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CSC 466
Sequence of Plans

Title: Heuristic Playing Machines for the Game of Battleship

First Plan - February 9, 2023

A total of 17 tasks are planned, the first task provides an introduction to the project, task 2 ~ 9 intend to develop the basic infrastructure for the game, task 10 will develop a basic opponent to play against. Task 11 to 14 are the main aim of this project, and they will be repeated as much as possible. Lastly task 16 and 17 will conclude the project.

Tasks:
1. Description of the Game and Motivation for the Project.
2. Model the Battleship Board.
3. Display the Battleship Board.
4. Model the warships.
5. Display the warships.
6. Allow users to place warships in desired grids.
7. Develop a "shots" system.
8. Allow users to call "shots" at desired locations.
9. Develop a system that recognizes if the game is over.
10. Develop a heuristic machine that places ships and shoots randomly
11. Develop a new rule for placing ships.
12. Develop a new rule for calling shots.
13. Develop an heuristic machine that follows a few rules.
14. Heuristic machine vs randomly playing machine.
15. Repeat step 11 to 14 until one of the following is true:
    a. All imaginable rules have been exhausted.
    b. A very satisfactory set of rules have been implemented.
    c. No more time available for development.
16. Analyze the result.
17. Reflection