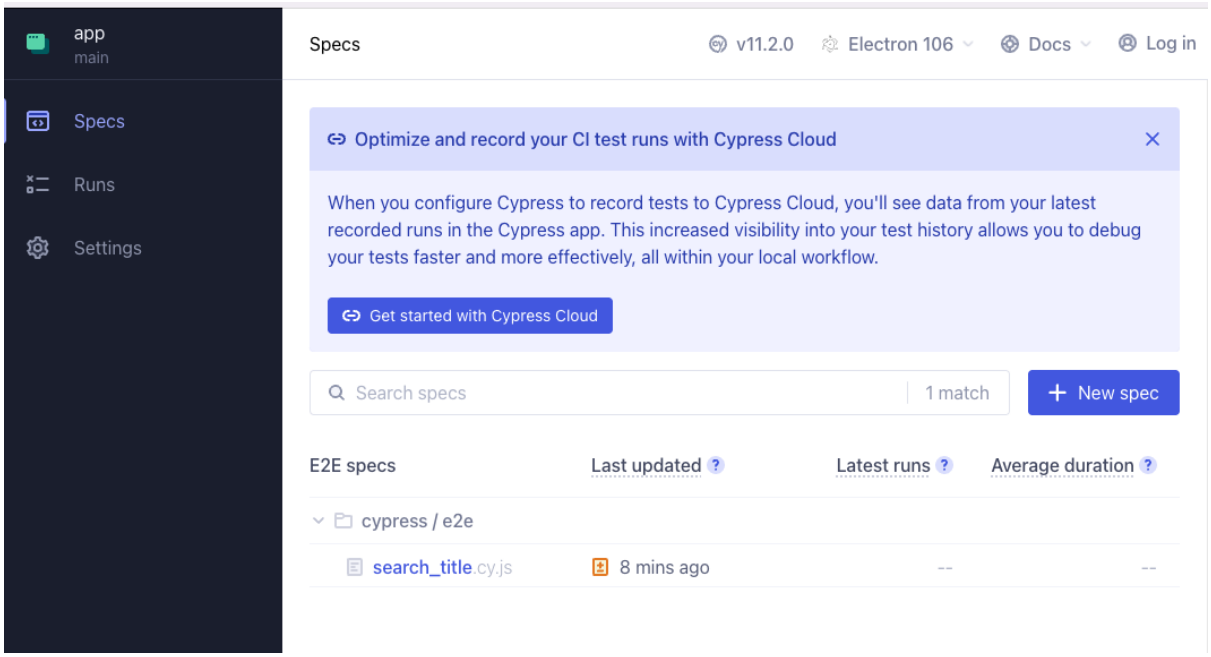
```
→  js git:(main) ✗ node callback.js
hello!
hello delayed...
→  js git:(main) ✗
```

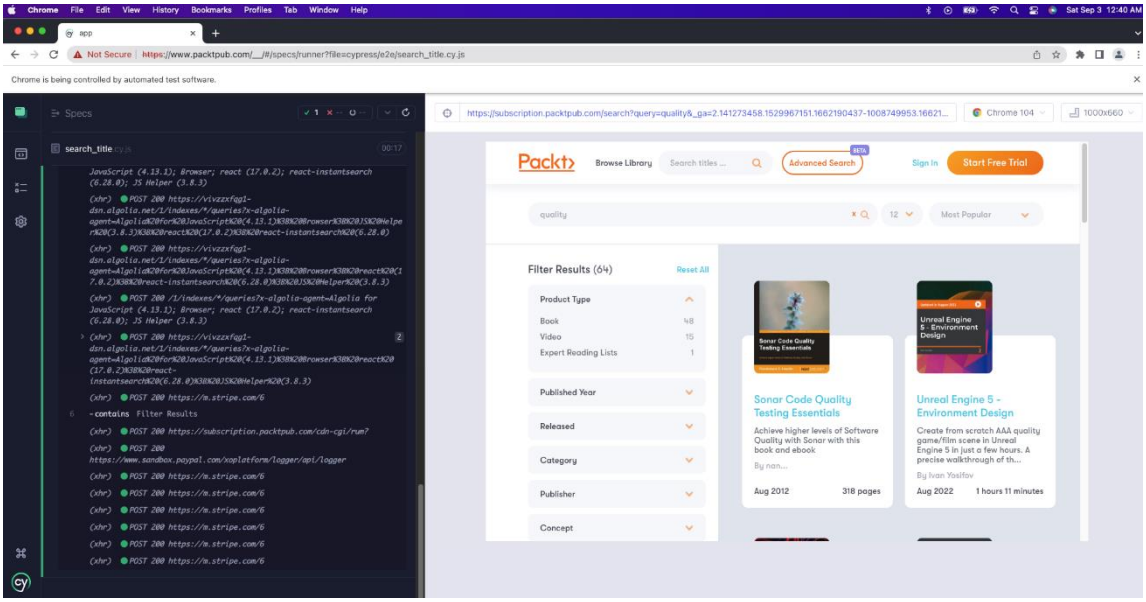

callback.js
src > ch5 > js > callback.js > ...
1 console.log('hello!');
2 setTimeout(message => console.log(message), 5000, 'hello delayed...');
TERMINAL
→ js git:(mani/update_readme) ✗ node callback.js
hello!
hello delayed...
→ js git:(mani/update_readme) ✗

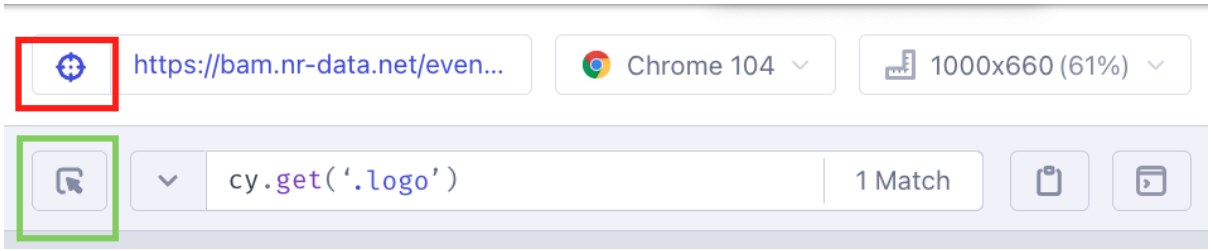

EXPLORER
search_title.cy.js U
B19046_TEST-AUTOMATION-ENG...
src > ch5 > app > cypress > e2e > search_title.cy.js
1
src
ch4
ch5 / app
cypress
downloads
e2e
search_title.cy.js U
fixtures

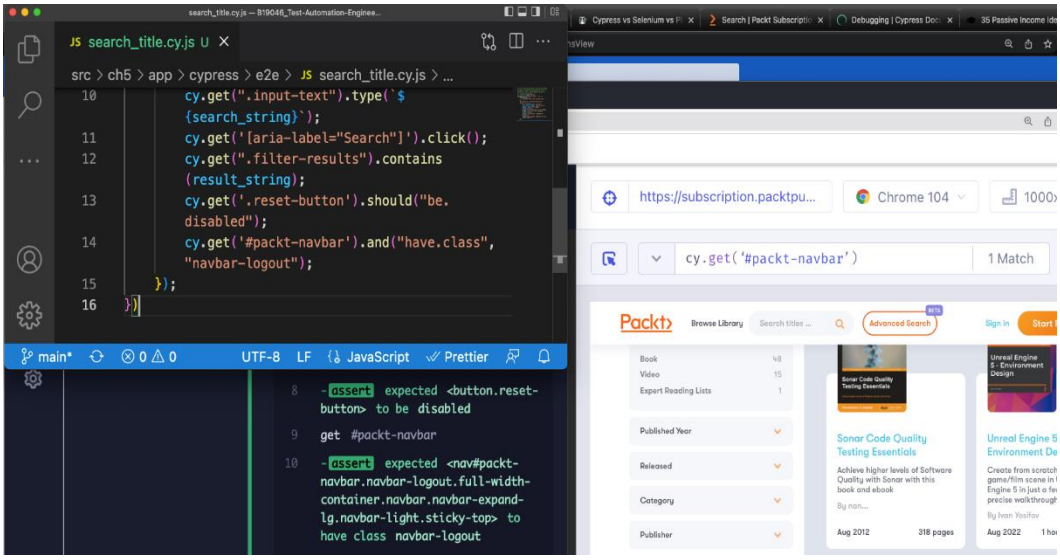

app git:(main) ✗ npx cypress run -s cypress/e2e/search_title.cy.js
(Run Starting)
Cypress: 11.2.0
Browser: Electron 106 (headless)
Node Version: v18.12.1 (/usr/local/bin/node)
Specs: 1 found (search_title.cy.js)
Searched: cypress/e2e/search_title.cy.js
Running: search_title.cy.js (1 of 1)
Vist packt home page,
✓ search for a title and and click submit (11003ms)
✓ by intercepting the recent items GET call (1802ms)
2 passing (14s)

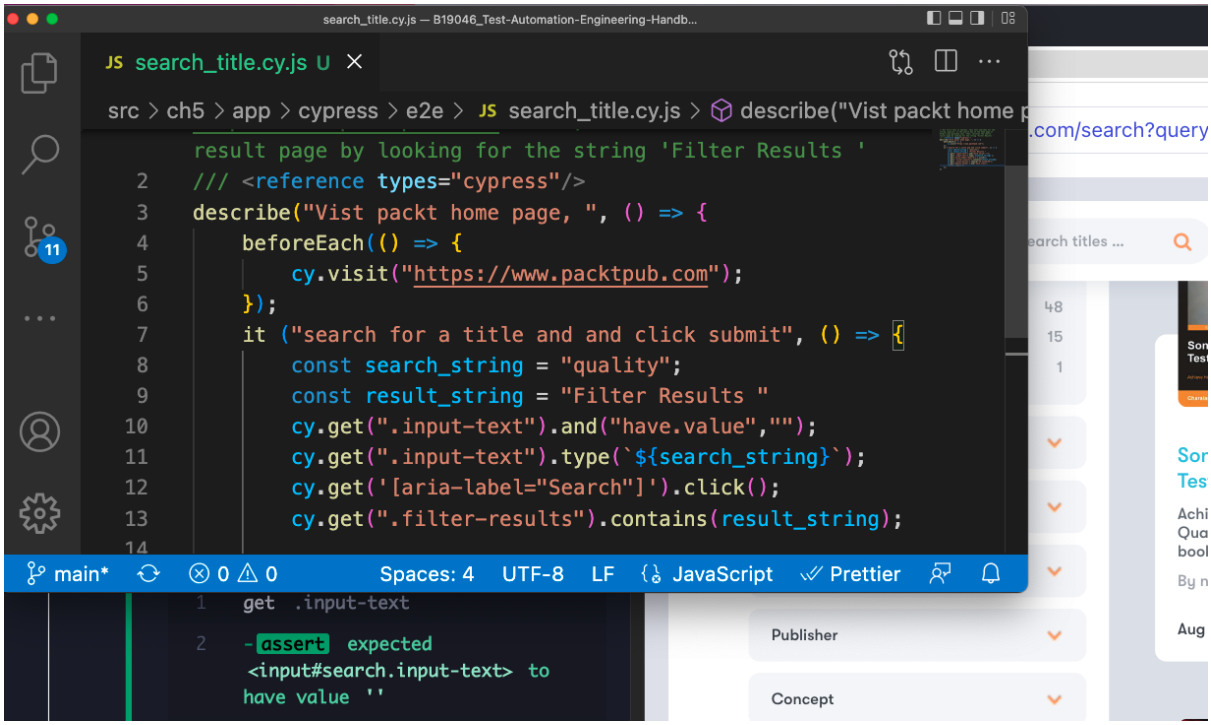

(Run Finished)
Spec Tests Passing Failing Pending Skipped
✓ search_title.cy.js 00:13 2 2 - -
✓ All specs passed! 00:13 2 2 - -
app git:(main) ✗


app
main
Specs
Runs
Settings
Specs
v11.2.0
Electron 106
Docs
Log in
Optimize and record your CI test runs with Cypress Cloud
When you configure Cypress to record tests to Cypress Cloud, you'll see data from your latest recorded runs in the Cypress app. This increased visibility into your test history allows you to debug your tests faster and more effectively, all within your local workflow.
Get started with Cypress Cloud
Search specs
1 match
New spec
E2E specs
Last updated
Latest runs
Average duration
cypress / e2e
search_title.cy.js
8 mins ago

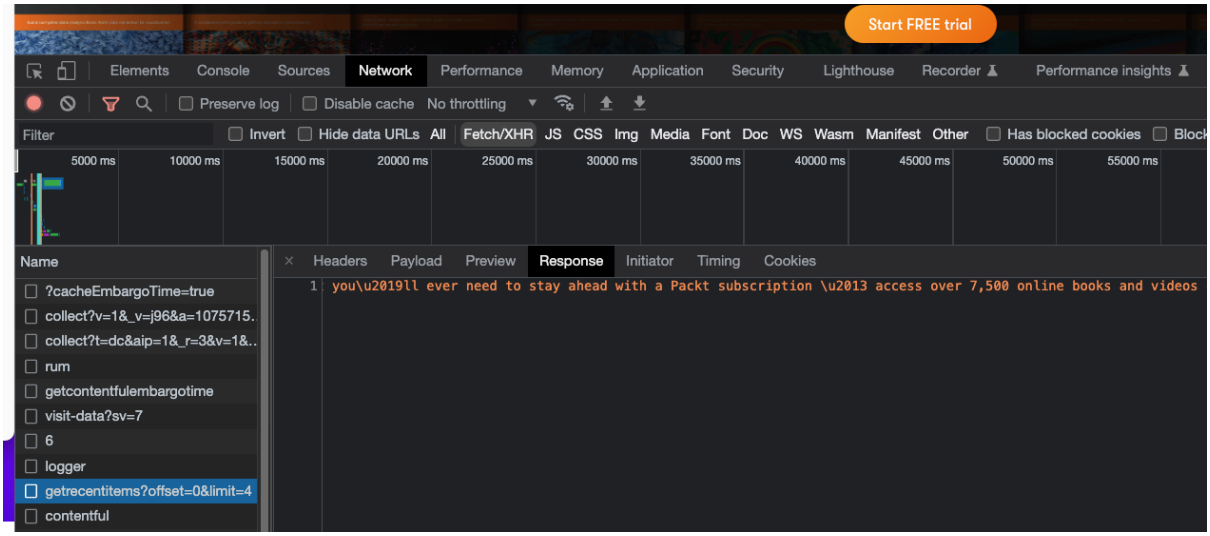

Specs
search_title.cy.js
Packt
Browse Library
Advanced Search
Start Free Trial
Filter Results (64)
Product Type
Published Year
Released
Category
Publisher
Concept
Sonar Code Quality Testing Essentials
Unreal Engine 5 - Environment Design

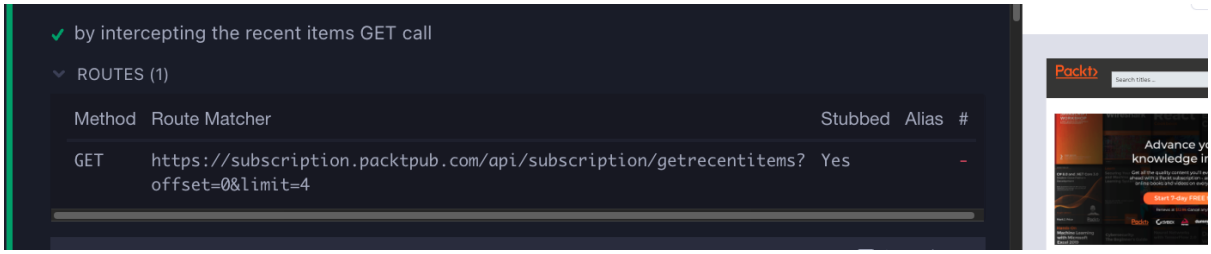

https://bam.nr-data.net/even...
Chrome 104
1000x660 (61%)
cy.get('.logo')
1 Match

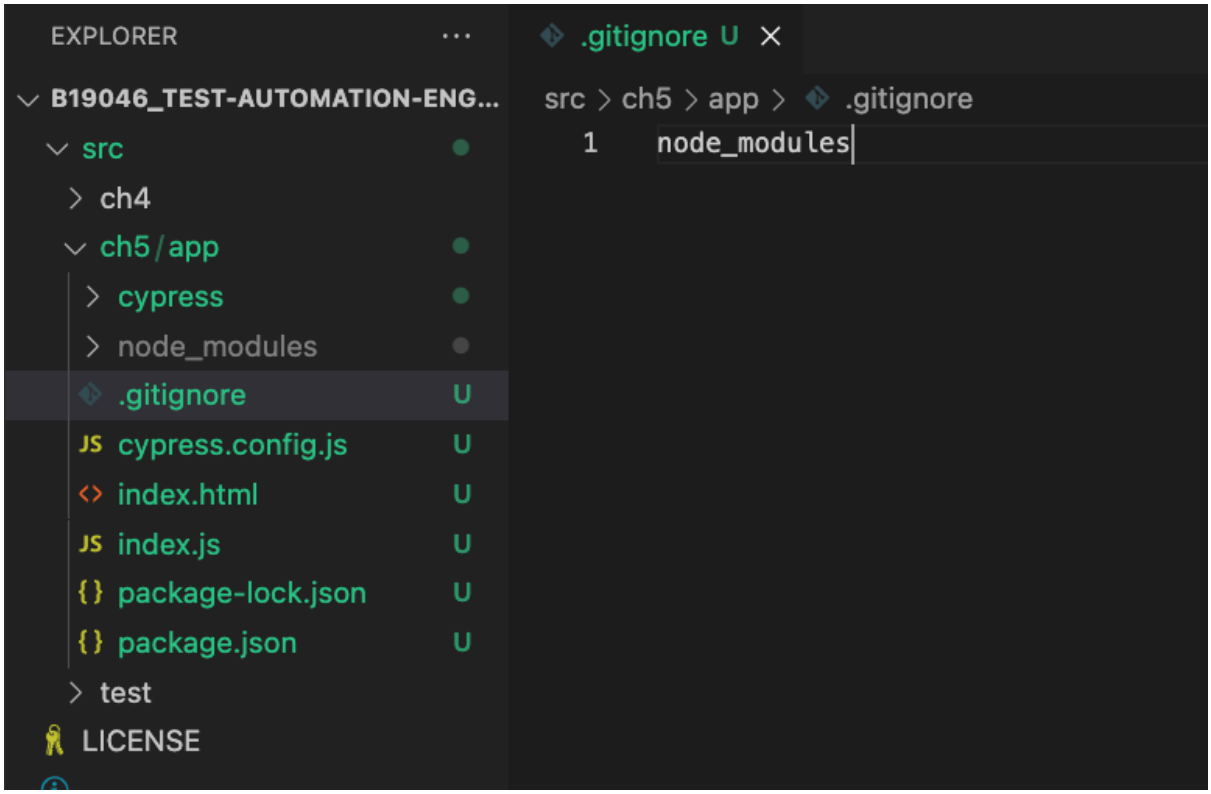





```
};
cy.intercept(
  "GET",
  "https://subscription.packtpub.com/api/subscription/getrecentitems?offset=0&limit=4",
  staticResponse
);
```

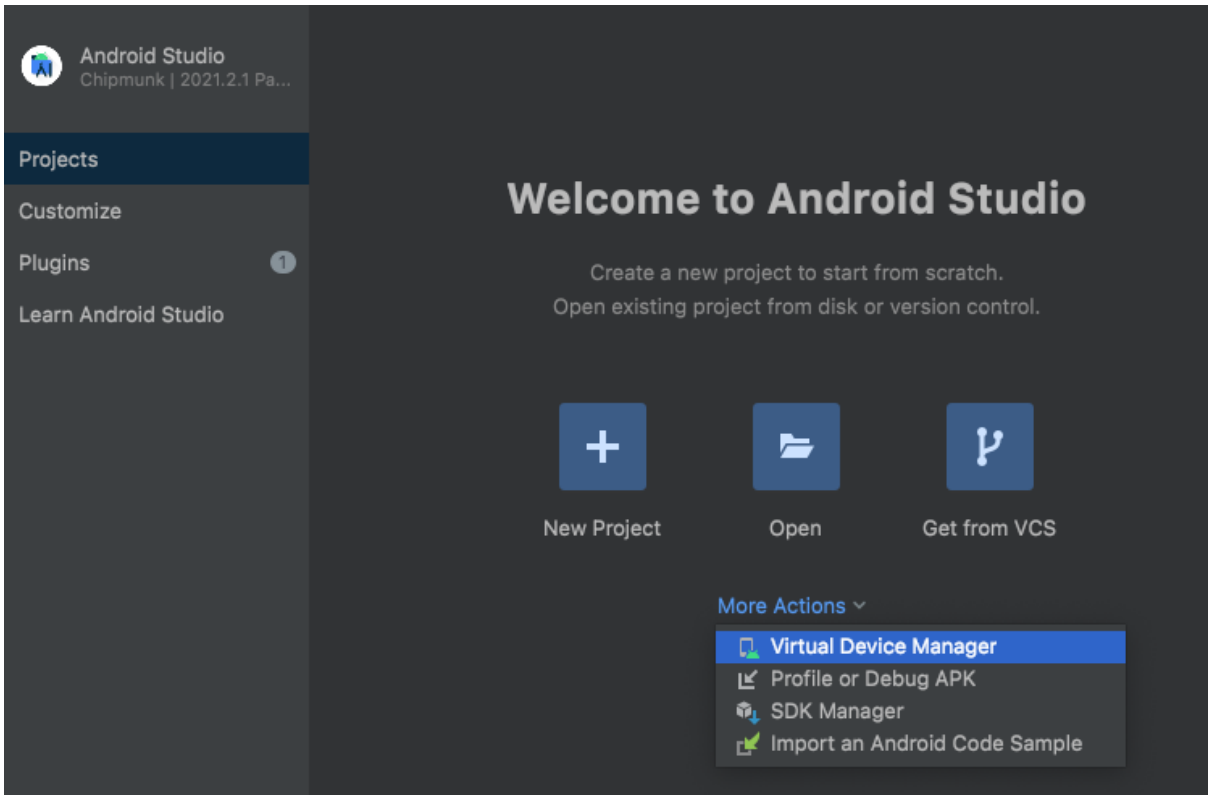

Start FREE trial
Elements
Console
Sources
Network
Performance
Memory
Application
Security
Lighthouse
Recorder
Performance insights
Preserve log
Disable cache
No throttling
Filter
Invert
Hide data URLs
All
Fetch/XHR
JS
CSS
Img
Media
Font
Doc
WS
Wasm
Manifest
Other
Has blocked cookies
5000 ms
10000 ms
15000 ms
20000 ms
25000 ms
30000 ms
35000 ms
40000 ms
45000 ms
50000 ms
55000 ms
Name
?cacheEmbargoTime=true
collect?v=1&_v=j96&a=1075715.
collect?t=dc&aip=1&_r=3&v=1&..
rum
getcontentfulembargotime
visit-data?sv=7
6
logger
getrecentitems?offset=0&limit=4
contentful
Headers
Payload
Preview
Response
Initiator
Timing
Cookies
1 you\u2019ll ever need to stay ahead with a Packt subscription \u2013 access over 7,500 online books and videos

