Milestone 4 Tests Writeup

- Play Button is visible
  - Tests the flow of the game. The player needs to know there is a button present for any movement and interaction to start. We use color, light, and text to differentiate the button. The code verifies this by checking there is a button present
- Play button starts animation
  - Tests the logic involving a start timer for enemies. If the play button is pressed, the player knows that enemies are starting to appear.This code verifies that by checking if the enemy is present in location in front of the path where the window in the UI.
- Enemies not visible before combat starts
  - Tests that enemies only appear once the combat button is clicked. If this doesn't work, the player may be able to target enemies before combat starts. This is done visually.
- Enemy movement
  - Tests the logic involving the enemy moving from one location to another. If this logic doesn't work properly, then health will not decrease. This code verifies that enemies are constantly moving left to right on the map and not stuck in one location or corner in the map. We will check this visually
- Enemy reaching monument causes health decrease
  - Tests the logic involving the enemy decreasing health if it reaches the monument. If this doesn't work, then the game will have no challenge. We will test this by running the game and ensuring that health decreases.
- Enemy paths are on the path
  - Tests that enemies are constantly on the path. If this logic does not work properly, then the player's expectations of game logic will be broken. This is checked by selecting different points on the path
- Enemy animations don't lock out user interaction
  - Tests that players can interact with towers when the animations are playing. If this doesn't work, then players will not be able to palace towers. This is done by playing the animation and then attempting to buy a tower. We then check to make sure the purchase was successful
- End screen will appear when health == 0
  - Tests that if health equals 0 after a certain amount of enemies has touched the monument. If this is not true, players will continue to play the game with no health and reduce the challenge of the game. This is done by changing the health to 0 and check if end screen has appeared
- End screen will have start over button
  - Tests that the end screen will have a start over button. This will allow more interaction with the game and player. This code will be done by checking if the event handler for start over will take the player to the welcome screen. If this is

not true, then the start over functionality will fail and players forced to click quit the game and reduce user interaction.

- End screen will have quit button
  - Tests the end screen will have a quit button. This will allow more interaction with the game and player. This code will be done by checking if the event handler for the quit button will terminate the game and won't show any scenes. If this is not true, then the quit button functionality will fail and will reduce user interaction.