Lab Report **GAME3004 – Mobile Game Development II**  W2022

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|  | **Lab / Assignment** | | 3 | **Date Submitted** | | 02/13/2022 | |
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|  | **Student Information** | | | | | | |
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|  |  |  | **Achievement Level** | | | |  |
| **Feature / Task / Subtask** | | | **Incomplete 0%** | **Unsatisfactory 50%** | **Satisfactory 75%** | **Complete 100%** | **Value** |
| Blender  (Create a Coin) | | | A Coin Mesh was not created in Blender. | Created a Simple Symmetrical Coin Mesh in Blender. However, several faces do not look right or are invisible. Materials and Textures have not been applied or are missing.  Animation is not working or is missing. | Created a Simple Symmetrical Coin Mesh in Blender that has been UV unwrapped and had several textures applied.  A Simple Animation has been created to Rotate the Coin.  However, some tweaking to the UV maps or the textures are required. | Created a Simple Symmetrical Coin Mesh in Blender that has been appropriately UV unwrapped and had several textures applied (Albedo, Metallic, Height, Normal, Roughness).  A Simple Animation has been created to Rotate the Coin. | 5 |
| Blender  (Coin Import to Unity) | | | Coin Mesh has not been imported into Unity. | Coin Mesh has been imported into Unity. However, it has many visual problems or is missing components.  An Animator Controller has not been created or the Rotation clip has not been added so that the Coin does not appear to animate in the Scene. | Coin Mesh has been imported into Unity correctly. Coin Mesh Materials have been Extracted in Unity.  Coin Mesh Textures have been imported to Unity.  An Animator Controller Asset has been created and the Rotation Animation has been added to it.  However, some additional tweaks and/or adjustments are required. | Coin Mesh has been imported into Unity correctly. Coin Mesh Materials have been Extracted in Unity.  Coin Mesh Textures have been imported to Unity.  An Animator Controller Asset has been created and the Rotation Animation has been added to it.  Animations have been adjusted as required. | 5 |
| Unity  (MiniMap Camera) | | | A new Camera Game Object was not added to the Scene. | A new Camera Game Object was added to the Scene. However, it was either not configured correctly or not positioned correctly so that the MiniMap UI elements would not appropriately display a map of the Scene from a “birds-eye view”.  The Script was either missing or produced errors. | A new Camera Game Object was added to the Scene and positioned appropriately.  The Camera was configured correctly, and a simple Script was added to the follow the player’s position.  However, some tweaking or adjustment was necessary to either the Camera configuration or to the attached Script. | A new Camera Game Object was added to the Scene and positioned so that it could view the Scene from a “birds-eye view”. The Camera Projection was set to Orthographic, and the Clear Flags property was set to Solid Color.  The Target Texture was set to the MiniMap Render Texture.  A simple Script was applied to allow the Camera to follow the Player’s X-Z position. | 5 |
| Unity  (MiniMap UI) | | | A MiniMap was not created and / or added the Scene. | Some Components were missing from the UI. The MiniMap is not displaying properly or does not have a mask applied correctly. | All Elements and Components for the MiniMap were added to the UI Canvas. However, the MiniMap requires some tweaking in terms of positioning, size or other properties. | A RenderTexture was created as a target for the MiniMap Camera. A RawImage was added to the UI Canvas and named “MiniMap Image”. The MiniMap Image’s Texture was Assigned to the RenderTexture.  A copy of the MiniMap Image was created, and a Mask component was added with the Texture property assigned to the MiniMapMask Sprite. A copy of the MiniMap Mask was created and was renamed to “MiniMap Border”.  All Components were layered to create an appropriately working MiniMap UI Element. | 5 |
| Unity  (Markers and MiniMapMask Sprites) | | | Player Marker, Enemy Marker and MiniMapMask Textures were not imported into Unity. | Player Marker, Enemy Marker and MiniMapMask Textures were imported into the Unity Project. However, imported textures were not correctly assigned. Materials were either not created for the MiniMap Markers and /or the correct shader was not assigned. | Player Marker, Enemy Marker and MiniMapMask Textures were imported into the Unity Project. Imported textures were assigned to a Sprite (2D and UI). Materials were created for both Markers, but the wrong shader was assigned. | Player Marker, Enemy Marker and MiniMapMask Textures were imported into the Unity Project. Imported textures were assigned to a Sprite (2D and UI).  Materials were created for both Markers and were assigned to a UI/Unlit/Transparent Shader. | 5 |
| Unity  (Death Plane and Respawn) | | | You did not create a Death Plane or related Script. | You Created a DeathPlane but the Player does not collide with it properly and the Respawn behaviour does not work. | You Created a DeathPlane and attached a Script to Respawn the Player, but the Script or Player position needs to be tweaked or adjusted. | You Created a DeathPlane and attached an appropriate Script so that when your player falls off the Tile Maze they Respawn to an appropriate location. | 5 |
| Version Control | | | No Repo Created or Repo inaccessible. | Repo is created but inappropriately named. Repo does not include necessary project components. | Repo is created and includes all components but only includes a single commit. | Added this week’s Lab to Master Repo.  Lab Folder is appropriately named.  Added instructor as collaborator. | 5 |
| WebGL Build and Live Site | | | Your Game has not been built for WebGL or deployed to GitHub pages. | Your Game has been built for WebGL but it is not playable and your build throws errors. Your Game has not been deployed properly to GitHub pages. | Your Game has been configured and built for WebGL. You have deployed your game to GitHub pages.  However, some tweaking is required for it to display and play correctly. | Your Game has been configured appropriately and built for WebGL. You have deployed your WebGL build to GitHub pages.  Your Game displays correctly and is playable. | 5 |
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|  | | |  |  |  | **Total** | **40** |

**\*\*Instructions: Please Highlight the Achievement Level for each Feature / Task / Subtask\*\***