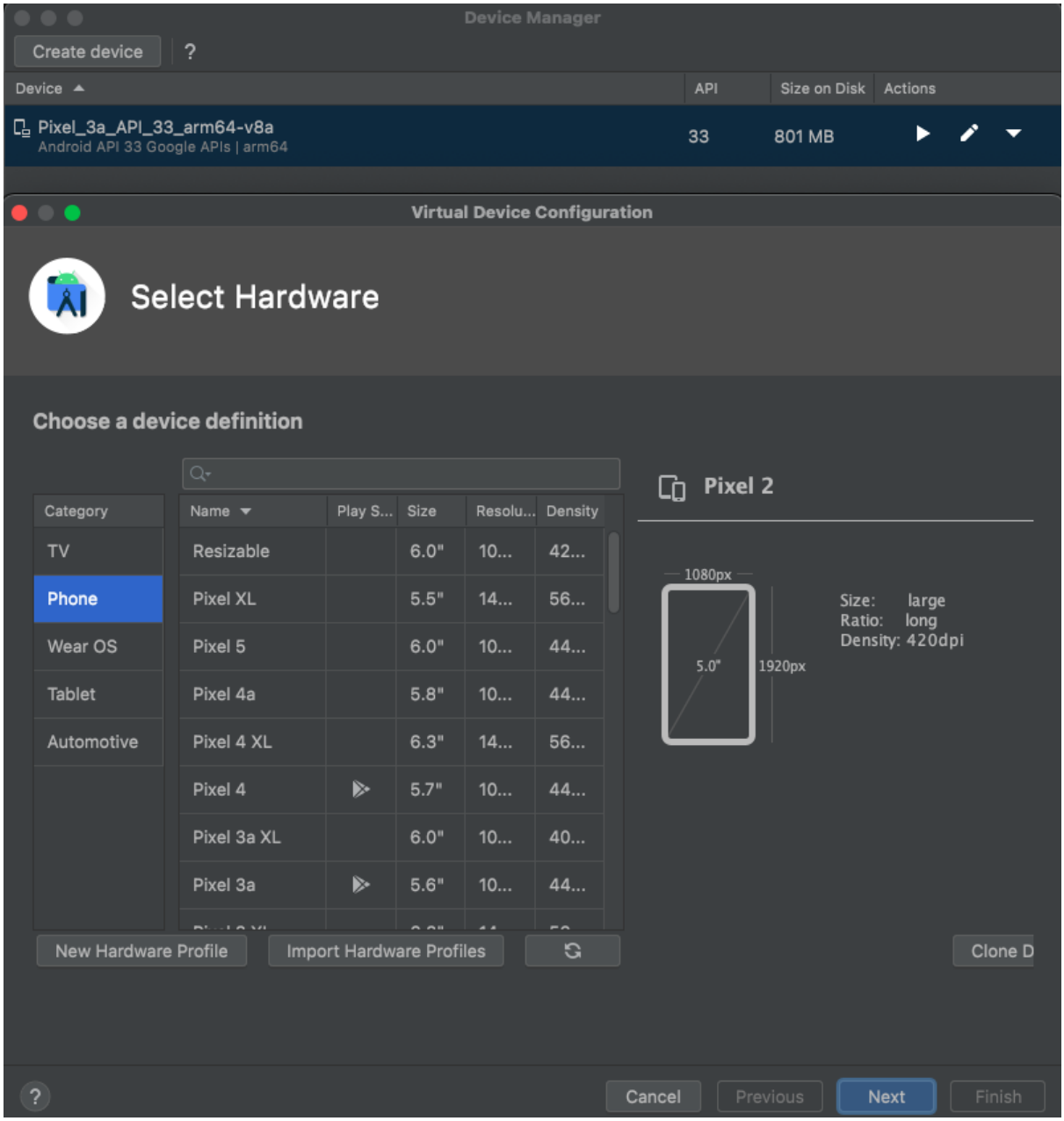

by intercepting the recent items GET call
ROUTES (1)
Method
Route Matcher
Stubbed
Alias
#
GET
https://subscription.packtpub.com/api/subscription/getrecentitems?offset=0&limit=4
Yes
-
Packt

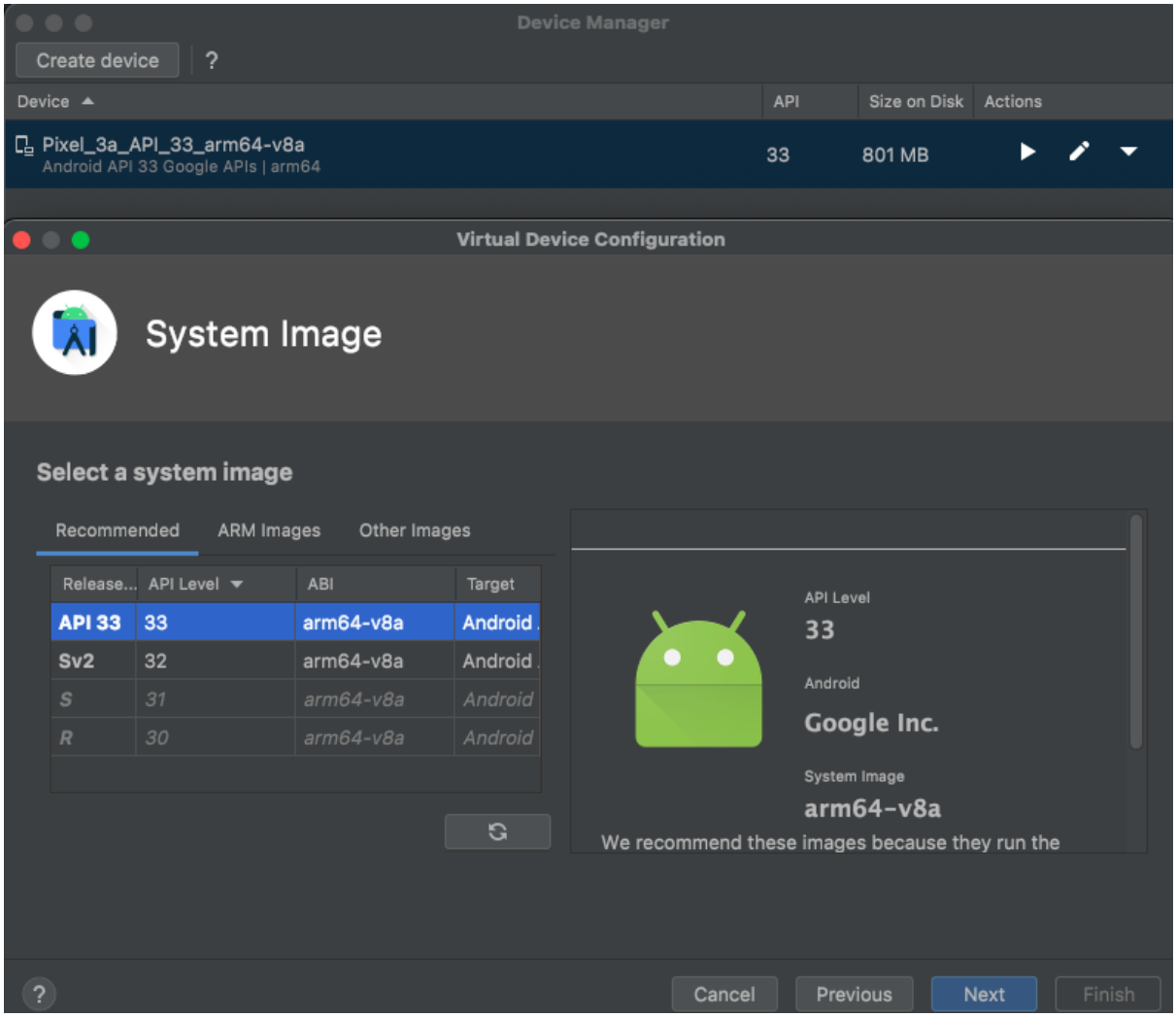

EXPLORER
B19046_TEST-AUTOMATION-ENG...
src
ch4
ch5 / app
cypress
node_modules
.gitignore
U
cypress.config.js
U
index.html
U
index.js
U
package-lock.json
U
package.json
U
test
LICENSE
.gitignore U
src > ch5 > app > .gitignore
1 node_modules

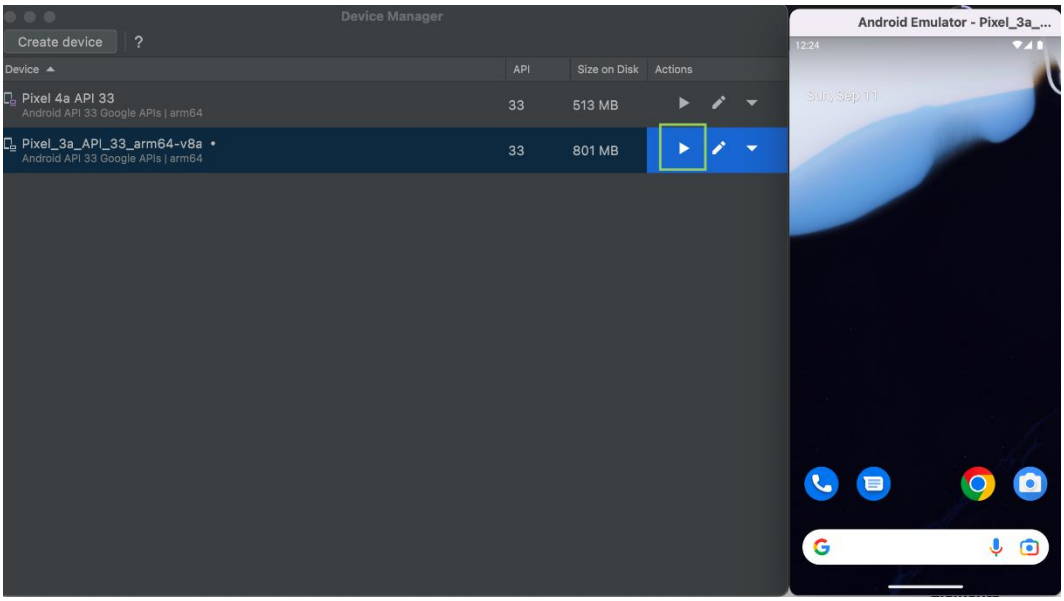
Chapter 6: Test Automation for Mobile

```
➜  ch6 git:(main) ✗ appium driver install xcuitest
info Appium Setting NODE_PATH to '/usr/local/lib/node_modules'
✔ Installing 'xcuitest' using NPM install spec 'appium-xcuitest-driver'
ℹ Driver xcuitest@4.11.1 successfully installed
- automationName: XCUITest
- platformNames: ["iOS","tvOS"]
➜  ch6 git:(main) ✗ appium driver install uiautomator2
info Appium Setting NODE_PATH to '/usr/local/lib/node_modules'
✔ Installing 'uiautomator2' using NPM install spec 'appium-uiautomator2-driver'
ℹ Driver uiautomator2@2.6.0 successfully installed
- automationName: UiAutomator2
- platformNames: ["Android"]
➜  ch6 git:(main) ✗ appium driver list
info Appium Setting NODE_PATH to '/usr/local/lib/node_modules'
✔ Listing available drivers
- xcuitest@4.11.1 [installed (NPM)]
- uiautomator2@2.6.0 [installed (NPM)]
- youiengine [not installed]
- windows [not installed]
- mac [not installed]
- mac2 [not installed]
- espresso [not installed]
- tizen [not installed]
- flutter [not installed]
- safari [not installed]
- gecko [not installed]
➜  ch6 git:(main) ✗
```




Device Manager
Create device
?
Device
API
Size on Disk
Actions
Pixel_3a_API_33_arm64-v8a
Android API 33 Google APIs | arm64
33
801 MB
Virtual Device Configuration
Select Hardware
Choose a device definition
Category
Name
Play S...
Size
Resolu...
Density
TV
Phone
Wear OS
Tablet
Automotive
Resizable
6.0"
10...
42...
Pixel XL
5.5"
14...
56...
Pixel 5
6.0"
10...
44...
Pixel 4a
5.8"
10...
44...
Pixel 4 XL
6.3"
14...
56...
Pixel 4
5.7"
10...
44...
Pixel 3a XL
6.0"
10...
40...
Pixel 3a
5.6"
10...
44...
Pixel 2
1080px
5.0"
1920px
Size: large
Ratio: long
Density: 420dpi
New Hardware Profile
Import Hardware Profiles
Clone D
?
Cancel
Previous
Next
Finish

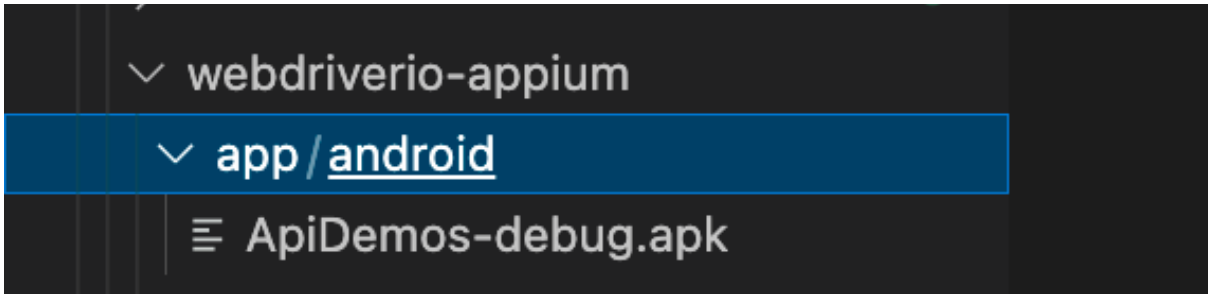

Device Manager
Create device
?
Device
API
Size on Disk
Actions
Pixel_3a_API_33_arm64-v8a
Android API 33 Google APIs | arm64
33
801 MB
Virtual Device Configuration
System Image
Select a system image
Recommended
ARM Images
Other Images
Release...
API Level
ABI
Target
API 33
33
arm64-v8a
Android
Sv2
32
arm64-v8a
Android
S
31
arm64-v8a
Android
R
30
arm64-v8a
Android
API Level
33
Android
Google Inc.
System Image
arm64-v8a
We recommend these images because they run the
Cancel
Previous
Next
Finish


Device Manager
Create device
?
Device
API
Size on Disk
Actions
Pixel 4a API 33
Android API 33 Google APIs | arm64
33
513 MB
Pixel_3a_API_33_arm64-v8a
Android API 33 Google APIs | arm64
33
801 MB
Android Emulator - Pixel_3a_...
12:24
Sun, Sep 11

```
➜  webdriverio-appium git:(main) ✗ npx wdio config

=========================
WDIO Configuration Helper
=========================

? Where is your automation backend located? On my local machine
? Which framework do you want to use? mocha
? Do you want to use a compiler? No!
? Where are your test specs located? ./test/specs/**/*.js
? Do you want WebdriverIO to autogenerate some test files? No
? Which reporter do you want to use? spec
? Do you want to add a plugin to your test setup?
? Do you want to add a service to your test setup? appium
? What is the base url? http://localhost
? Do you want me to run `npm install` Yes
```

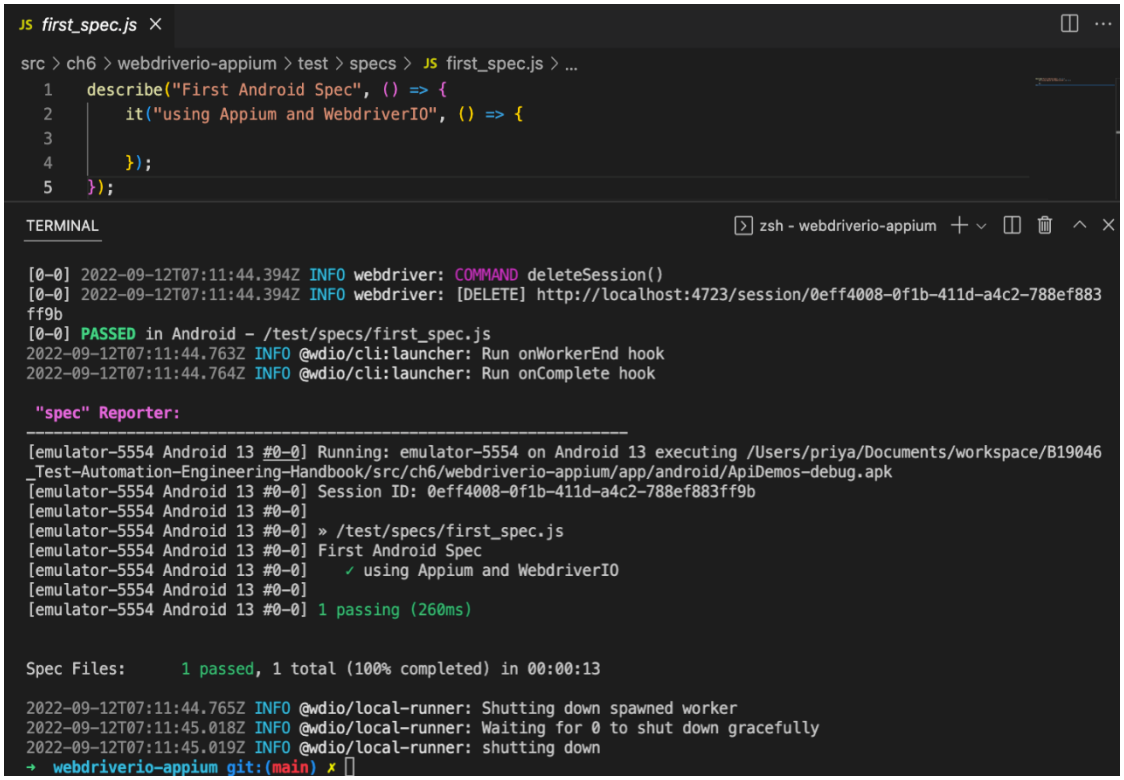


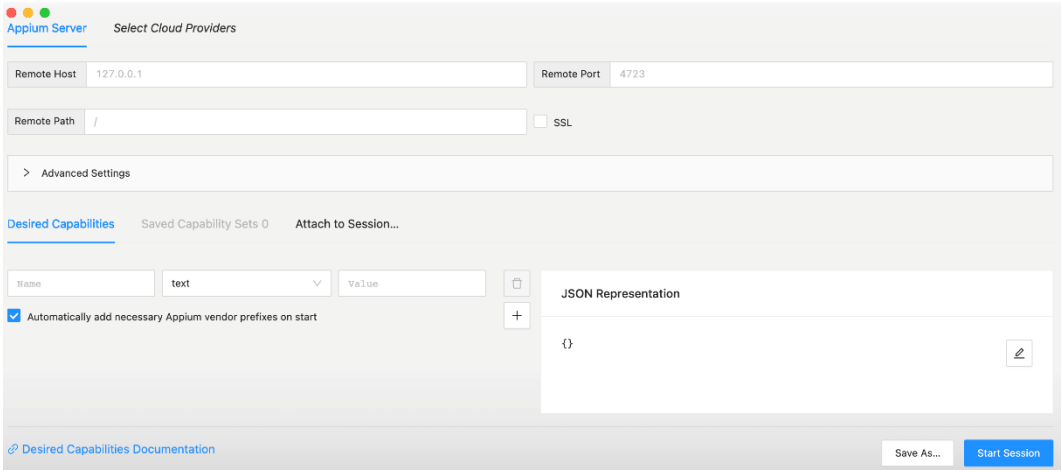
wdio.conf.js

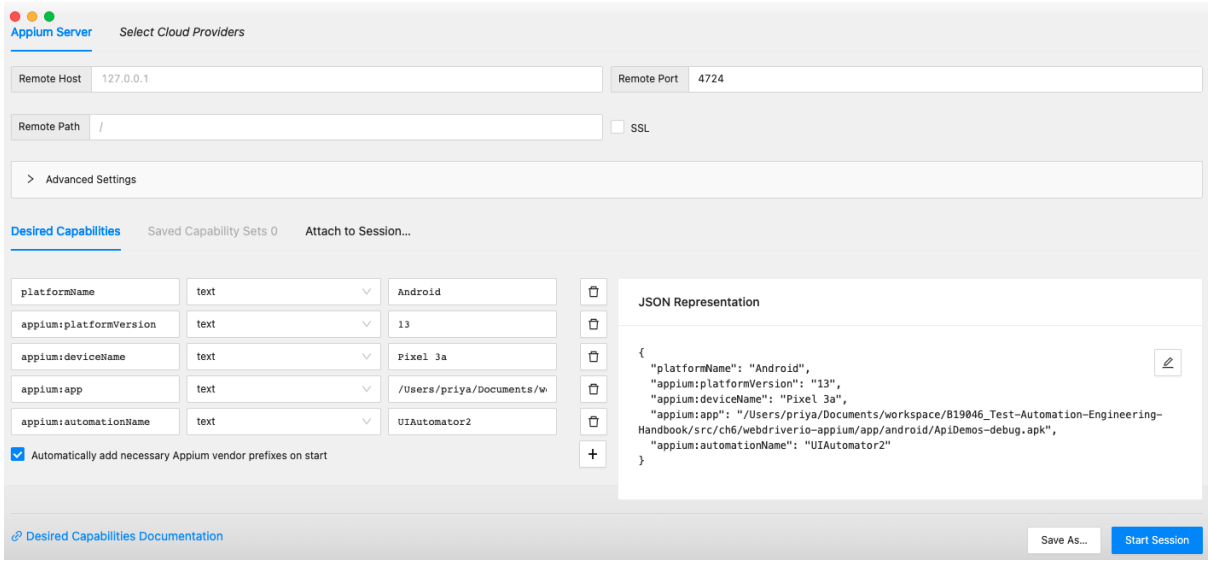
src > ch6 > webdriverio-appium > wdio.conf.js > config > capabilities

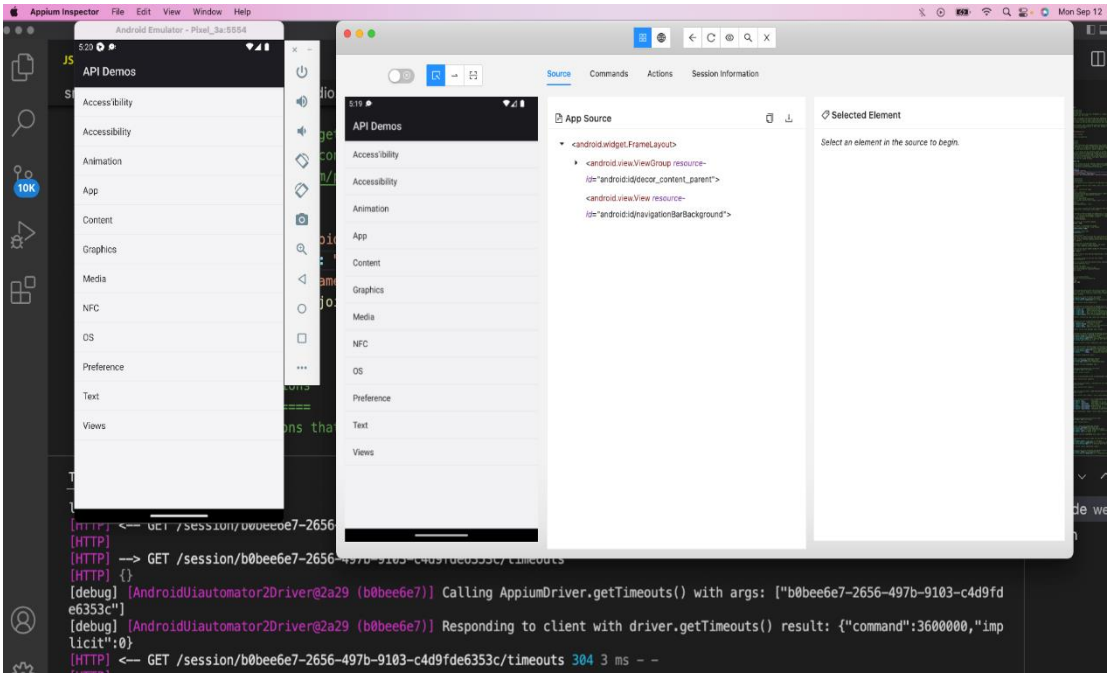
```
50      //
51      // If you have trouble getting all important capabilities together, check out the
52      // Sauce Labs platform configurator - a great tool to configure your capabilities:
53      // https://saucelabs.com/platform/platform-configurator
54      //
55      capabilities: [{
56          platformName: "Android",
57          "appium:platformVersion": "13.0",
58          "appium:deviceName": "Pixel 4a",
59          "appium:automationName": "UIAutomator2",
60          "appium:app": path.join(process.cwd(),"/app/android/ApiDemos-debug.apk")
61      }],
```




first_spec.js
src > ch6 > webdriverio-appium > test > specs > first_spec.js > ...
1 describe("First Android Spec", () => {
2 it("using Appium and WebdriverIO", () => {
3
4 });
5 });
TERMINAL
zsh - webdriverio-appium
[0-0] 2022-09-12T07:11:44.394Z INFO webdriver: COMMAND deleteSession()
[0-0] 2022-09-12T07:11:44.394Z INFO webdriver: [DELETE] http://localhost:4723/session/0eff4008-0f1b-411d-a4c2-788ef883ff9b
[0-0] PASSED in Android - /test/specs/first_spec.js
2022-09-12T07:11:44.763Z INFO @wdio/cli:launcher: Run onWorkerEnd hook
2022-09-12T07:11:44.764Z INFO @wdio/cli:launcher: Run onComplete hook
"spec" Reporter:
[emulator-5554 Android 13 #0-0] Running: emulator-5554 on Android 13 executing /Users/priya/Documents/workspace/B19046_Test-Automation-Engineering-Handbook/src/ch6/webdriverio-appium/app/android/ApiDemos-debug.apk
[emulator-5554 Android 13 #0-0] Session ID: 0eff4008-0f1b-411d-a4c2-788ef883ff9b
[emulator-5554 Android 13 #0-0]
[emulator-5554 Android 13 #0-0] » /test/specs/first_spec.js
[emulator-5554 Android 13 #0-0] First Android Spec
[emulator-5554 Android 13 #0-0] ✓ using Appium and WebdriverIO
[emulator-5554 Android 13 #0-0]
[emulator-5554 Android 13 #0-0] 1 passing (260ms)
Spec Files: 1 passed, 1 total (100% completed) in 00:00:13
2022-09-12T07:11:44.765Z INFO @wdio/local-runner: Shutting down spawned worker
2022-09-12T07:11:45.018Z INFO @wdio/local-runner: Waiting for 0 to shut down gracefully
2022-09-12T07:11:45.019Z INFO @wdio/local-runner: shutting down
webdriverio-appium git:(main) ✗


Appium Server
Select Cloud Providers
Remote Host
127.0.0.1
Remote Port
4723
Remote Path
/
SSL
Advanced Settings
Desired Capabilities
Saved Capability Sets 0
Attach to Session...
Name
text
Value
Automatically add necessary Appium vendor prefixes on start
JSON Representation
{}
Desired Capabilities Documentation
Save As...
Start Session


Appium Server
Select Cloud Providers
Remote Host
127.0.0.1
Remote Port
4724
Remote Path
/
SSL
Advanced Settings
Desired Capabilities
Saved Capability Sets 0
Attach to Session...
platformName
text
Android
appium:platformVersion
text
13
appium:deviceName
text
Pixel 3a
appium:app
text
/Users/priya/Documents/w
appium:automationName
text
UIAutomator2
Automatically add necessary Appium vendor prefixes on start
JSON Representation
{
"platformName": "Android",
"appium:platformVersion": "13",
"appium:deviceName": "Pixel 3a",
"appium:app": "/Users/priya/Documents/workspace/B19046_Test-Automation-Engineering-Handbook/src/ch6/webdriverio-appium/app/android/ApiDemos-debug.apk",
"appium:automationName": "UIAutomator2"
}
Desired Capabilities Documentation
Save As...
Start Session


Appium Inspector
File
Edit
View
Window
Help
Mon Sep 12
Android Emulator - Pixel_3a:5554
API Demos
Accessibility
Animation
App
Content
Graphics
Media
NFC
OS
Preference
Text
Views
Source
Commands
Actions
Session Information
App Source
Selected Element
Select an element in the source to begin.
[HTTP] --> GET /session/b0bee6e7-2656-497b-9103-c4d9fde6353c/timeouts
[HTTP] {}
[debug] [AndroidUiautomator2Driver@2a29 (b0bee6e7)] Calling AppiumDriver.getTimeouts() with args: ["b0bee6e7-2656-497b-9103-c4d9fde6353c"]
[debug] [AndroidUiautomator2Driver@2a29 (b0bee6e7)] Responding to client with driver.getTimeouts() result: {"command":3600000,"implicit":0}
[HTTP] <-- GET /session/b0bee6e7-2656-497b-9103-c4d9fde6353c/timeouts 304 3 ms - -

JS async_await.js

src > ch6 > functions > JS async_await.js > ...

