## **Battleship Rules**

## Game Setup:

A 10x10 grid is generated with coordinates designated by a letter (A-J) representing the row and an integer (0-9) representing the column. 5 ships are placed randomly on the grid with the following names and lengths:

- Carrier 4 spaces long
- Battleship 4 spaces long
- Submarine 3 spaces long
- Destroyer 3 spaces long
- Patrol Boat 2 spaces long

Note: the ships only run up/down or left/right. No ships are placed diagonally. Ships do not overlap, and all parts of each ship remain within the grid boundary.

## **Game Objective:**

Sink as many ships as possible by firing and hitting all parts of the ship. The player is given 40 rounds of ammunition with which to accomplish this task. The game ends either in victory when all ships have been sunk or in defeat when all 40 rounds of ammunition have been expended with at least one ship surviving intact.

## **Gameplay:**

The user inputs a valid coordinate in the format (A-J)(0-9). The result of the shot is reported to the user and an updated grid is displayed. This process repeats until either all ships have been destroyed or 40 rounds have been fired.