

Design Report

Design decisions made and why we made them.

1. Data Structure for Grid

- We used a 2 dimensional Integer Vector to create a grid that can hold different values depending on the state of the grid position.
- To simplify the process of saving and loading save information, the grid array is printed as a string so that it can be saved in a text file

2. A.I.

- We brainstormed game strategies and used conditional statements to implement them into our A.I

3. Save and Load Functions

- To be able to load game information after shutting down, file I/O was used to create a text file with the game information that will not get cleared after the program has shut down.

4. Graphical Libraries

- After researching different graphical libraries to implement this game, windows form application was chosen for its compatibility and simplicity.

5. Drawing Out the Board

- We used a .jpg file to create the background for the program and used windows form application functions to add button, labels, textboxes, and other functional objects.