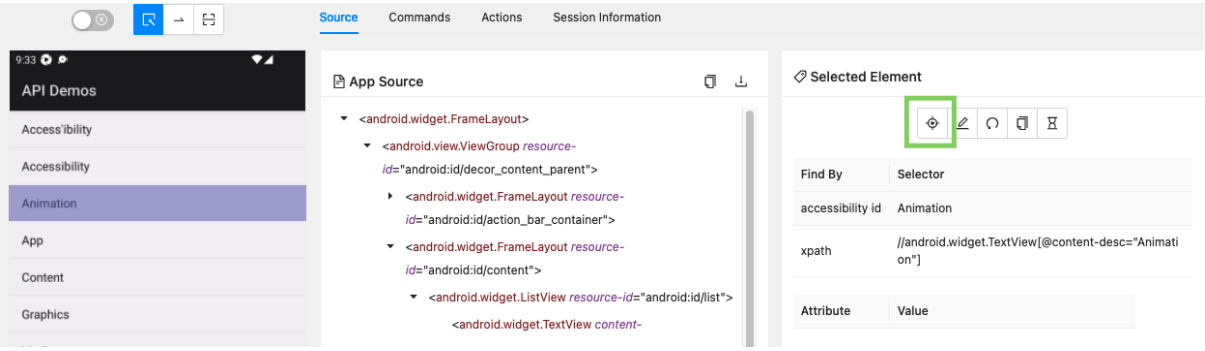
```
async function demo_async_await() {

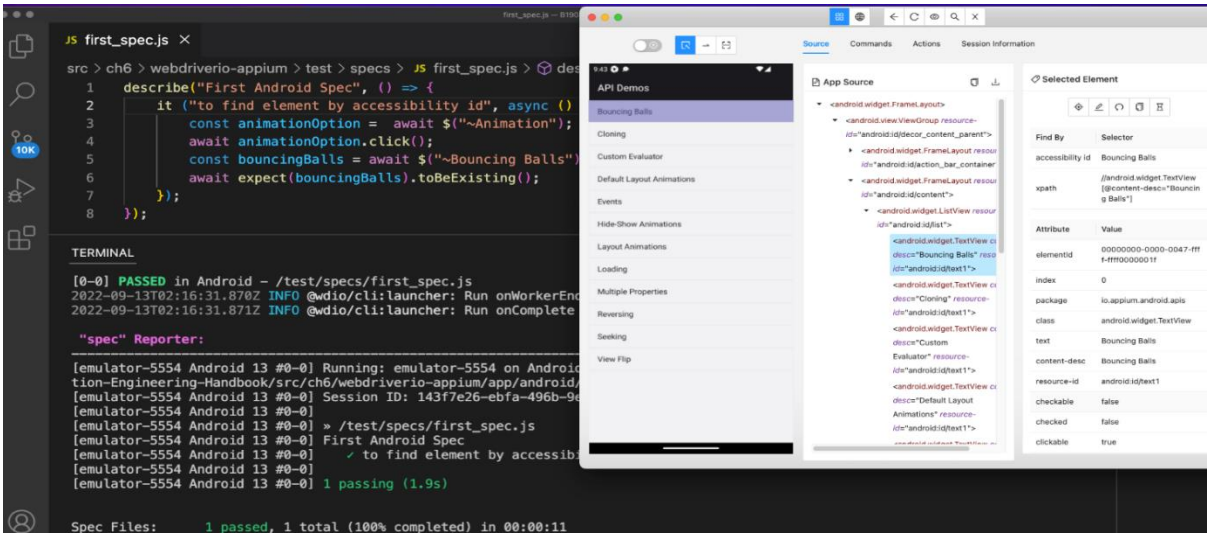
    let simple_promise = new Promise((resolve, reject) => {
      setTimeout(() => resolve("Promise Fulfilled!"), 5000)
    });
    // wait for the promise to be resolved
    let result = await simple_promise;
    console.log(result);
  }

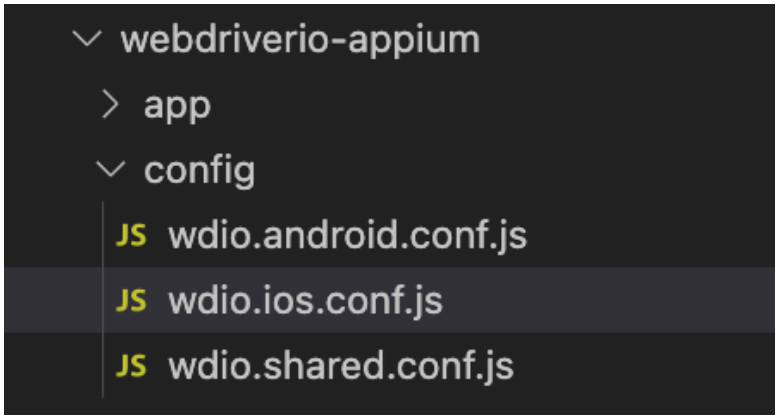
  demo_async_await();
```

TERMINAL

```
➜  functions git:(main) ✗ node async_await.js
Promise Fulfilled!
➜  functions git:(main) ✗
```







wdio.shared.conf.js | wdio.android.conf.js | wdio.ios.conf.js

src > ch6 > webdriverio-appium > config > wdio.android.conf.js > ...

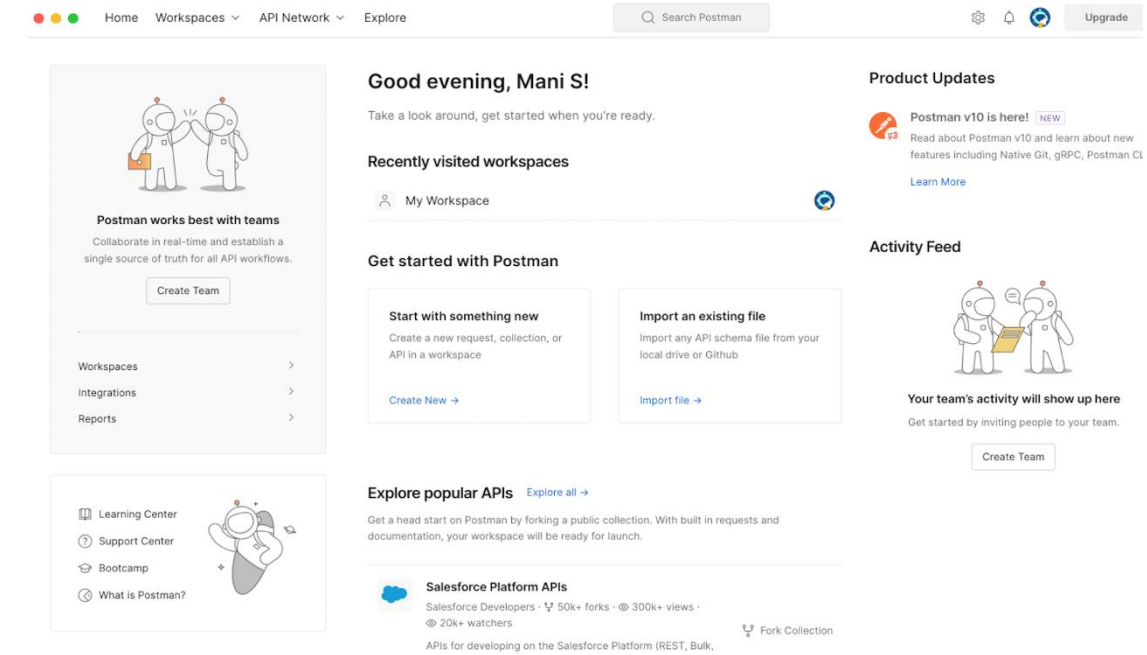
```
const { config } = require('./wdio.shared.conf')
const path = require('path');
config.port = 4723
config.specs = [
    '<<folder where the Android tests live>>'
]
config.capabilities = [
    {
        platformName: "Android",
        "appium:platformVersion": "13.0",
        "appium:deviceName": "Pixel 4a",
        "appium:automationName": "UIAutomator2",
        "appium:app": path.join(process.cwd(),"/app/android/ApiDemos-debug.apk")
    }
]
exports.config = config
```

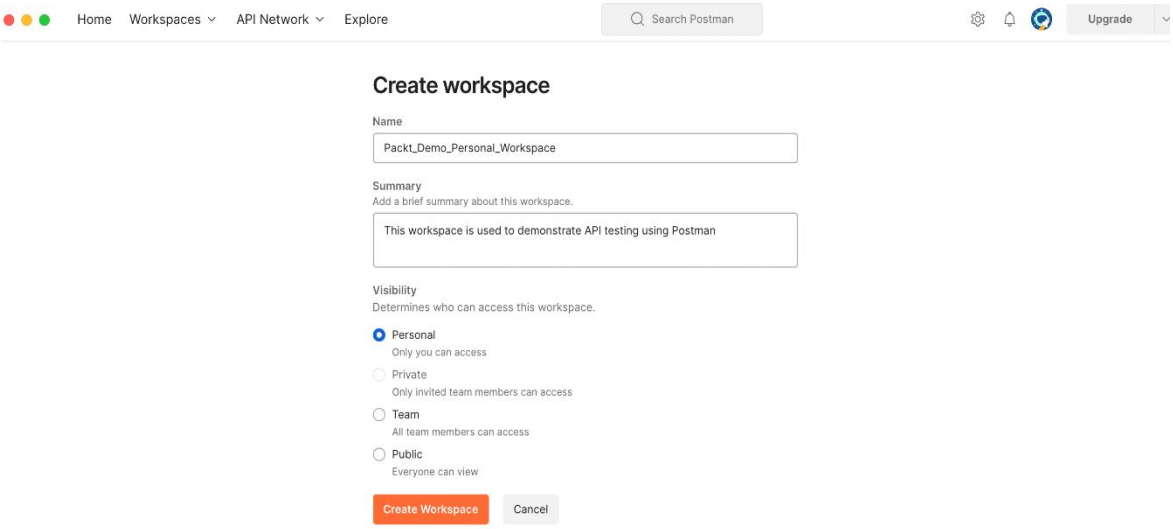
wdio.shared.conf.js | wdio.android.conf.js | wdio.ios.conf.js

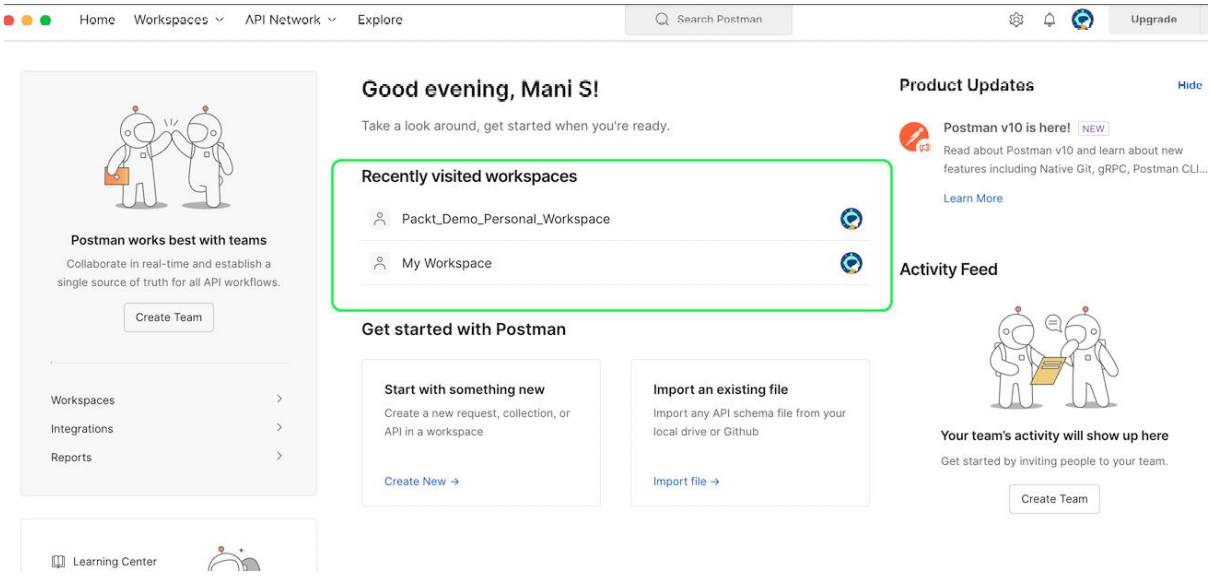
src > ch6 > webdriverio-appium > config > wdio.ios.conf.js > ...

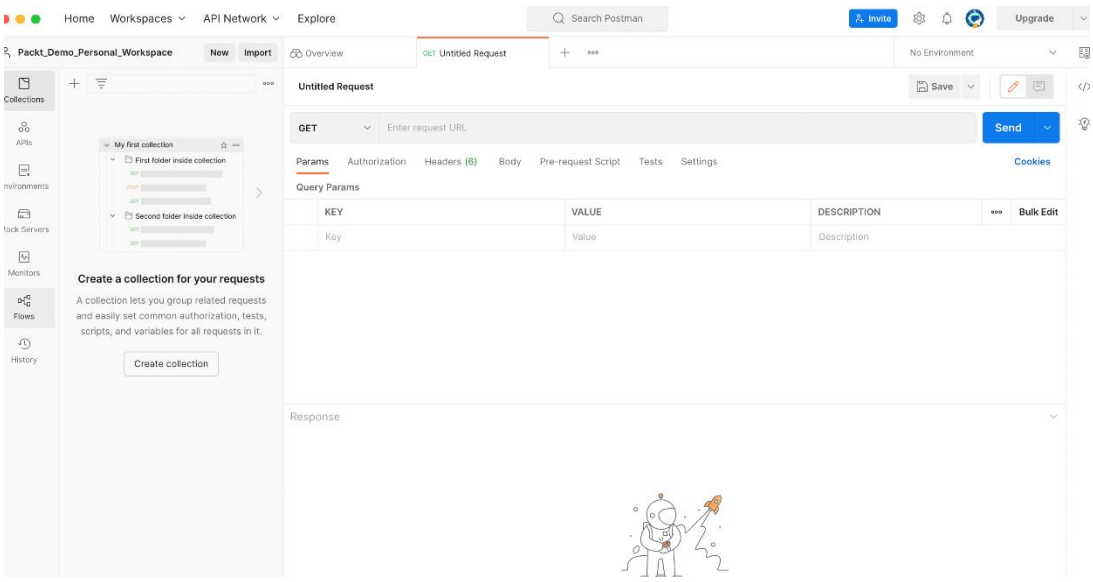
```
const { config } = require('./wdio.shared.conf')
const path = require('path');
config.port = 4723
config.specs = [
    '<<folder where the iOS tests live>>'
]
config.capabilities = [
    {
        platformName: "iOS",
        "appium:platformVersion": "15.0",
        "appium:deviceName": "iPhone 13",
        "appium:automationName": "XCUITest",
        "appium:app": path.join(process.cwd(),"/app/iOS/Test-iOS.app")
    }
]
exports.config = config
```

