Creating E-Learning Games with Unity

Chapter 1, Introduction to E-Learning and the Three Cs of 3D Games
Chapter 2, Interactive Objects and MissionMgr

![Diagram of Interactive Objects and MissionMgr](Image)

```
Inventory Mgr (Script)

- Script
- Inventory Mgr

Inventory Objects
- Size: 1

Element 0
- Display Texture: None (Texture)
- Item: Coin
- Popup: None (Game Object)
- Quantity: 1
- Num Cells: 6
- Height: 40
- Width: 40
- YPosition: 0.65
```

```
width width width

SW
```
Mission Mgr (Script)

Missions

Element 0
- Activated: Yes
- Visible: Yes
- Status: MS_Acquired
- Display Name: Coin Craze
- Description

Tokens

Element 0
- Size: 2
- Element Token: Coin (MissionToken)
- Points: 500
- Reward: CoinReward

Element 1
- Size: 2
- Element Token: Coin2 (MissionToken)

Collect the coins!
Chapter 3, Mission One – Find the Facts

![Graph showing the relationship between Anxiety, Skill Required, Difficulty, Flow, and Boredom]

Set Heightmap resolution

Please note that modifying the resolution will clear the

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrain Width</td>
<td>500</td>
</tr>
<tr>
<td>Terrain Height</td>
<td>600</td>
</tr>
<tr>
<td>Terrain Length</td>
<td>500</td>
</tr>
<tr>
<td>Heightmap Resolution</td>
<td>513</td>
</tr>
<tr>
<td>Detail Resolution</td>
<td>1024</td>
</tr>
<tr>
<td>Detail Resolution Per Pal</td>
<td>8</td>
</tr>
<tr>
<td>Control Texture Resolution</td>
<td>512</td>
</tr>
<tr>
<td>Base Texture Resolution</td>
<td>1024</td>
</tr>
</tbody>
</table>

Set Resolution

![Terrain (Script) tool selection]

No tool selected
Please select a tool
a-[screenWidth/2,screenHeight/2]
b-[sw/2-tw/2],[sh/2-th/2]
Delaware

“Delaware was America’s first state.”
Return flags to monument
Chapter 4, Mission One – Future Proofing the Code
GeographyQuest

New
Info
Quit

Popup Button Script

Actions
Size
Element 0
Action
Data
Obj
Id
Name
Element 1
Action
Data
Obj
Id
Name
Element 2
Action

LoadLevel1
LoadLevel2
LoadLevelB
ShowGameObject
HideGameObject
QuitApplication
SelfDestruct
Instantiate

New
New
New
Chapter 6, NPCs and Associated Technology
Chapter 7, Mission Two – Testing a Player’s Learning
popup_Level2Start

Button1
line1
line2
line3
line4
line5
text

popup Button Script (Script)

Actions
Size
Element 0
Action
Data
Obj
Id
Name
Element 1
Action
Data
Obj
Id
Name
Element 2
Action
Data
Obj
Id

PopupButtonScript
3
EnableObject
setupLevel2
0
EnableObject
raceStartup
0
SelfDestruct
Racer8
0
Chapter 8, Adding Animations
Chapter 9, Synthesis of Knowledge

Diagram of knowledge synthesis process:

- Remember
- Understand
- Apply
- Evaluate
- Analyze

Screenshots of Unity Editor showing:

1. Hierarchy panel with game objects such as MainCamera and Player1.
2. Inspector panel for a popup object, showing settings for popupLevel3Start.
3. Inspector panel for another popup object, showing settings for popupLevel3Repeat.
4. _level3 node in the hierarchy, containing Directional light and LevelLogicObj.