

User Interface time estimate: 25 hours

- Due to the amount of flexibility allowed by a game as simple as battleship, we realize that UI has the greatest opportunity to distinguish our project given that it is allotted enough time. UI has to be responsible for accurately displaying the game state, transitions, and even non-functional elements such as a ship key. All of these elements, and a desire to create an appealing game, lead us to believe that it will take at least 25 hours.

Gamestate time estimate: 3 hours

- During our initial architecture meeting, we narrowed down the focus of Gamestate to initialization and two functions, as well as thinking through the logic of those functions. So, it seems pretty simple to write, and with adding additional error checks, we estimate it would take two people 1.5 hours each for a total of 3 hours.

main.py time estimate: 4 hours

- With the limited scope of main.py, we expect that 2 people working together on the file should take no longer than 2 hours each. In our first meeting, we decided the control flow of main.py, and the main timesuck will be specifying how main interacts with UI.

Testing time estimate: 5 hours

- Due to the pre-planned error checking and time spent during the development of the program thinking about potential issues, we expect that each person should only need to do about an hour of testing to ensure a good experience. This does not cover the time to potentially solve those issues, but instead focuses on ensuring the program works correctly.

Meeting(s) & Documentation: 28 hours

- Our first meeting took 3 hours, our next two meetings are planned to take about 1 hour each and then documentation alone will take about 1 hour per meeting. Given each team member will be working during the meetings we multiplied 5 by 5 for each member and added 1 times 3 for the documentation for each meeting which would only be done by 1 person.
- $((3 + 1 + 1) * 5) + (1 * 3) = 28$

Total: 65 hours