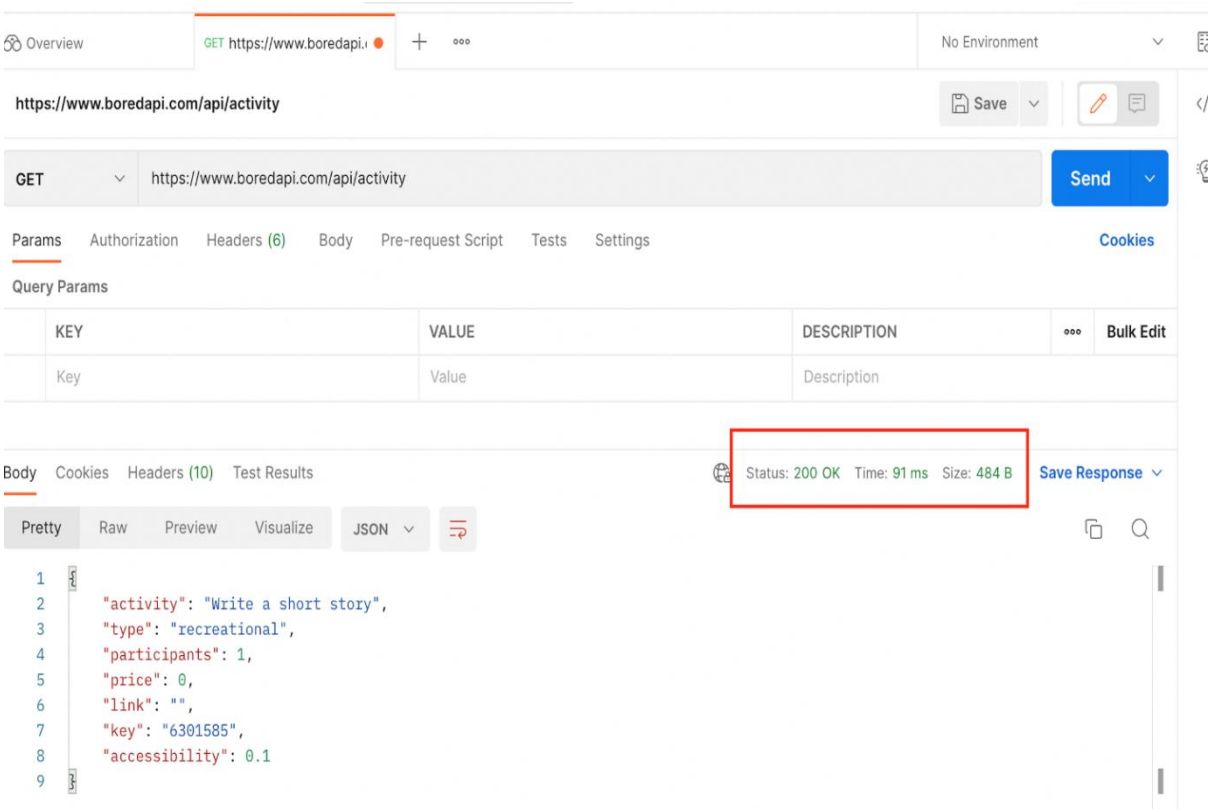
Chapter 7: Test Automation for API

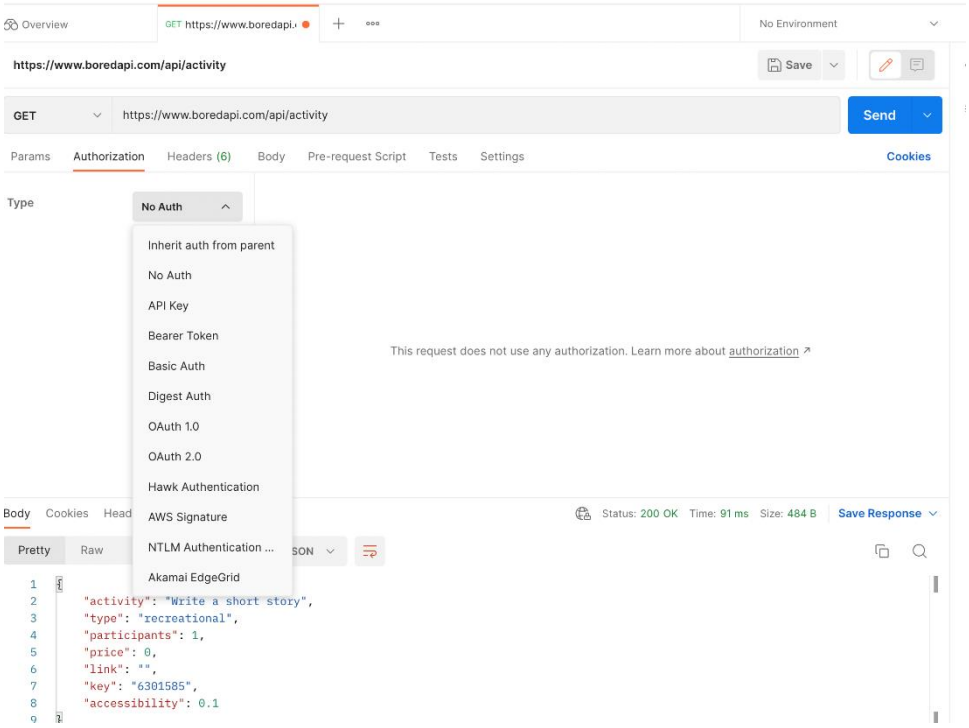


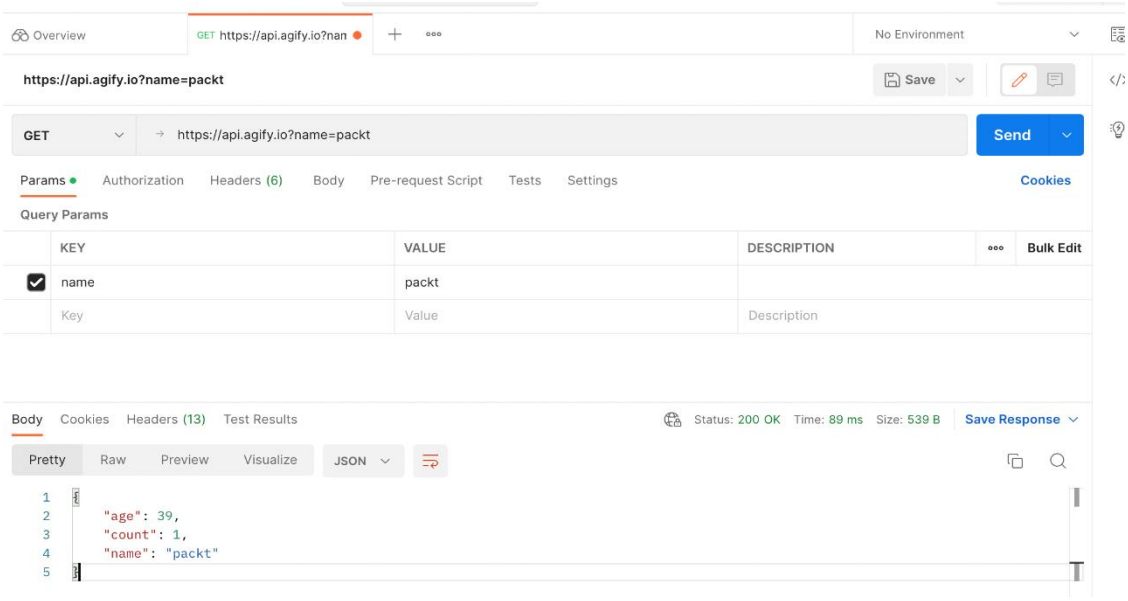


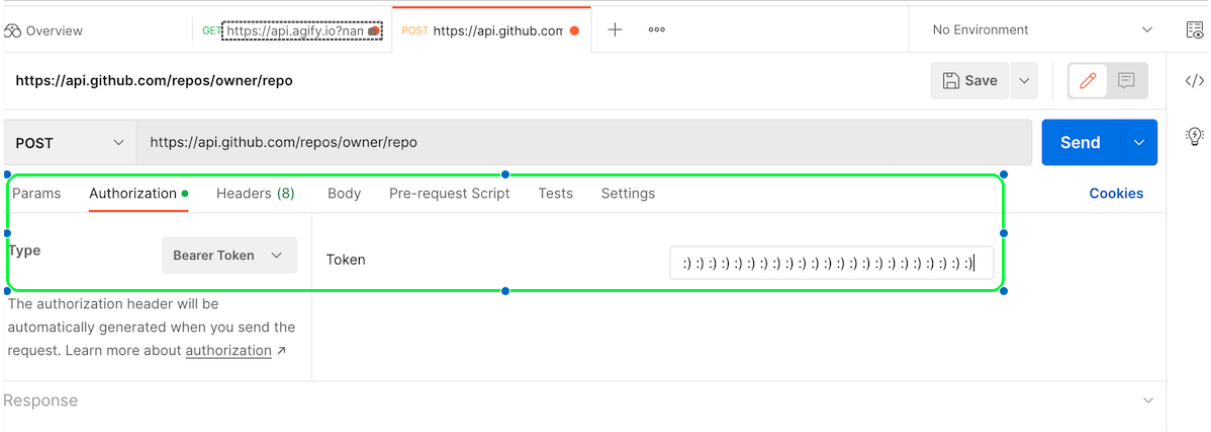

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Postman works best with teams
Collaborate in real-time and establish a single source of truth for all API workflows.
Create Team
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Integrations
Reports
Learning Center
Good evening, Mani S!
Take a look around, get started when you're ready.
Recently visited workspaces
Packt_Demo_Personal_Workspace
My Workspace
Get started with Postman
Start with something new
Create a new request, collection, or API in a workspace
Create New →
Import an existing file
Import any API schema file from your local drive or Github
Import file →
Product Updates
Hide
Postman v10 is here!
NEW
Read about Postman v10 and learn about new features including Native Git, gRPC, Postman CLI...
Learn More
Activity Feed
Your team's activity will show up here
Get started by inviting people to your team.
Create Team

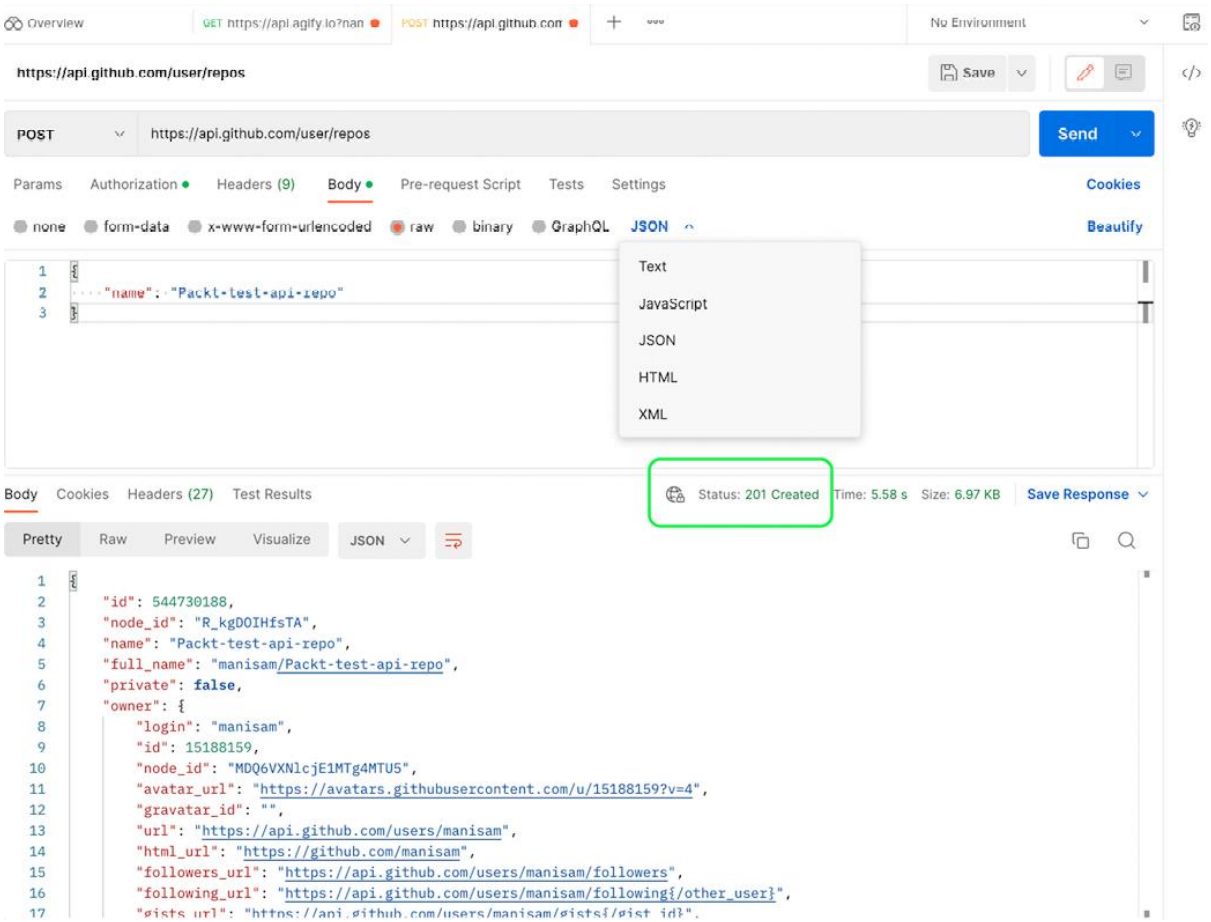

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GET Untitled Request
No Environment
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Flows
History
Untitled Request
Save
GET
Enter request URL
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Create a collection for your requests
A collection lets you group related requests and easily set common authorization, tests, scripts, and variables for all requests in it.
Create collection
Response

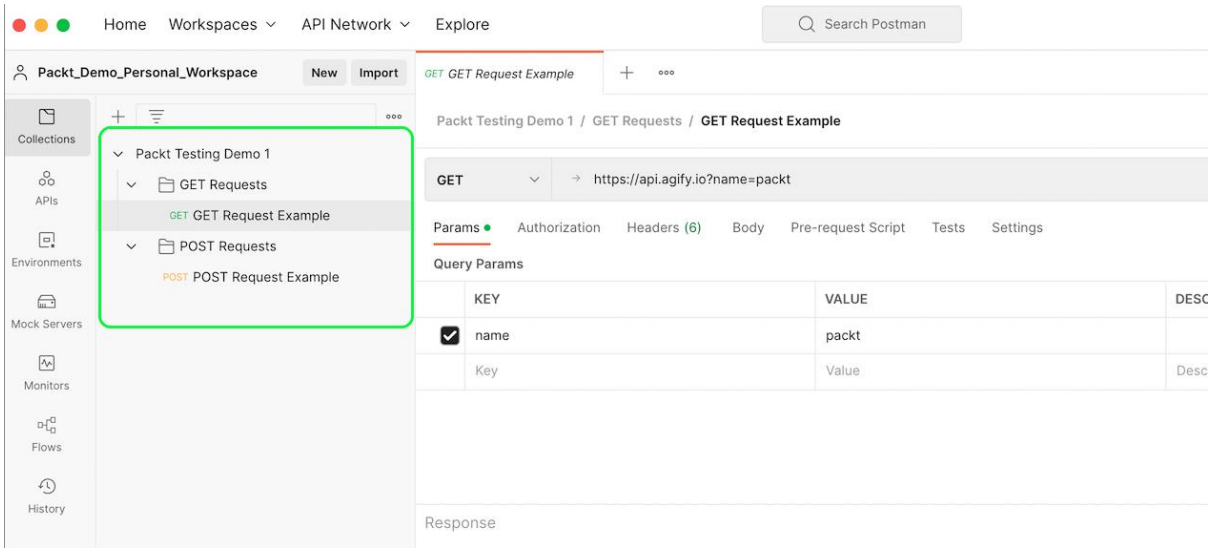

Overview
GET https://www.boredapi.
No Environment
https://www.boredapi.com/api/activity
Save
GET
https://www.boredapi.com/api/activity
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Body
Cookies
Headers (10)
Test Results
Status: 200 OK
Time: 91 ms
Size: 484 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"activity": "Write a short story",
"type": "recreational",
"participants": 1,
"price": 0,
"link": "",
"key": "6301585",
"accessibility": 0.1
}

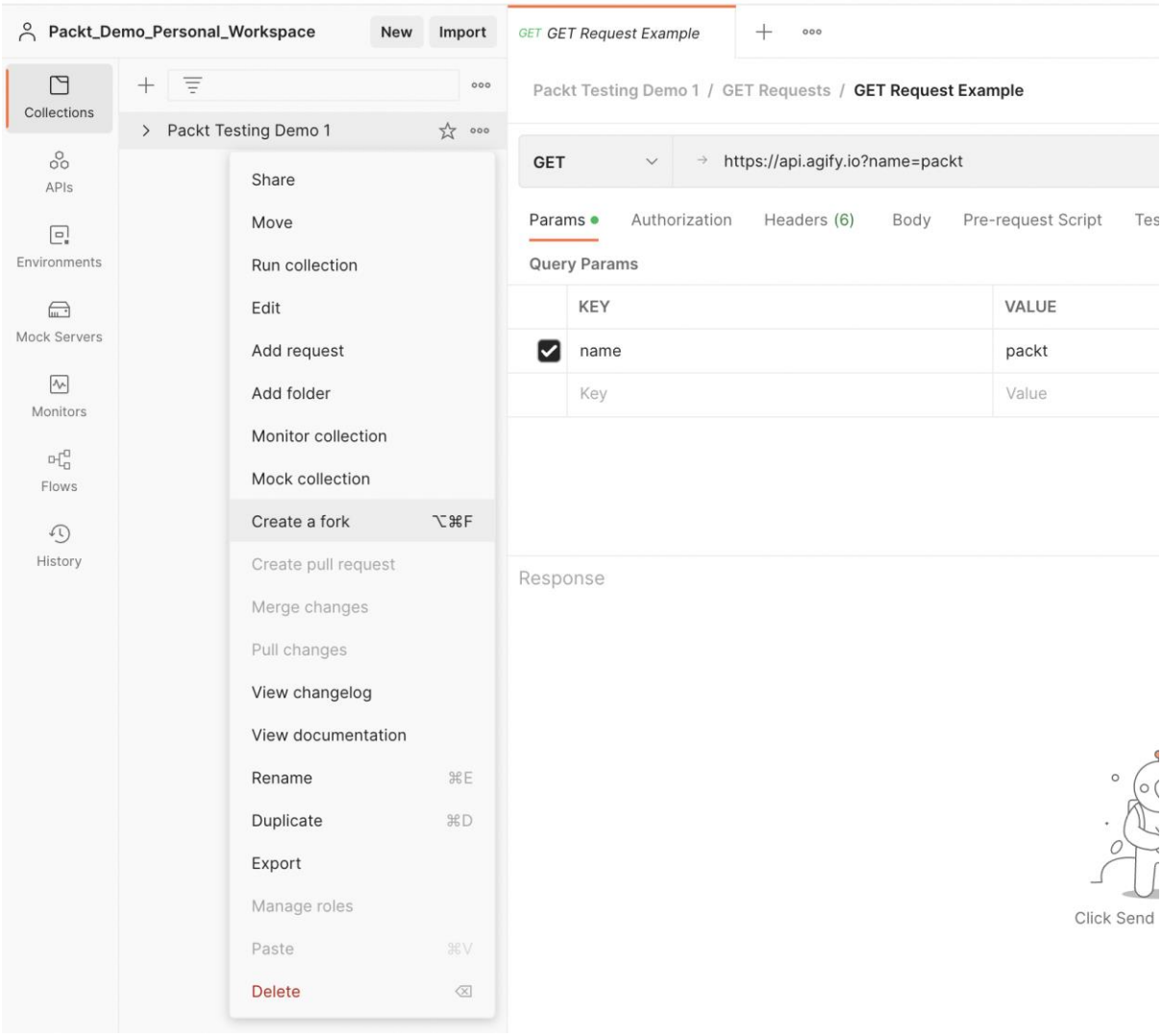

Overview
GET https://www.boredapi.
No Environment
https://www.boredapi.com/api/activity
Save
GET
https://www.boredapi.com/api/activity
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Type
No Auth
Inherit auth from parent
No Auth
API Key
Bearer Token
Basic Auth
Digest Auth
OAuth 1.0
OAuth 2.0
Hawk Authentication
AWS Signature
NTLM Authentication ...
Akamai EdgeGrid
This request does not use any authorization. Learn more about authorization
Body
Cookies
Status: 200 OK
Time: 91 ms
Size: 484 B
Save Response
Pretty
Raw
{
"activity": "Write a short story",
"type": "recreational",
"participants": 1,
"price": 0,
"link": "",
"key": "6301585",
"accessibility": 0.1
}

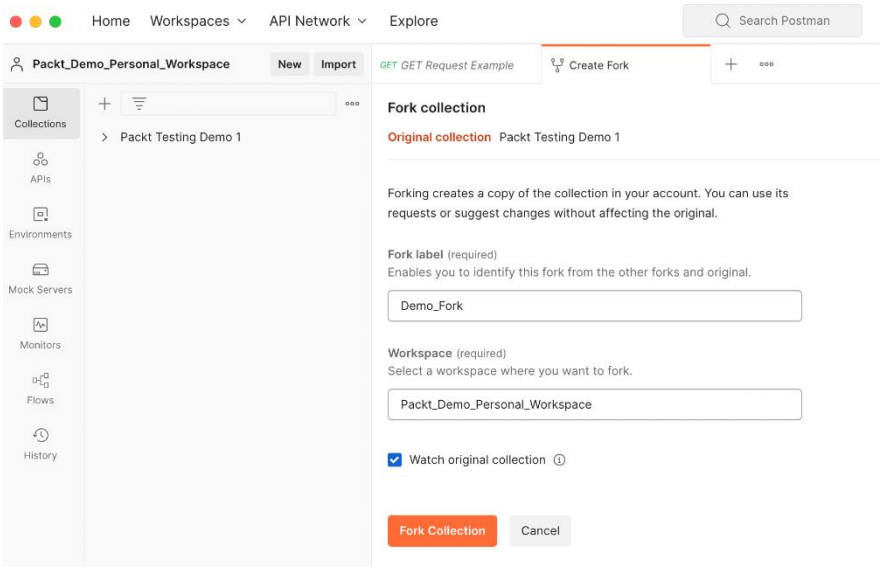

Overview
GET https://api.agify.io?nan
No Environment
https://api.agify.io?name=packt
Save
GET
https://api.agify.io?name=packt
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
name
packt
Key
Value
Description
Body
Cookies
Headers (13)
Test Results
Status: 200 OK
Time: 89 ms
Size: 539 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"age": 39,
"count": 1,
"name": "packt"
}

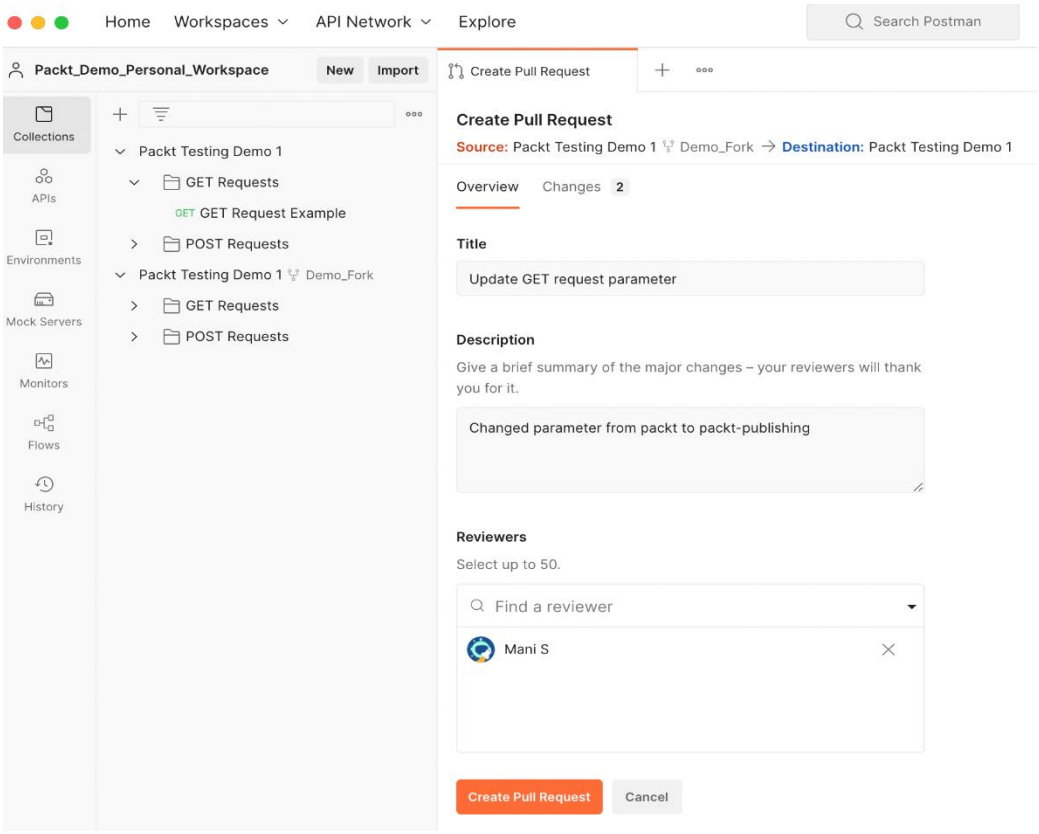

Overview
GET https://api.agify.io?nan
POST https://api.github.com
No Environment
https://api.github.com/repos/owner/repo
Save
POST
https://api.github.com/repos/owner/repo
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
Type
Bearer Token
Token
:) :)
The authorization header will be automatically generated when you send the request. Learn more about authorization
Response

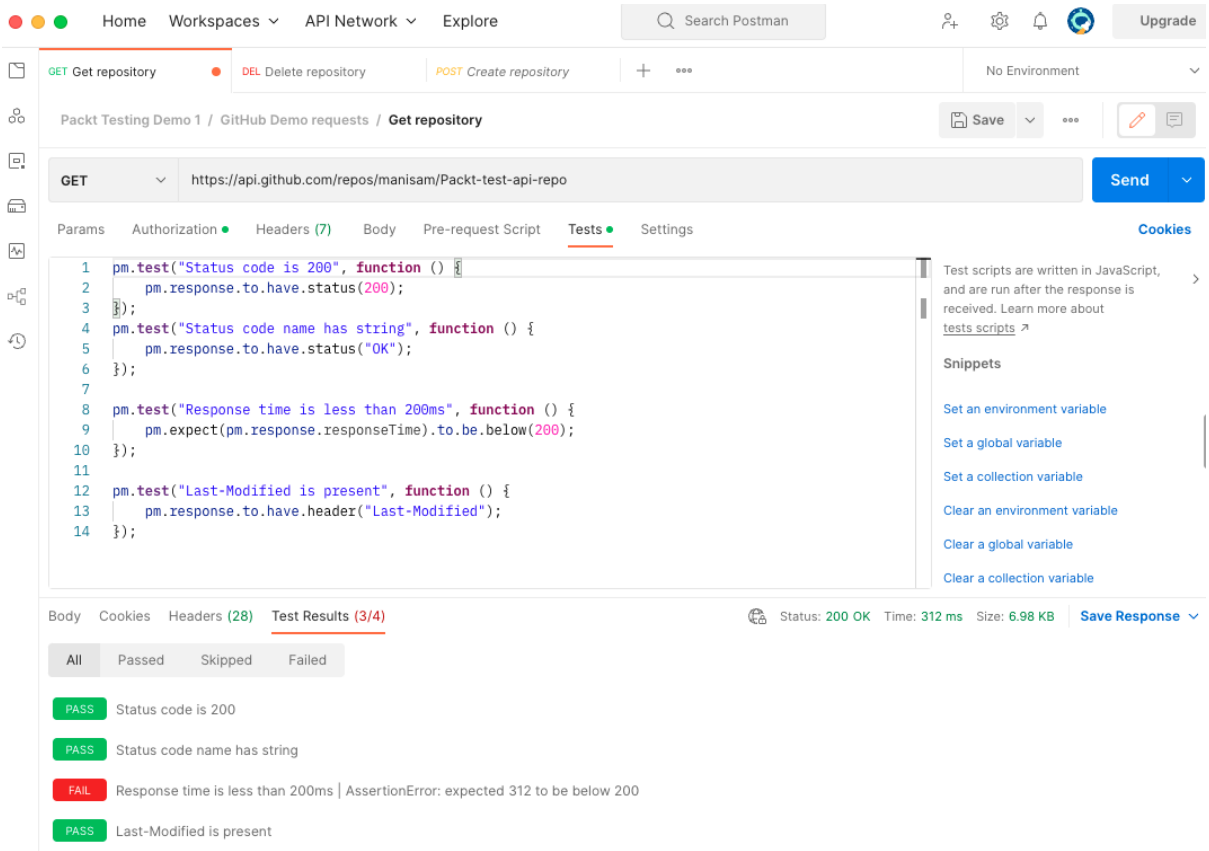

Overview
GET https://api.agify.io?nan
POST https://api.github.com
No Environment
https://api.github.com/user/repos
Save
POST
https://api.github.com/user/repos
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"name": "Packt-test-api-repo"
}
Text
JavaScript
JSON
HTML
XML
Body
Cookies
Headers (27)
Test Results
Status: 201 Created
Time: 5.58 s
Size: 6.97 KB
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"id": 544730188,
"node_id": "R_kgDOIHfsTA",
"name": "Packt-test-api-repo",
"full_name": "manisam/Packt-test-api-repo",
"private": false,
"owner": {
"login": "manisam",
"id": 15188159,
"node_id": "MDQ6VXNlcjE1MTg4MTU5",
"avatar_url": "https://avatars.githubusercontent.com/u/15188159?v=4",
"gravatar_id": "",
"url": "https://api.github.com/users/manisam",
"html_url": "https://github.com/manisam",
"followers_url": "https://api.github.com/users/manisam/followers",
"following_url": "https://api.github.com/users/manisam/following{/other_user}",

