Capture the Flag

QA Plan

Objective

Create a tower defense game with a robust code base that allows for easy extension and follows design principles well. It is also important that each team member can quickly understand any given piece of code as we are working on many pieces of the game together.

Code Quality and Reviews

To facilitate code quality, each member of the group will have their code reviewed by at least one other member of the group. When a group member’s code is complete, they will first test it on their local machine and ensure that it functions as intended. Then, they will add it to the github repo and announce their change so that others have a chance to look at it. The conventions that will be most heavily emphasized are proper naming of variables, using design patterns, and overall code efficiency.

Testing

Integration and system testing will be the main focus of our testing endeavors. Most of the tests that will be done are simply to ensure that our code integrates with the Unity game engine correctly. Unit tests are more difficult to write (and arguably less important when using a game engine like Unity). Unit tests can be written to check the specific values certain methods return, but as most methods rely heavily on the game engine’s mechanics, they will be tested primarily through running the game and inspecting the assets while the game is running.

UX Design

The user experience will be analyzed by all team members and continually modified as the game progresses. We will set specific milestones of ways that the code can be improved when we notice issues with the UX. We also have a specialist in charge of assets and UX design who we can report feedback to.