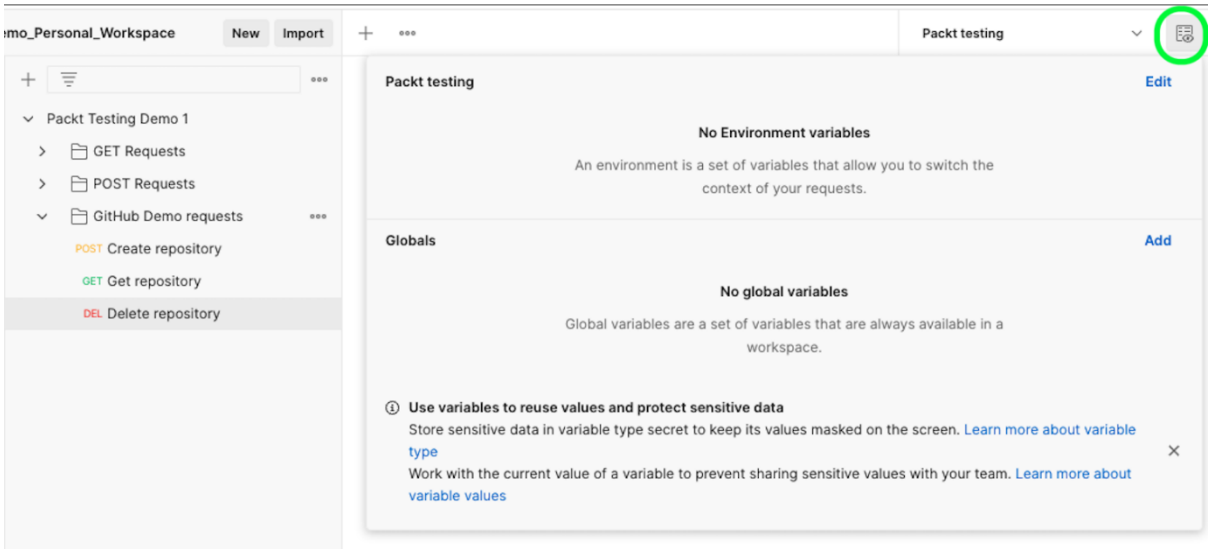

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GET Requests
GET GET Request Example
POST Requests
POST POST Request Example
Packt Testing Demo 1 / GET Requests / GET Request Example
GET
https://api.agify.io?name=packt
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Query Params
KEY
VALUE
DESC
name
packt
Key
Value
Desc
Response

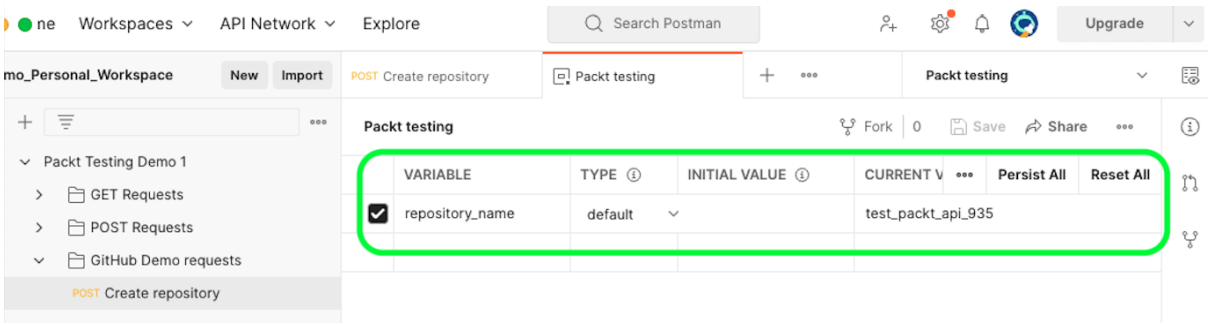

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Packt Testing Demo 1
Packt Testing Demo 1 / GET Requests / GET Request Example
GET
https://api.agify.io?name=packt
Params
Authorization
Headers (6)
Body
Pre-request Script
Query Params
KEY
VALUE
name
packt
Key
Value
Share
Move
Run collection
Edit
Add request
Add folder
Monitor collection
Mock collection
Create a fork ⌥⌘F
Create pull request
Merge changes
Pull changes
View changelog
View documentation
Rename ⌘E
Duplicate ⌘D
Export
Manage roles
Paste ⌘V
Delete
Response
Click Send

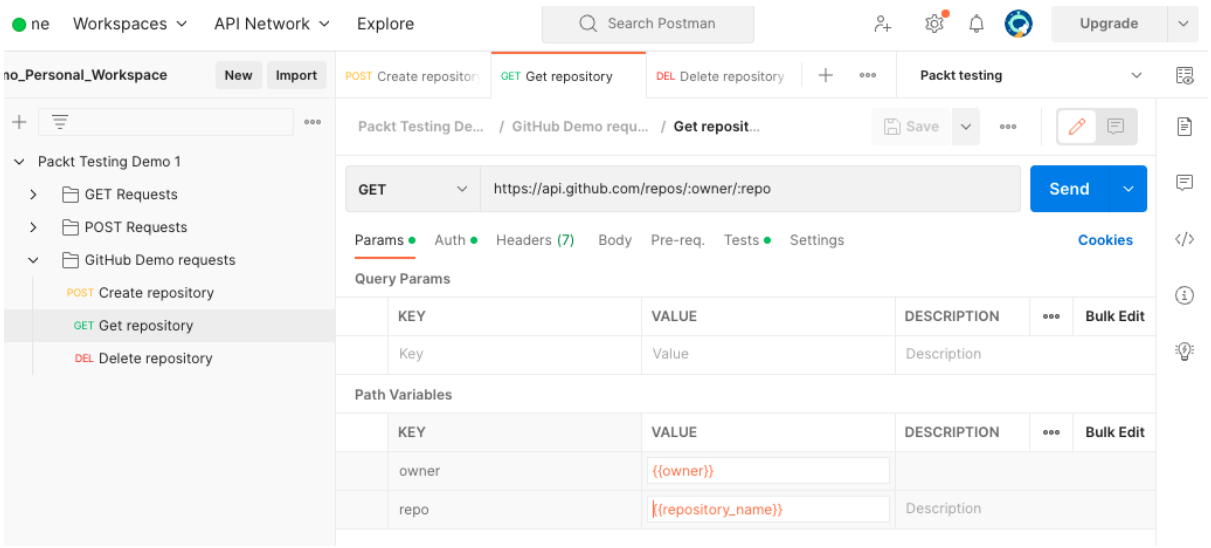

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Packt Testing Demo 1
Fork collection
Original collection Packt Testing Demo 1
Forking creates a copy of the collection in your account. You can use its requests or suggest changes without affecting the original.
Fork label (required)
Enables you to identify this fork from the other forks and original.
Demo_Fork
Workspace (required)
Select a workspace where you want to fork.
Packt_Demo_Personal_Workspace
Watch original collection
Fork Collection
Cancel

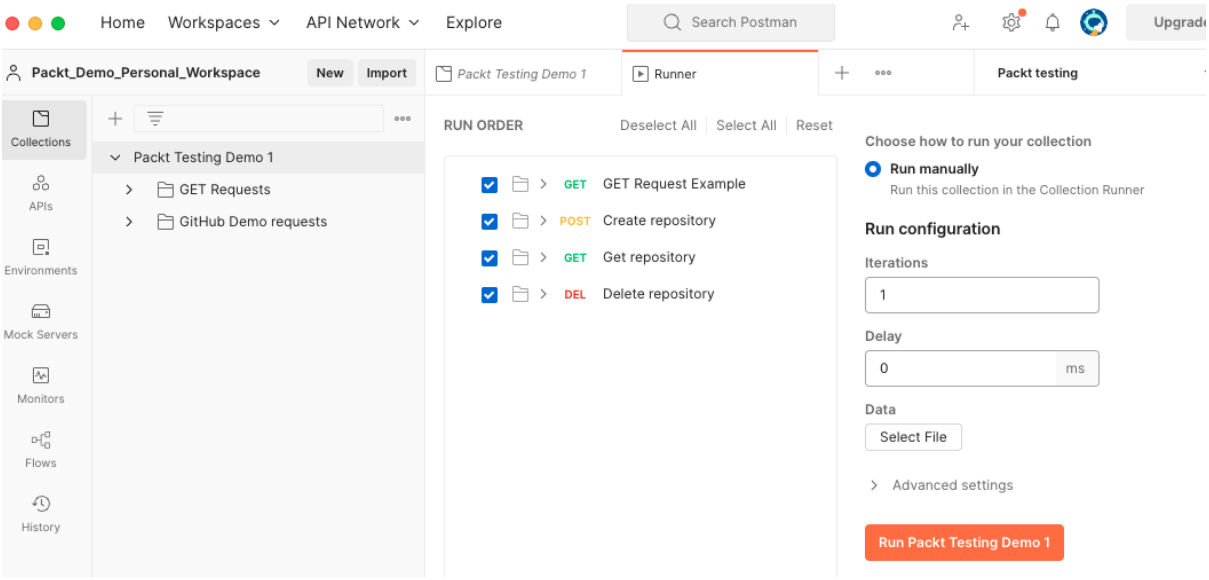

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GET Requests
GET GET Request Example
POST Requests
Packt Testing Demo 1 Demo_Fork
GET Requests
POST Requests
Create Pull Request
Source: Packt Testing Demo 1 Demo_Fork → Destination: Packt Testing Demo 1
Overview
Changes 2
Title
Update GET request parameter
Description
Give a brief summary of the major changes – your reviewers will thank you for it.
Changed parameter from packt to packt-publishing
Reviewers
Select up to 50.
Find a reviewer
Mani S
Create Pull Request
Cancel

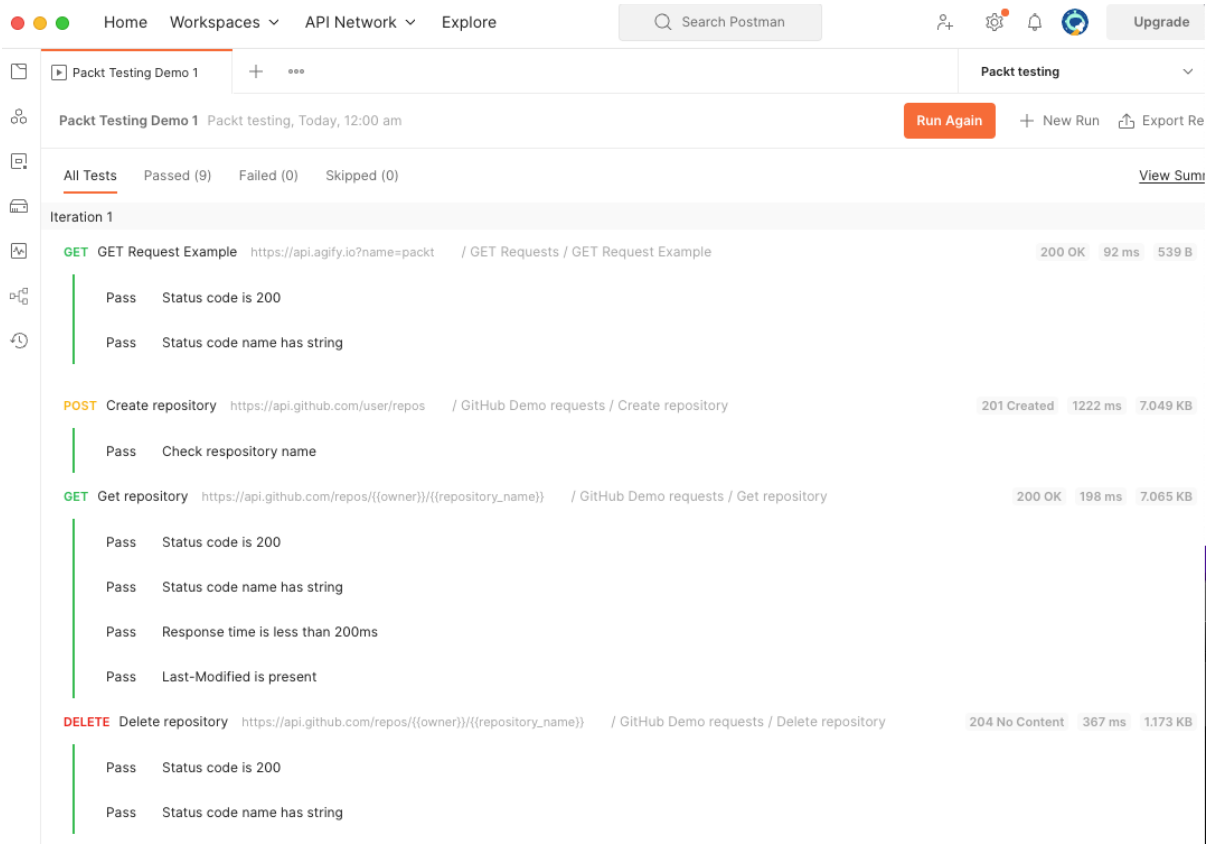

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Upgrade
GET Get repository
DEL Delete repository
POST Create repository
No Environment
Packt Testing Demo 1 / GitHub Demo requests / Get repository
Save
GET
https://api.github.com/repos/manisam/Packt-test-api-repo
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
pm.test("Status code is 200", function () {
pm.response.to.have.status(200);
});
pm.test("Status code name has string", function () {
pm.response.to.have.status("OK");
});
pm.test("Response time is less than 200ms", function () {
pm.expect(pm.response.responseTime).to.be.below(200);
});
pm.test("Last-Modified is present", function () {
pm.response.to.have.header("Last-Modified");
});
Test scripts are written in JavaScript, and are run after the response is received. Learn more about tests scripts
Snippets
Set an environment variable
Set a global variable
Set a collection variable
Clear an environment variable
Clear a global variable
Clear a collection variable
Body
Cookies
Headers (28)
Test Results (3/4)
Status: 200 OK
Time: 312 ms
Size: 6.98 KB
Save Response
All
Passed
Skipped
Failed
PASS
Status code is 200
PASS
Status code name has string
FAIL
Response time is less than 200ms | AssertionError: expected 312 to be below 200
PASS
Last-Modified is present


New
Import
Packt testing
Packt Testing Demo 1
GET Requests
POST Requests
GitHub Demo requests
POST Create repository
GET Get repository
DEL Delete repository
Packt testing
Edit
No Environment variables
An environment is a set of variables that allow you to switch the context of your requests.
Globals
Add
No global variables
Global variables are a set of variables that are always available in a workspace.
Use variables to reuse values and protect sensitive data
Store sensitive data in variable type secret to keep its values masked on the screen. Learn more about variable type
Work with the current value of a variable to prevent sharing sensitive values with your team. Learn more about variable values


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POST Requests
GitHub Demo requests
POST Create repository
Packt testing
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Share
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INITIAL VALUE
CURRENT V
Persist All
Reset All
repository_name
default
test_packt_api_935


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POST Requests
GitHub Demo requests
POST Create repository
GET Get repository
DEL Delete repository
Packt Testing De...
GitHub Demo requ...
Get reposit...
Save
GET
https://api.github.com/repos/:owner/:repo
Send
Params
Auth
Headers (7)
Body
Pre-req.
Tests
Settings
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Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Key
Value
Description
Path Variables
KEY
VALUE
DESCRIPTION
Bulk Edit
owner
{{owner}}
repo
{{repository_name}}
Description


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Packt Testing Demo 1
GET Requests
GitHub Demo requests
RUN ORDER
Deselect All
Select All
Reset
GET GET Request Example
POST Create repository
GET Get repository
DEL Delete repository
Choose how to run your collection
Run manually
Run this collection in the Collection Runner
Run configuration
Iterations
1
Delay
0
ms
Data
Select File
Advanced settings
Run Packt Testing Demo 1


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Packt testing
Packt Testing Demo 1 Packt testing, Today, 12:00 am
Run Again
New Run
Export Re
All Tests
Passed (9)
Failed (0)
Skipped (0)
View Sum
Iteration 1
GET GET Request Example https://api.agify.io?name=packt / GET Requests / GET Request Example 200 OK 92 ms 539 B
Pass Status code is 200
Pass Status code name has string
POST Create repository https://api.github.com/user/repos / GitHub Demo requests / Create repository 201 Created 1222 ms 7.049 KB
Pass Check respository name
GET Get repository https://api.github.com/repos/{{owner}}/{{repository_name}} / GitHub Demo requests / Get repository 200 OK 198 ms 7.065 KB
Pass Status code is 200
Pass Status code name has string
Pass Response time is less than 200ms
Pass Last-Modified is present
DELETE Delete repository https://api.github.com/repos/{{owner}}/{{repository_name}} / GitHub Demo requests / Delete repository 204 No Content 367 ms 1.173 KB
Pass Status code is 200
Pass Status code name has string

```
→  packt_postman_downloads ls
packt_testing_collection.json  packt_testing_environment.json
→  packt_postman_downloads clear
→  packt_postman_downloads ls
packt_testing_collection.json  packt_testing_environment.json
→  packt_postman_downloads newman run packt_testing_collection.json -e packt_testing_environm
ent.json
newman

Packt Testing Demo 1

□ GET Requests
↳ GET Request Example
  GET https://api.agify.io?name=packt [200 OK, 539B, 620ms]
  ✓  Status code is 200
  ✓  Status code name has string

□ GitHub Demo requests
↳ Create repository
  POST https://api.github.com/user/repos [201 Created, 7.09kB, 1237ms]
  ✓  Check respository name

↳ Get repository
  GET https://api.github.com/repos/manisam/test_packt_api_131 [200 OK, 7.11kB, 208ms]
  ✓  Status code is 200
  ✓  Status code name has string
  1. Response time is less than 200ms
  ✓  Last-Modified is present

↳ Delete repository
  DELETE https://api.github.com/repos/manisam/test_packt_api_131 [204 No Content, 1.17kB, 377
ms]
  ✓  Status code is 200
  ✓  Status code name has string

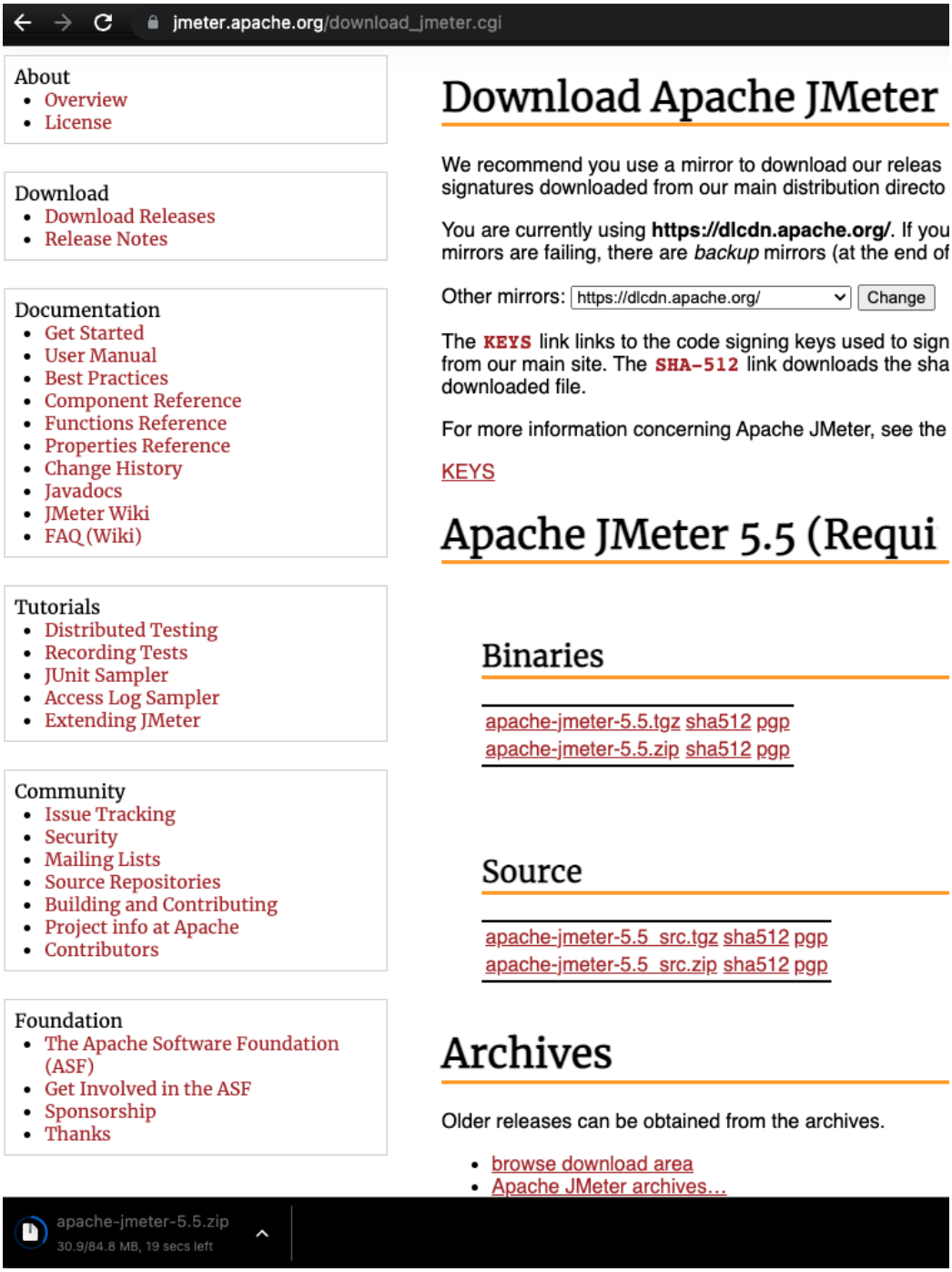
┌─────────────────────────┬────────────────────┬────────────────────┐
│                         │           executed │             failed │
├─────────────────────────┼────────────────────┼────────────────────┤
│              iterations │                  1 │                  0 │
├─────────────────────────┼────────────────────┼────────────────────┤
│                requests │                  4 │                  0 │
├─────────────────────────┼────────────────────┼────────────────────┤
│            test-scripts │                  4 │                  0 │
├─────────────────────────┼────────────────────┼────────────────────┤
│      prerequest-scripts │                  1 │                  0 │
├─────────────────────────┼────────────────────┼────────────────────┤
│              assertions │                  9 │                  1 │
├─────────────────────────┴────────────────────┴────────────────────┤
│ total run duration: 2.5s                                          │
├───────────────────────────────────────────────────────────────────┤
│ total data received: 11.39kB (approx)                             │
├───────────────────────────────────────────────────────────────────┤
│ average response time: 610ms [min: 208ms, max: 1237ms, s.d.: 390ms] │
└───────────────────────────────────────────────────────────────────┘

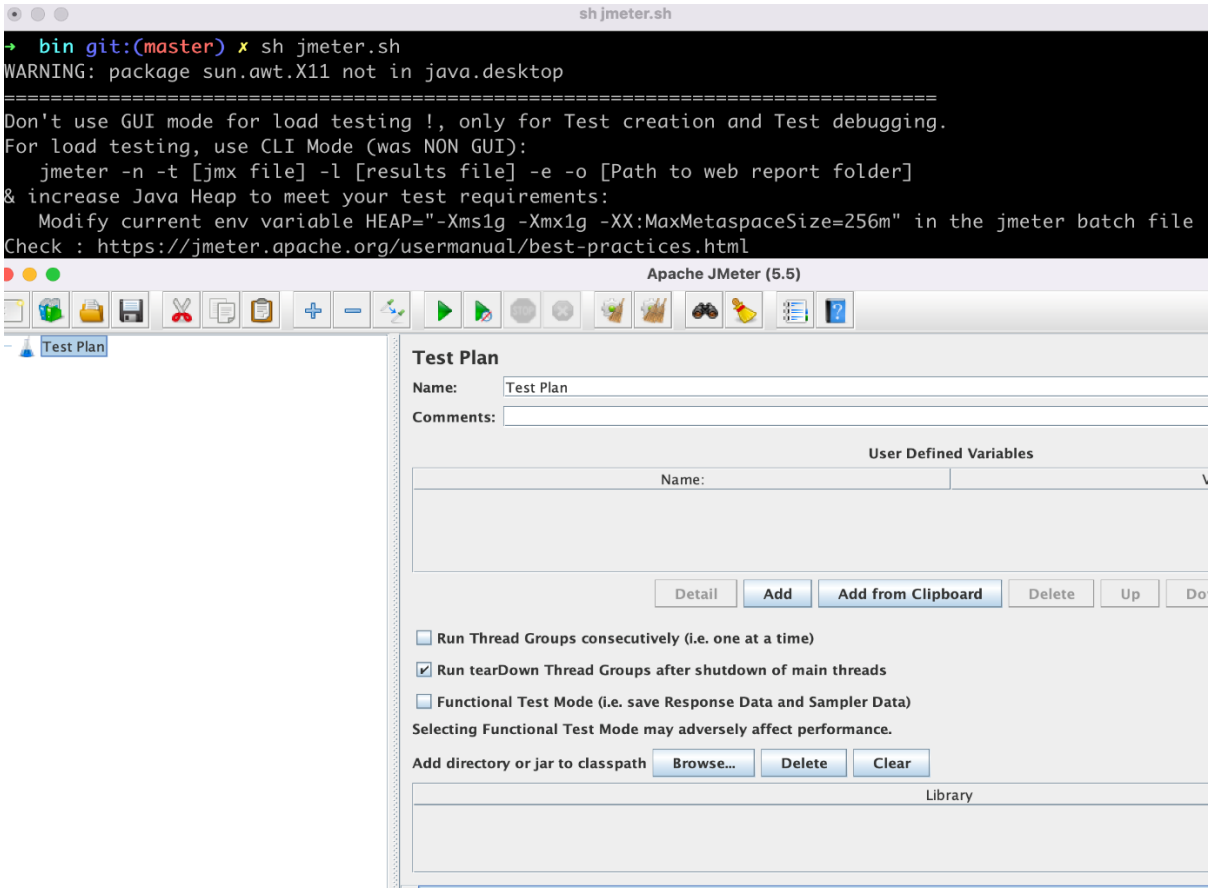
  #  failure          detail

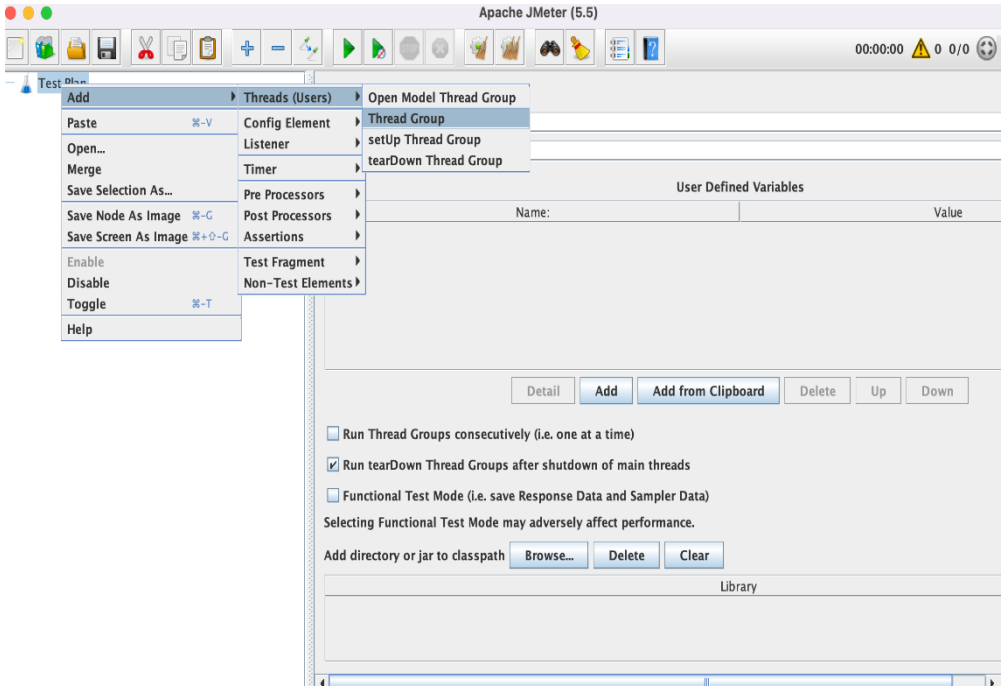
 1.  AssertionError   Response time is less than 200ms
                      expected 208 to be below 200
                      at assertion:2 in test-script
                      inside "GitHub Demo requests / Get repository"
→  packt_postman_downloads
```

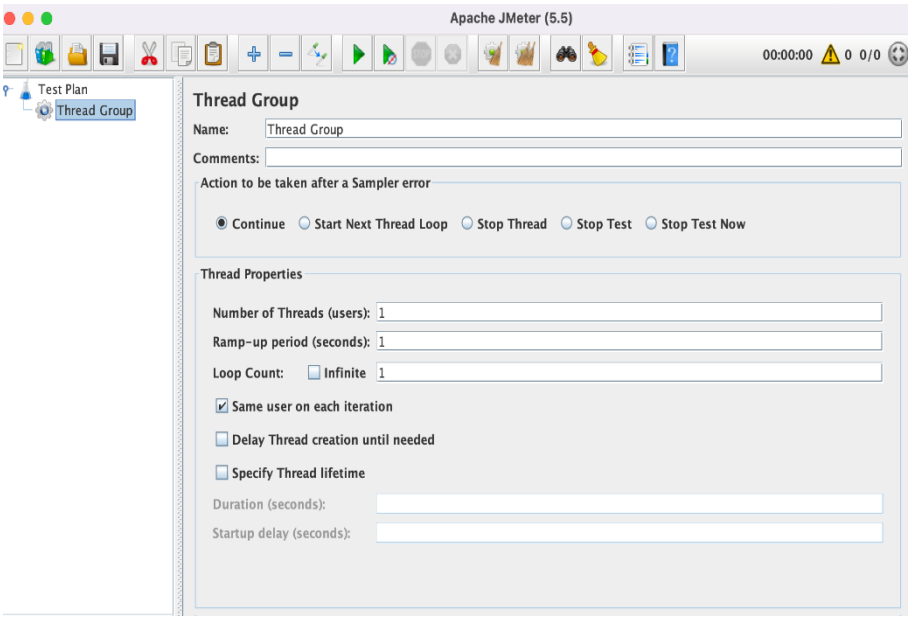
Chapter 8: Test Automation for Performance

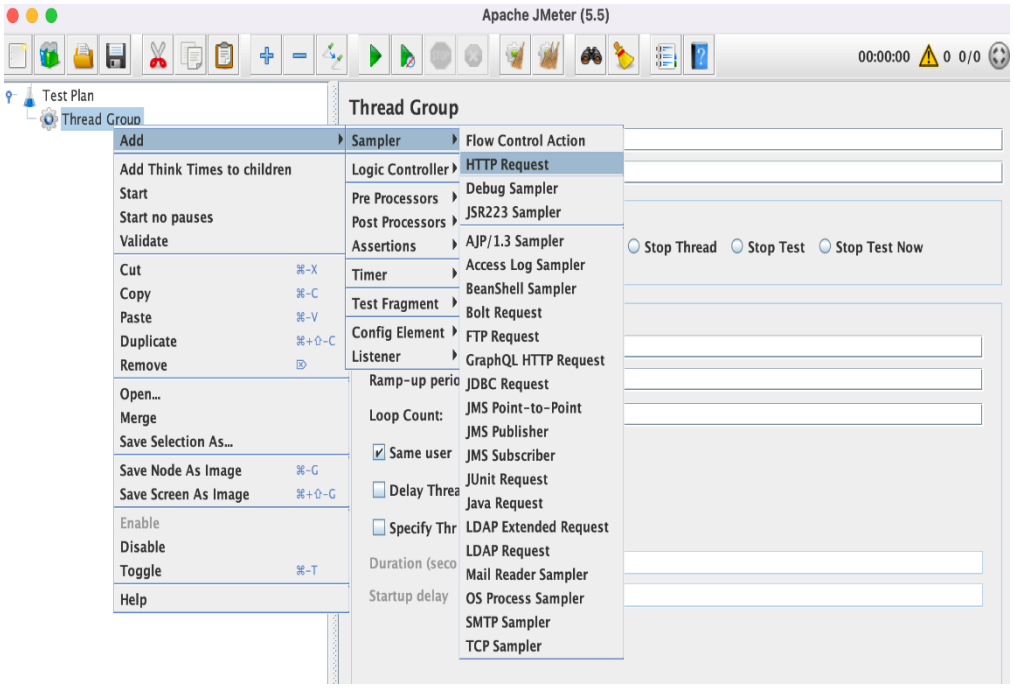
```
→  app git:(main) ✗ java -version
openjdk version "17.0.4.1" 2022-08-12
OpenJDK Runtime Environment Temurin-17.0.4.1+1 (build 17.0.4.1+1)
OpenJDK 64-Bit Server VM Temurin-17.0.4.1+1 (build 17.0.4.1+1, mixed mode)
→  app git:(main) ✗
```

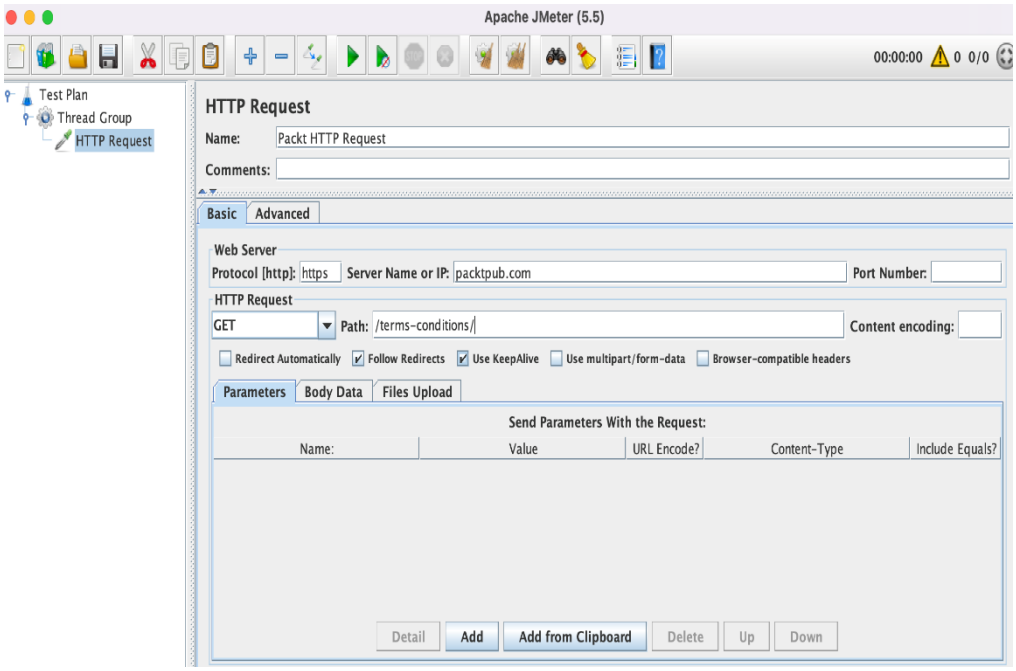


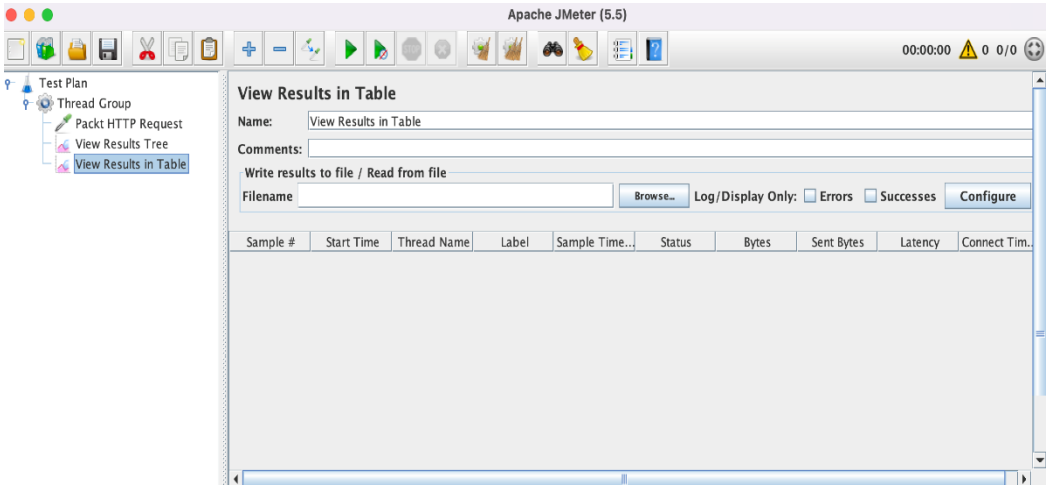

sh jmeter.sh
→ bin git:(master) ✗ sh jmeter.sh
WARNING: package sun.awt.X11 not in java.desktop
==
Don't use GUI mode for load testing !, only for Test creation and Test debugging.
For load testing, use CLI Mode (was NON GUI):
jmeter -n -t [jmx file] -l [results file] -e -o [Path to web report folder]
& increase Java Heap to meet your test requirements:
Modify current env variable HEAP="-Xms1g -Xmx1g -XX:MaxMetaspaceSize=256m" in the jmeter batch file
Check : https://jmeter.apache.org/usermanual/best-practices.html
Apache JMeter (5.5)
Test Plan
Test Plan
Name:
Test Plan
Comments:
User Defined Variables
Name:
Detail
Add
Add from Clipboard
Delete
Up
Run Thread Groups consecutively (i.e. one at a time)
Run tearDown Thread Groups after shutdown of main threads
Functional Test Mode (i.e. save Response Data and Sampler Data)
Selecting Functional Test Mode may adversely affect performance.
Add directory or jar to classpath
Browse...
Delete
Clear
Library

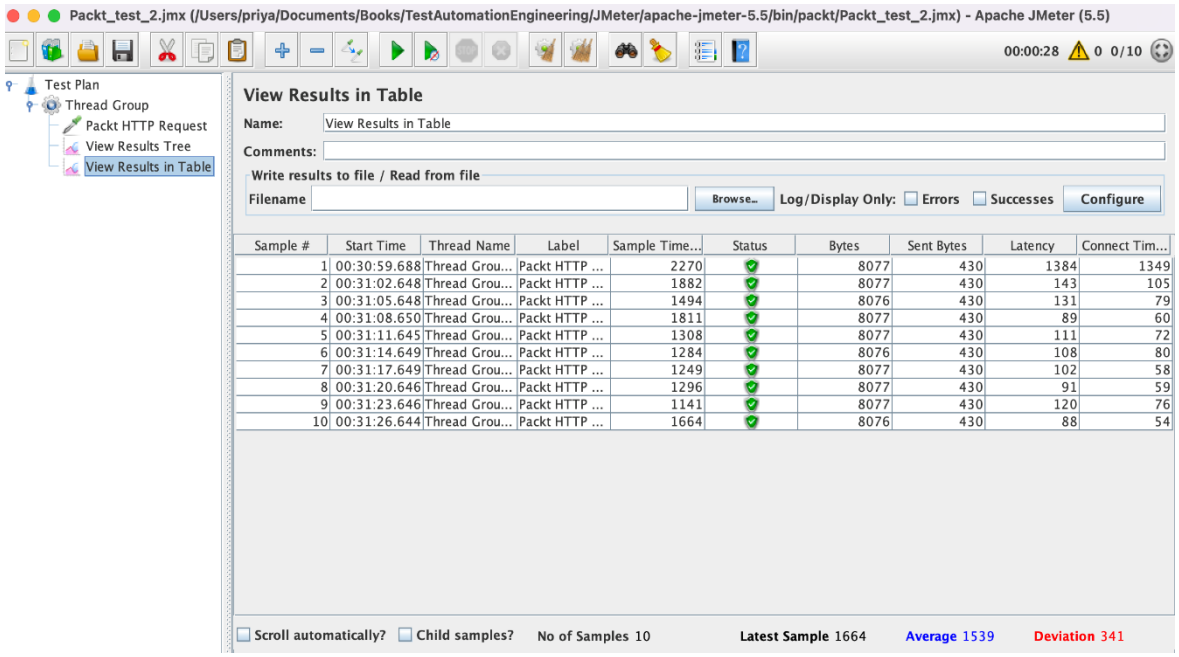

Apache JMeter (5.5)
00:00:00
0 0/0
Add
Paste
Open...
Merge
Save Selection As...
Save Node As Image
Save Screen As Image
Enable
Disable
Toggle
Help
Threads (Users)
Config Element
Listener
Timer
Pre Processors
Post Processors
Assertions
Test Fragment
Non-Test Elements
Open Model Thread Group
Thread Group
setUp Thread Group
tearDown Thread Group
User Defined Variables
Name:
Value
Detail
Add
Add from Clipboard
Delete
Up
Down
Run Thread Groups consecutively (i.e. one at a time)
Run tearDown Thread Groups after shutdown of main threads
Functional Test Mode (i.e. save Response Data and Sampler Data)
Selecting Functional Test Mode may adversely affect performance.
Add directory or jar to classpath
Browse...
Delete
Clear
Library

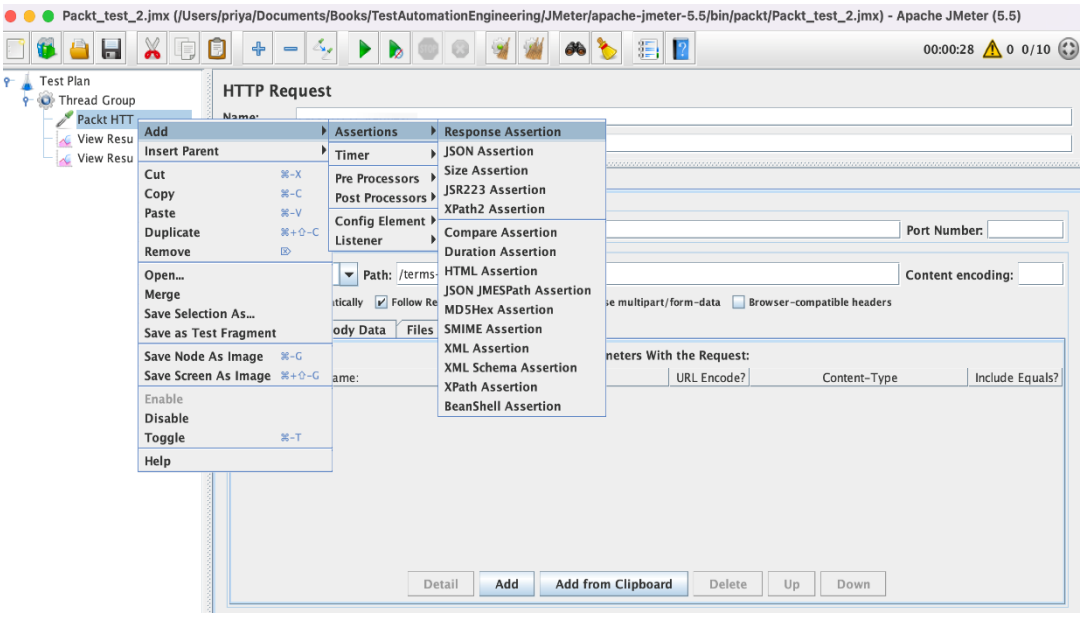

Apache JMeter (5.5)
00:00:00 0 0/0
Test Plan
Thread Group
Thread Group
Name: Thread Group
Comments:
Action to be taken after a Sampler error
Continue Start Next Thread Loop Stop Thread Stop Test Stop Test Now
Thread Properties
Number of Threads (users): 1
Ramp-up period (seconds): 1
Loop Count: Infinite 1
Same user on each iteration
Delay Thread creation until needed
Specify Thread lifetime
Duration (seconds):
Startup delay (seconds):

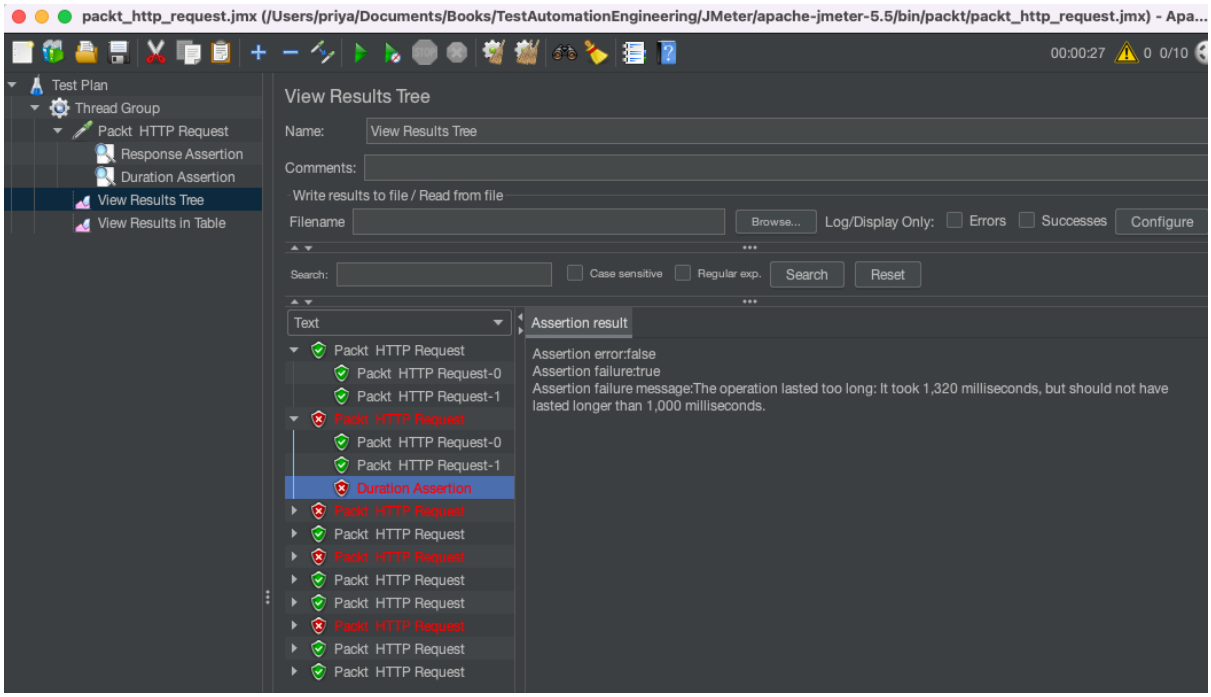

Apache JMeter (5.5)
00:00:00 0 0/0
Test Plan
Thread Group
Thread Group
Add
Add Think Times to children
Start
Start no pauses
Validate
Cut ⌘-X
Copy ⌘-C
Paste ⌘-V
Duplicate ⌘+⇧-C
Remove
Open...
Merge
Save Selection As...
Save Node As Image ⌘-G
Save Screen As Image ⌘+⇧-G
Enable
Disable
Toggle ⌘-T
Help
Sampler
Logic Controller
Pre Processors
Post Processors
Assertions
Timer
Test Fragment
Config Element
Listener
Flow Control Action
HTTP Request
Debug Sampler
JSR223 Sampler
AJP/1.3 Sampler
Access Log Sampler
BeanShell Sampler
Bolt Request
FTP Request
GraphQL HTTP Request
JDBC Request
JMS Point-to-Point
JMS Publisher
JMS Subscriber
JUnit Request
Java Request
LDAP Extended Request
LDAP Request
Mail Reader Sampler
OS Process Sampler
SMTP Sampler
TCP Sampler
Stop Thread Stop Test Stop Test Now
Ramp-up perio
Loop Count:
Same user
Delay Threa
Specify Thr
Duration (seco
Startup delay

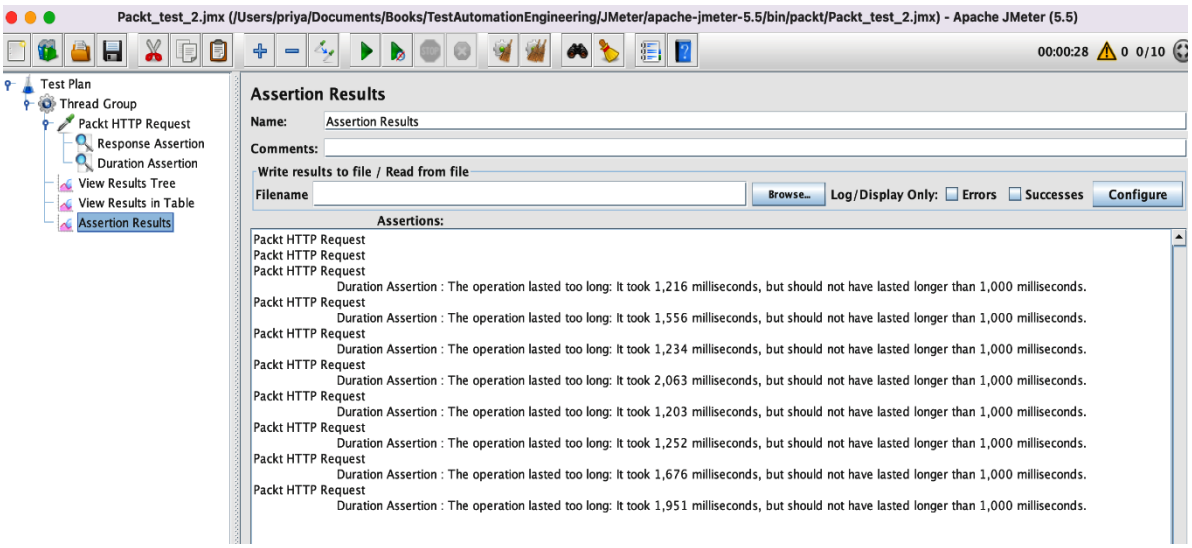

Apache JMeter (5.5)
00:00:00 0 0/0
Test Plan
Thread Group
HTTP Request
HTTP Request
Name: Packt HTTP Request
Comments:
Basic
Advanced
Web Server
Protocol [http]: https
Server Name or IP: packtpub.com
Port Number:
HTTP Request
GET
Path: /terms-conditions/
Content encoding:
Redirect Automatically
Follow Redirects
Use KeepAlive
Use multipart/form-data
Browser-compatible headers
Parameters
Body Data
Files Upload
Send Parameters With the Request:
Name:
Value
URL Encode?
Content-Type
Include Equals?
Detail
Add
Add from Clipboard
Delete
Up
Down


Apache JMeter (5.5)
00:00:00 0 0/0
Test Plan
Thread Group
Packt HTTP Request
View Results Tree
View Results in Table
View Results in Table
Name: View Results in Table
Comments:
Write results to file / Read from file
Filename
Browse...
Log/Display Only:
Errors
Successes
Configure
Sample #
Start Time
Thread Name
Label
Sample Time...
Status
Bytes
Sent Bytes
Latency
Connect Tim...

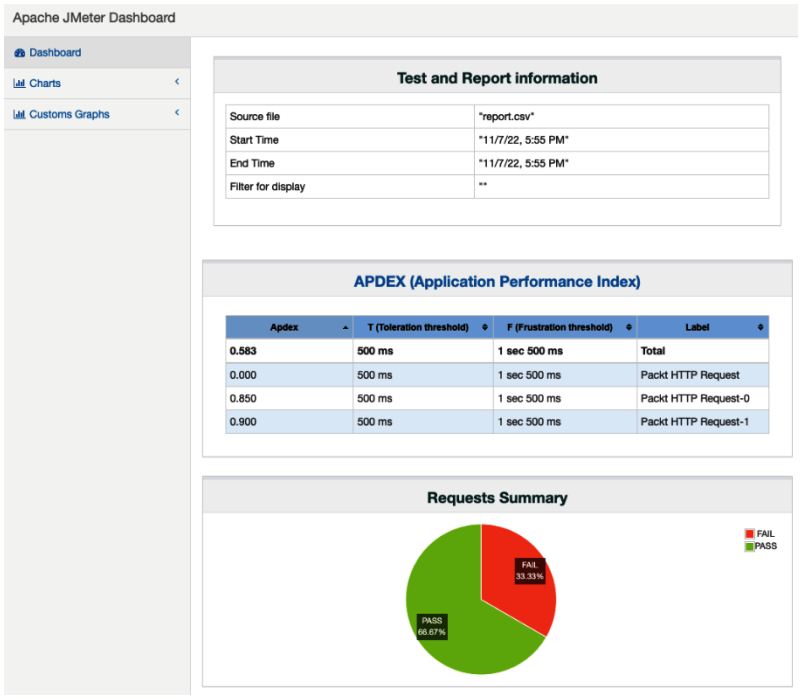

Packt_test_2.jmx (/Users/priya/Documents/Books/TestAutomationEngineering/JMeter/apache-jmeter-5.5/bin/packt/Packt_test_2.jmx) - Apache JMeter (5.5)
00:00:28 0 0/10
Test Plan
Thread Group
Packt HTTP Request
View Results Tree
View Results in Table
View Results in Table
Name: View Results in Table
Comments:
Write results to file / Read from file
Filename
Browse...
Log/Display Only: Errors Successes
Configure
Sample # Start Time Thread Name Label Sample Time... Status Bytes Sent Bytes Latency Connect Tim...
1 00:30:59.688 Thread Grou... Packt HTTP ... 2270 8077 430 1384 1349
2 00:31:02.648 Thread Grou... Packt HTTP ... 1882 8077 430 143 105
3 00:31:05.648 Thread Grou... Packt HTTP ... 1494 8076 430 131 79
4 00:31:08.650 Thread Grou... Packt HTTP ... 1811 8077 430 89 60
5 00:31:11.645 Thread Grou... Packt HTTP ... 1308 8077 430 111 72
6 00:31:14.649 Thread Grou... Packt HTTP ... 1284 8076 430 108 80
7 00:31:17.649 Thread Grou... Packt HTTP ... 1249 8077 430 102 58
8 00:31:20.646 Thread Grou... Packt HTTP ... 1296 8077 430 91 59
9 00:31:23.646 Thread Grou... Packt HTTP ... 1141 8077 430 120 76
10 00:31:26.644 Thread Grou... Packt HTTP ... 1664 8076 430 88 54
Scroll automatically? Child samples? No of Samples 10 Latest Sample 1664 Average 1539 Deviation 341

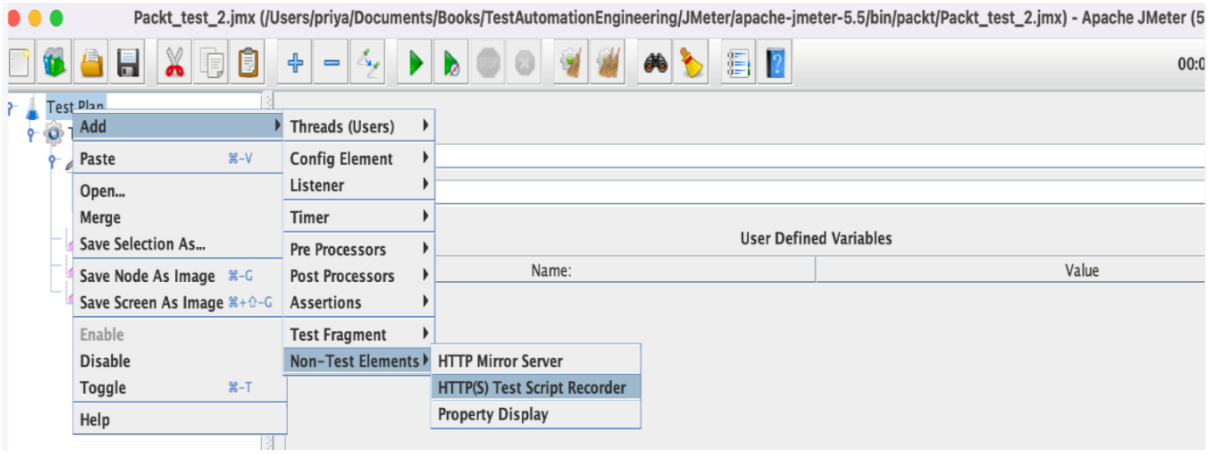

Packt_test_2.jmx (/Users/priya/Documents/Books/TestAutomationEngineering/JMeter/apache-jmeter-5.5/bin/packt/Packt_test_2.jmx) - Apache JMeter (5.5)
00:00:28 0 0/10
Test Plan
Thread Group
Packt HTT
View Resu
View Resu
HTTP Request
Add
Insert Parent
Cut ⌘-X
Copy ⌘-C
Paste ⌘-V
Duplicate ⌘+⇧-C
Remove ⌦
Open...
Merge
Save Selection As...
Save as Test Fragment
Save Node As Image ⌘-G
Save Screen As Image ⌘+⇧-G
Enable
Disable
Toggle ⌘-T
Help
Assertions
Timer
Pre Processors
Post Processors
Config Element
Listener
Response Assertion
JSON Assertion
Size Assertion
JSR223 Assertion
XPath2 Assertion
Compare Assertion
Duration Assertion
HTML Assertion
JSON JMESPath Assertion
MD5Hex Assertion
SMIME Assertion
XML Assertion
XML Schema Assertion
XPath Assertion
BeanShell Assertion
Port Number:
Path:
Content encoding:
Browser-compatible headers
URL Encode?
Content-Type
Include Equals?
Detail
Add
Add from Clipboard
Delete
Up
Down

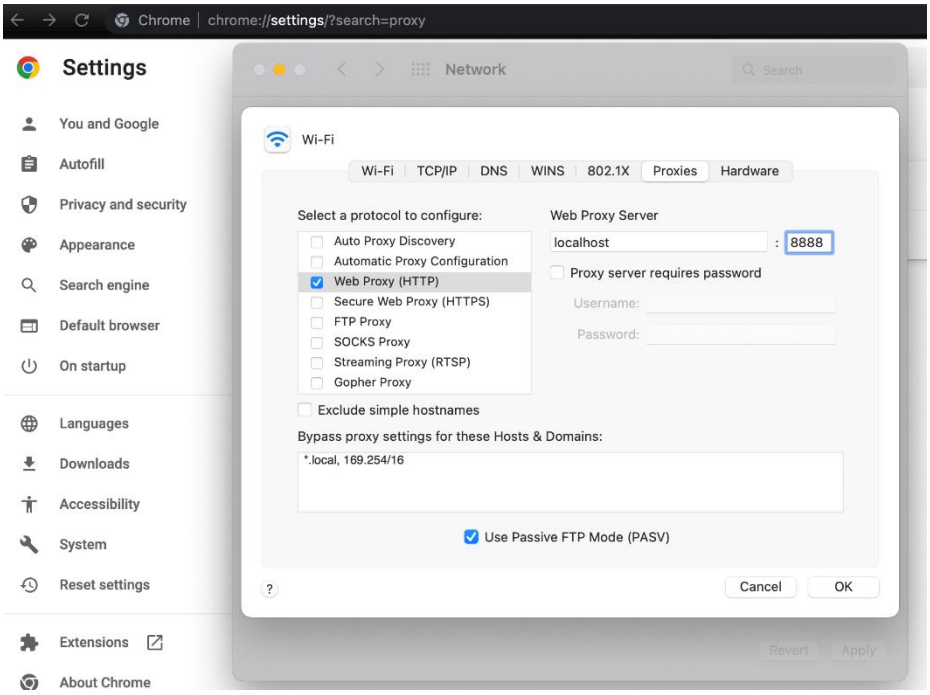


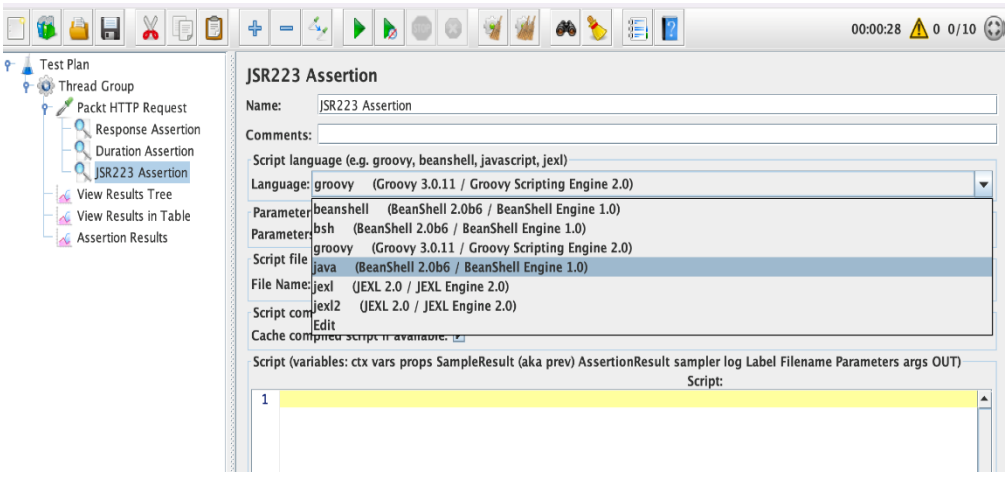



```
Starting standalone test @ 2022 Nov 7 17:21:47 PST (1667870507589)
Waiting for possible Shutdown/StopTestNow/HeapDump/ThreadDump message on port 4445
summary +      5 in 00:00:13 =    0.4/s Avg:  1029 Min:   728 Max:  1287 Err:     5 (100.00%) Active: 1 Started: 5 Finished: 4
summary +      5 in 00:00:15 =    0.3/s Avg:   959 Min:   860 Max:  1166 Err:     5 (100.00%) Active: 0 Started: 10 Finished: 10
summary =     10 in 00:00:28 =    0.4/s Avg:   994 Min:   728 Max:  1287 Err:    10 (100.00%)
Tidying up ...    @ 2022 Nov 7 17:22:15 PST (1667870535505)
... end of run
➜  bin
```

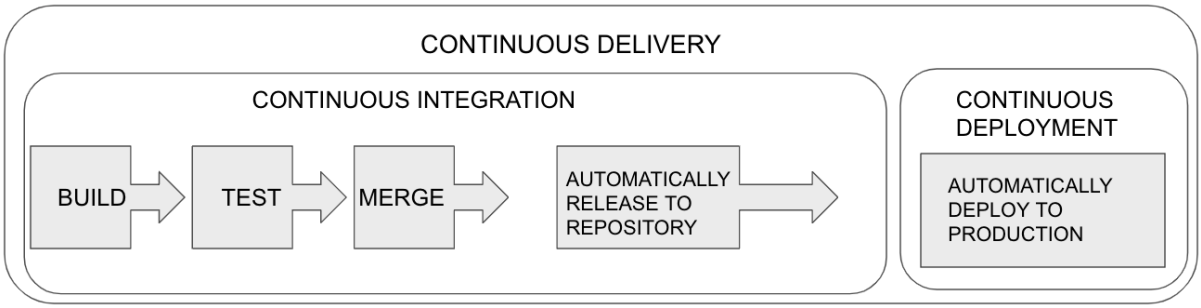

Apache JMeter Dashboard
Dashboard
Charts
Customs Graphs
Test and Report information
Source file
"report.csv"
Start Time
"11/7/22, 5:55 PM"
End Time
"11/7/22, 5:55 PM"
Filter for display
""
APDEX (Application Performance Index)
Apdex
T (Toleration threshold)
F (Frustration threshold)
Label
0.583
500 ms
1 sec 500 ms
Total
0.000
500 ms
1 sec 500 ms
Packt HTTP Request
0.850
500 ms
1 sec 500 ms
Packt HTTP Request-0
0.900
500 ms
1 sec 500 ms
Packt HTTP Request-1
Requests Summary
FAIL
PASS
FAIL
33.33%
PASS
66.67%

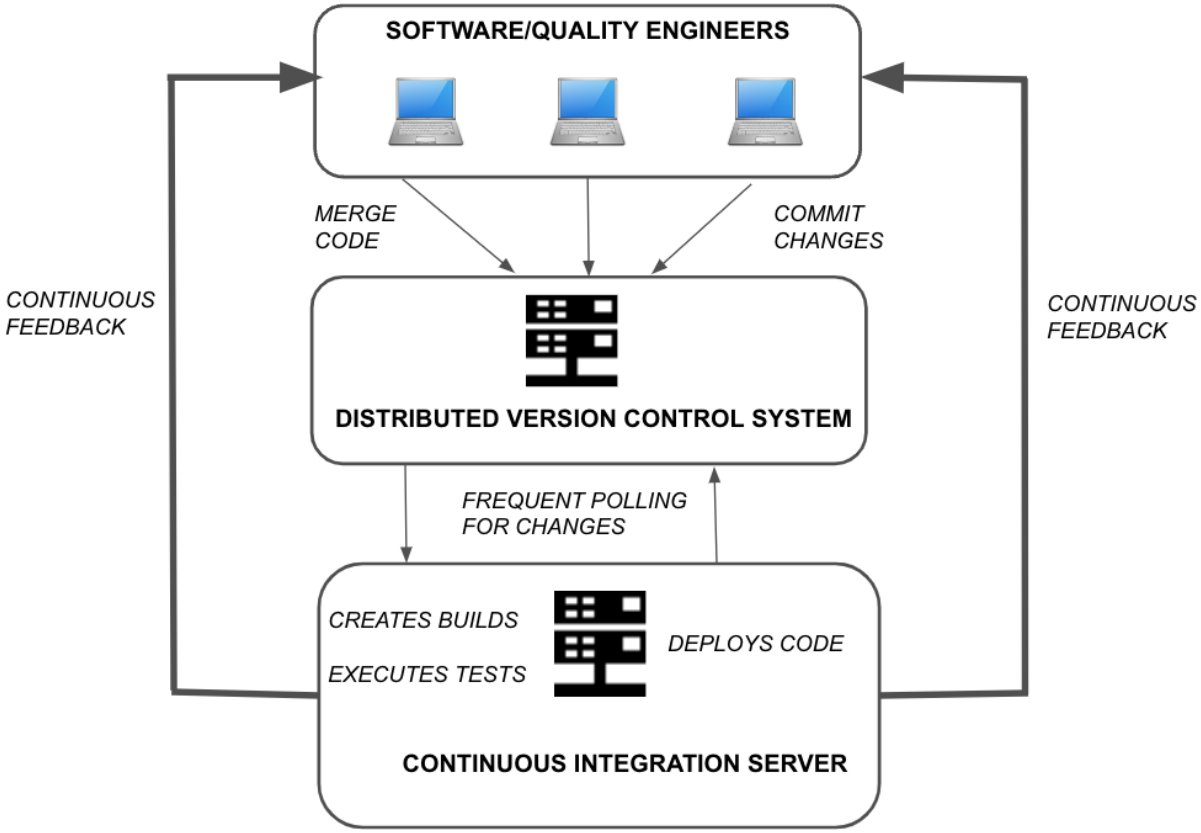

Packt_test_2.jmx (/Users/priya/Documents/Books/TestAutomationEngineering/JMeter/apache-jmeter-5.5/bin/packt/Packt_test_2.jmx) - Apache JMeter (5
00:0
Test Plan
Add
Paste ⌘-V
Open...
Merge
Save Selection As...
Save Node As Image ⌘-G
Save Screen As Image ⌘+⇧-G
Enable
Disable
Toggle ⌘-T
Help
Threads (Users)
Config Element
Listener
Timer
Pre Processors
Post Processors
Assertions
Test Fragment
Non-Test Elements
HTTP Mirror Server
HTTP(S) Test Script Recorder
Property Display
User Defined Variables
Name:
Value

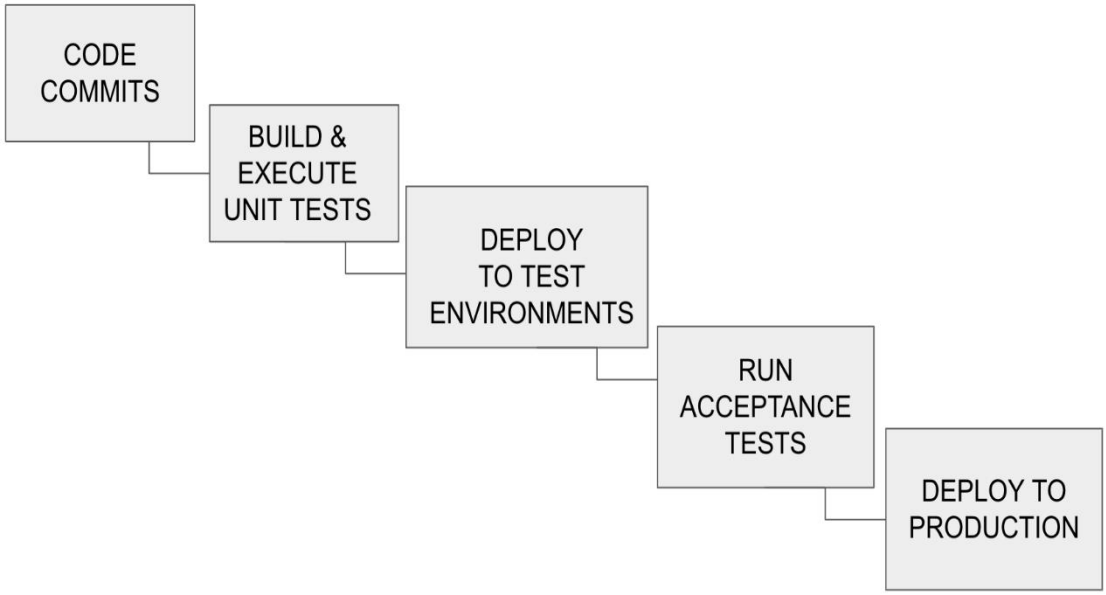

Chrome | chrome://settings/?search=proxy
Settings
You and Google
Autofill
Privacy and security
Appearance
Search engine
Default browser
On startup
Languages
Downloads
Accessibility
System
Reset settings
Extensions
About Chrome
Network
Search
Wi-Fi
Wi-Fi | TCP/IP | DNS | WINS | 802.1X | Proxies | Hardware
Select a protocol to configure:
Auto Proxy Discovery
Automatic Proxy Configuration
Web Proxy (HTTP)
Secure Web Proxy (HTTPS)
FTP Proxy
SOCKS Proxy
Streaming Proxy (RTSP)
Gopher Proxy
Web Proxy Server
localhost : 8888
Proxy server requires password
Username:
Password:
Exclude simple hostnames
Bypass proxy settings for these Hosts & Domains:
*.local, 169.254/16
Use Passive FTP Mode (PASV)
Cancel
OK
Revert
Apply

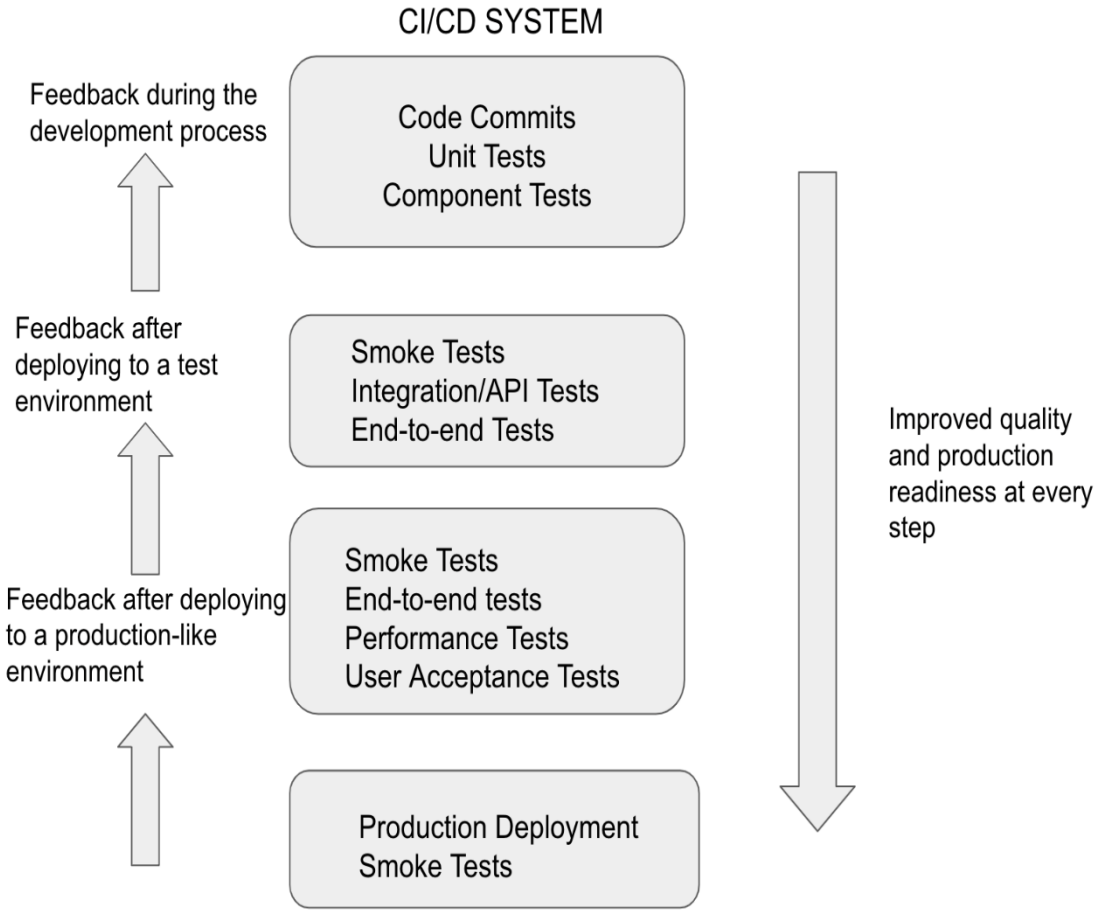

00:00:28 0 0/10
Test Plan
Thread Group
Packt HTTP Request
Response Assertion
Duration Assertion
JSR223 Assertion
View Results Tree
View Results in Table
Assertion Results
JSR223 Assertion
Name: JSR223 Assertion
Comments:
Script language (e.g. groovy, beanshell, javascript, jexl)
Language: groovy (Groovy 3.0.11 / Groovy Scripting Engine 2.0)
beanshell (BeanShell 2.0b6 / BeanShell Engine 1.0)
bsh (BeanShell 2.0b6 / BeanShell Engine 1.0)
groovy (Groovy 3.0.11 / Groovy Scripting Engine 2.0)
java (BeanShell 2.0b6 / BeanShell Engine 1.0)
jexl (JEXL 2.0 / JEXL Engine 2.0)
jexl2 (JEXL 2.0 / JEXL Engine 2.0)
Edit
File Name:
Script (variables: ctx vars props SampleResult (aka prev) AssertionResult sampler log Label Filename Parameters args OUT)
Script:
1

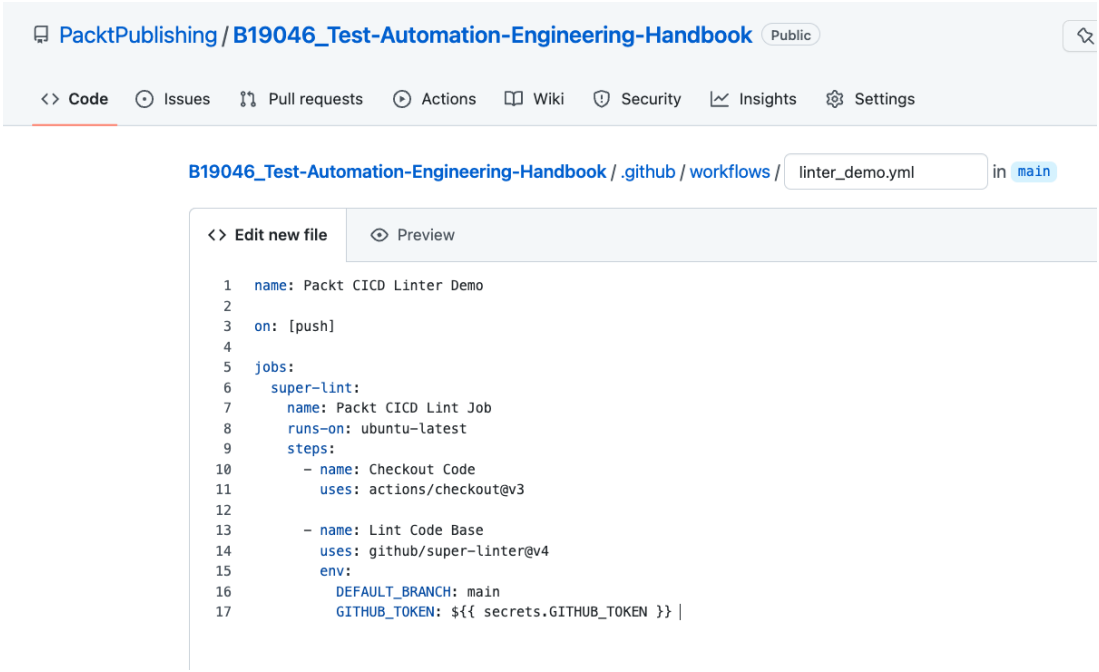
Chapter 9: CI/CD and Test Automation

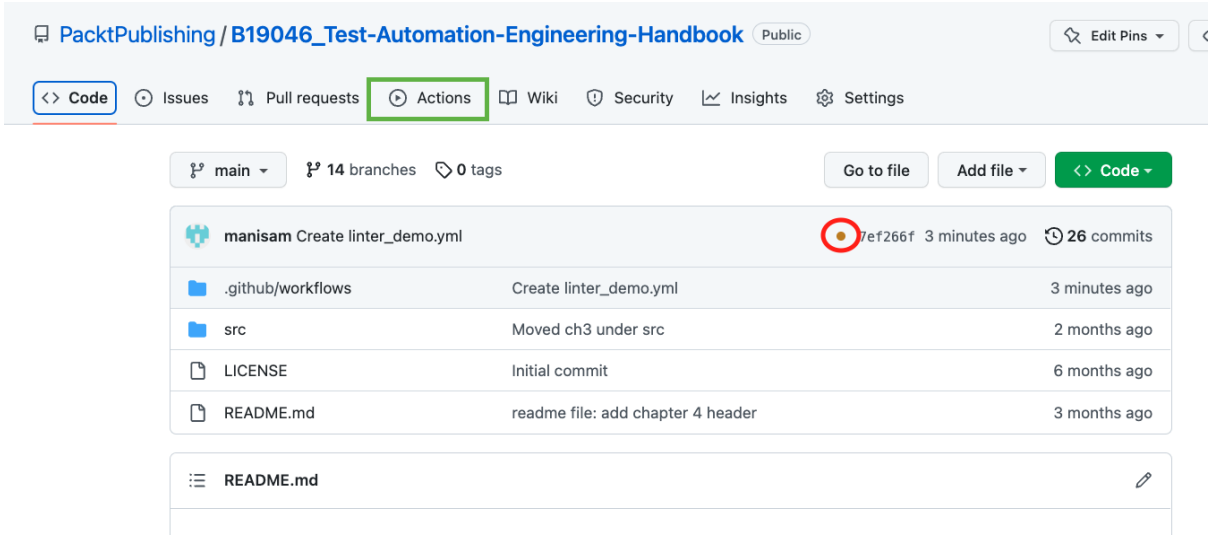


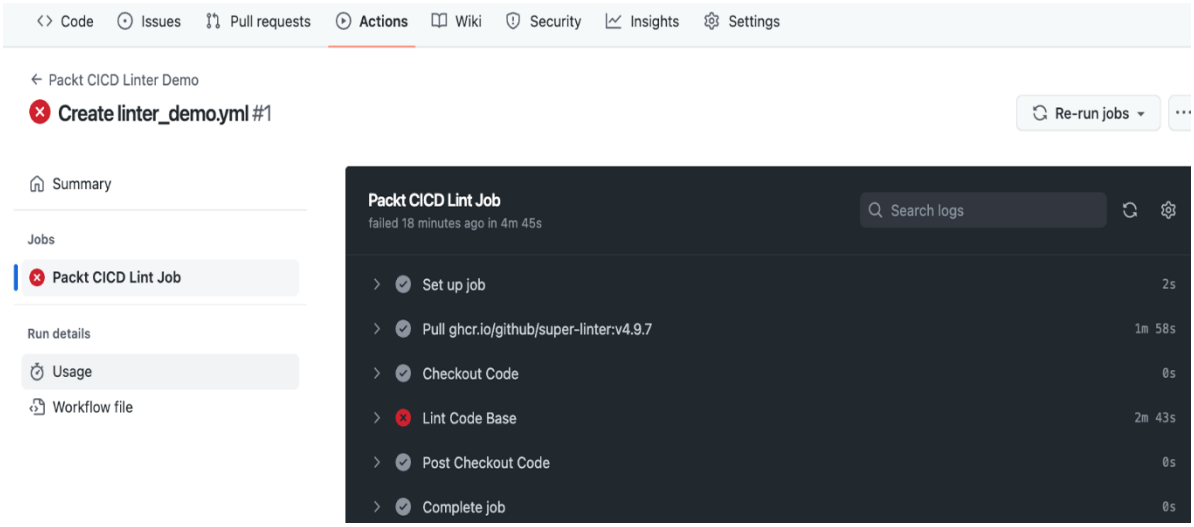



CODE COMMITS
BUILD & EXECUTE UNIT TESTS
DEPLOY TO TEST ENVIRONMENTS
RUN ACCEPTANCE TESTS
DEPLOY TO PRODUCTION

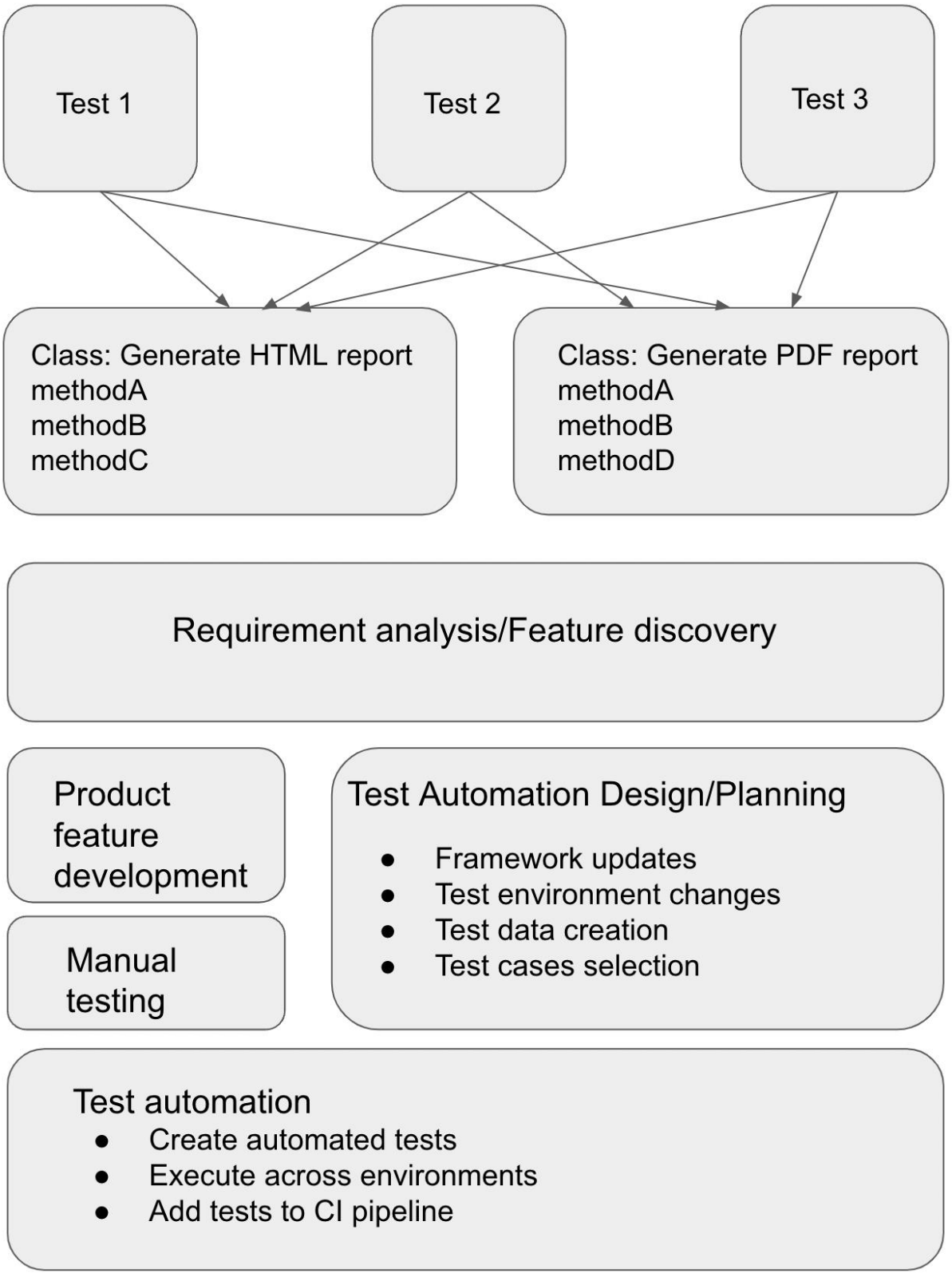

CI/CD SYSTEM
Feedback during the development process
Code Commits
Unit Tests
Component Tests
Feedback after deploying to a test environment
Smoke Tests
Integration/API Tests
End-to-end Tests
Feedback after deploying to a production-like environment
Smoke Tests
End-to-end tests
Performance Tests
User Acceptance Tests
Production Deployment
Smoke Tests
Improved quality and production readiness at every step


PacktPublishing / B19046_Test-Automation-Engineering-Handbook Public
Code Issues Pull requests Actions Wiki Security Insights Settings
B19046_Test-Automation-Engineering-Handbook / .github / workflows / linter_demo.yml in main
Edit new file Preview
name: Packt CICD Linter Demo
on: [push]
jobs:
super-lint:
name: Packt CICD Lint Job
runs-on: ubuntu-latest
steps:
- name: Checkout Code
uses: actions/checkout@v3
- name: Lint Code Base
uses: github/super-linter@v4
env:
DEFAULT_BRANCH: main
GITHUB_TOKEN: ${{ secrets.GITHUB_TOKEN }}

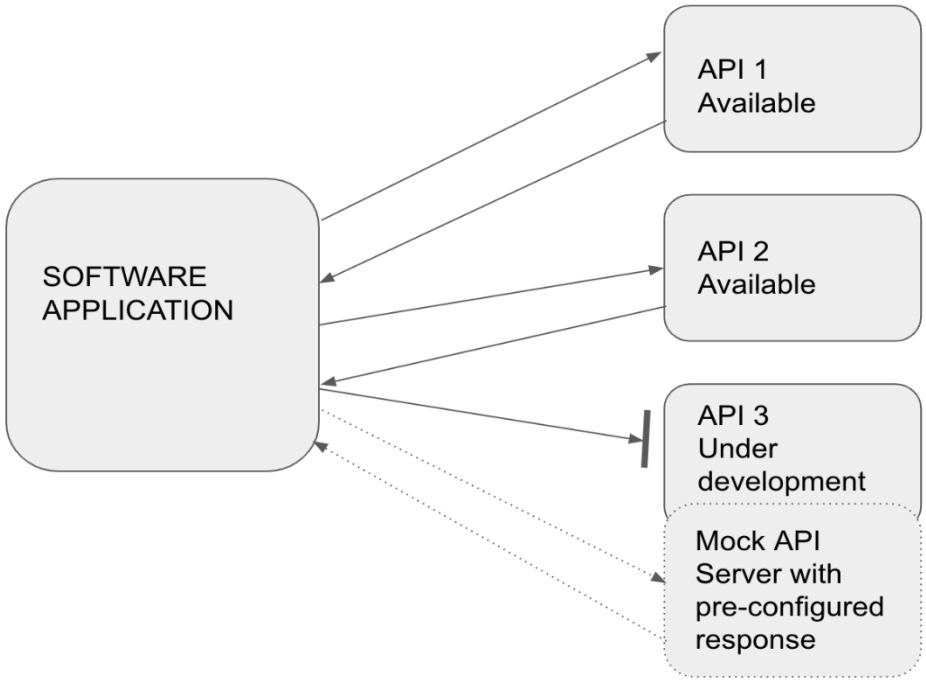

PacktPublishing / B19046_Test-Automation-Engineering-Handbook Public
Edit Pins
Code Issues Pull requests Actions Wiki Security Insights Settings
main 14 branches 0 tags
Go to file Add file Code
manisam Create linter_demo.yml 7ef266f 3 minutes ago 26 commits
.github/workflows Create linter_demo.yml 3 minutes ago
src Moved ch3 under src 2 months ago
LICENSE Initial commit 6 months ago
README.md readme file: add chapter 4 header 3 months ago
README.md

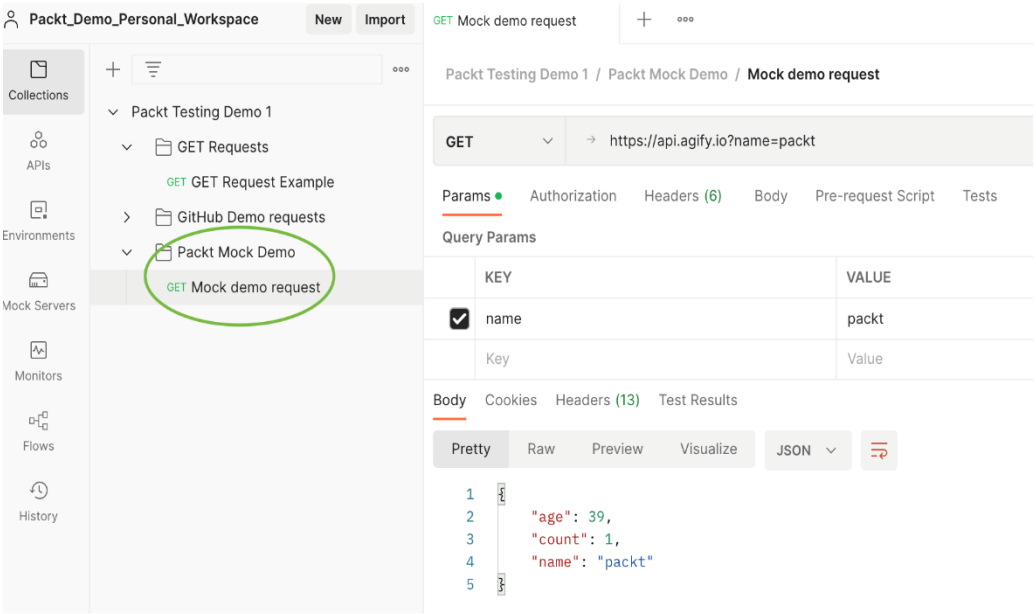

Code Issues Pull requests Actions Wiki Security Insights Settings
Packt CICD Linter Demo
Create linter_demo.yml #1
Re-run jobs
Summary
Jobs
Packt CICD Lint Job
Run details
Usage
Workflow file
Packt CICD Lint Job
failed 18 minutes ago in 4m 45s
Search logs
Set up job 2s
Pull ghcr.io/github/super-linter:v4.9.7 1m 58s
Checkout Code 0s
Lint Code Base 2m 43s
Post Checkout Code 0s
Complete job 0s

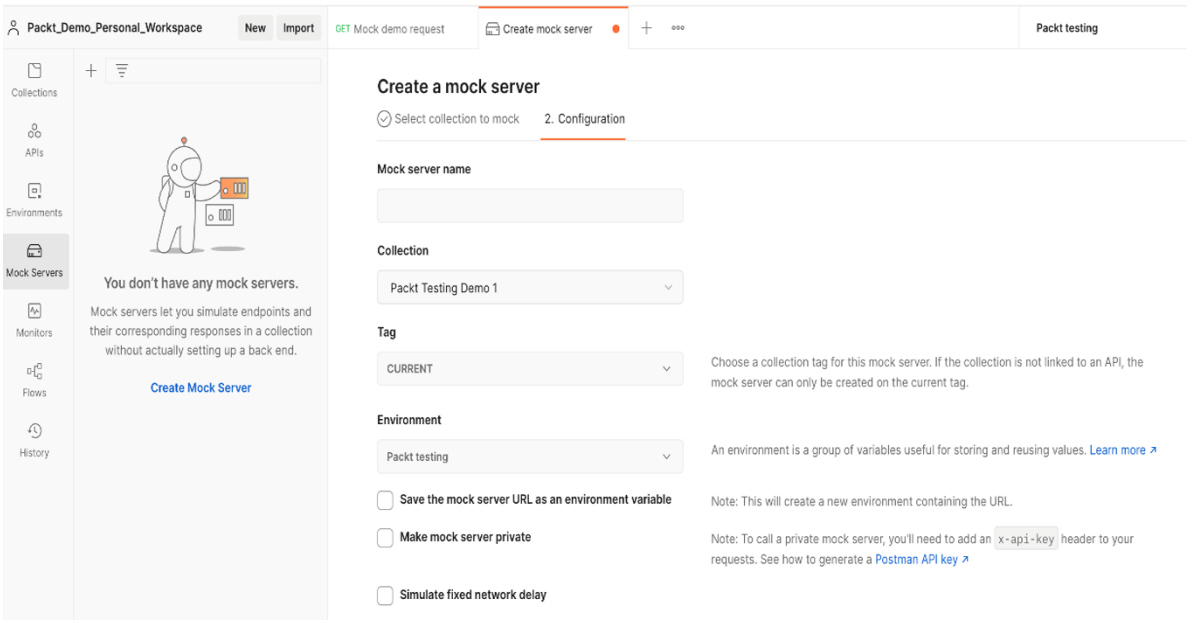
Chapter 10: Common Issues and Pitfalls

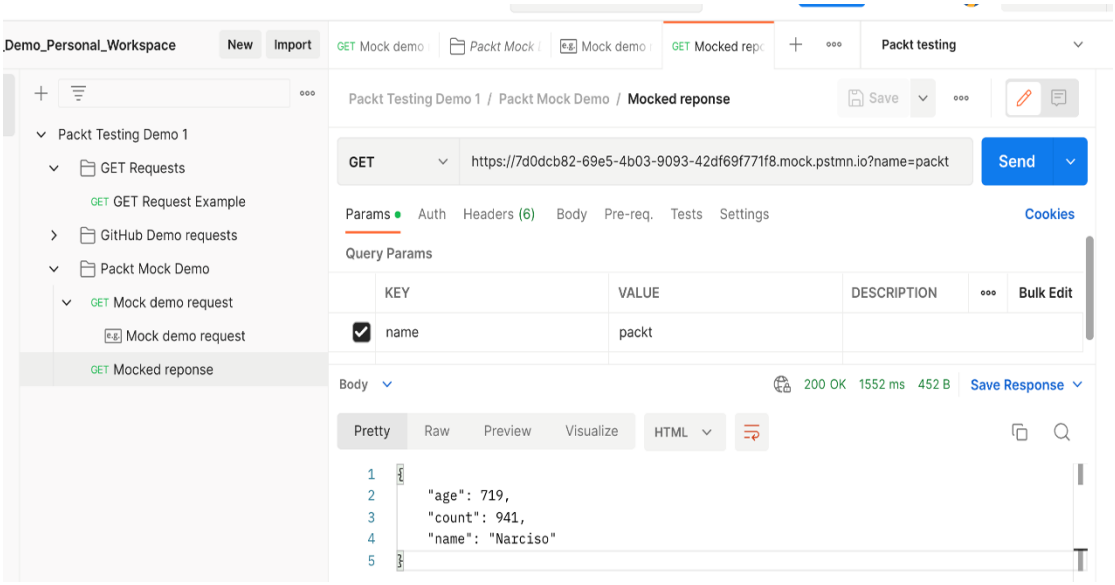


Chapter 11: Appendix






Packt_Demo_Personal_Workspace
New
Import
GET Mock demo request
Create mock server
Packt testing
Collections
APIs
Environments
Mock Servers
Monitors
Flows
History
You don't have any mock servers.
Mock servers let you simulate endpoints and their corresponding responses in a collection without actually setting up a back end.
Create Mock Server
Create a mock server
Select collection to mock
2. Configuration
Mock server name
Collection
Packt Testing Demo 1
Tag
CURRENT
Choose a collection tag for this mock server. If the collection is not linked to an API, the mock server can only be created on the current tag.
Environment
Packt testing
An environment is a group of variables useful for storing and reusing values. Learn more
Save the mock server URL as an environment variable
Note: This will create a new environment containing the URL.
Make mock server private
Note: To call a private mock server, you'll need to add an x-api-key header to your requests. See how to generate a Postman API key
Simulate fixed network delay


Demo_Personal_Workspace
New
Import
GET Mock demo
Packt Mock
Mock demo
GET Mocked rep
Packt testing
Packt Testing Demo 1
GET Requests
GET GET Request Example
GitHub Demo requests
Packt Mock Demo
GET Mock demo request
Mock demo request
GET Mocked reponse
Packt Testing Demo 1 / Packt Mock Demo / Mocked reponse
Save
GET
https://7d0dcb82-69e5-4b03-9093-42df69f771f8.mock.pstmn.io?name=packt
Send
Params
Auth
Headers (6)
Body
Pre-req.
Tests
Settings
Cookies
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
name
packt
Body
200 OK
1552 ms
452 B
Save Response
Pretty
Raw
Preview
Visualize
HTML
{
"age": 719,
"count": 941,
"name": "Narciso"
}