



**Project title:** Battleship

**Group members:** Noah Ross and Walter Glockner

**Overview:** Battleship is a fun family friendly game. Traditionally played on a 10 by 10 grid, our version can have as many or as few squares as requested. The first player (user or computer) to sink all of the other player's battleships wins the game. The game can not end in a tie.

**Required functionality (65 pts. total):**

1. Player chooses the number of ships, the board size, and the location of the ships.  
Computer chooses the location of its ships at random.  
**(10 pts.)**
2. Players and the computer can guess squares to shoot at which will result in a hit or a miss. The system for guessing utilizes a coordinate system where the player inputs a guess for the x and y directions. The coordinate is then determined to be a hit or a miss depending on the random placement of the computer's ships.  
**(10 pts.)**
3. Players can shoot at squares already marked as a miss, but the computer can not.  
**(10 pts.)**
4. The board of the player and the computer is displayed, but the board of the computer is populated with question mark symbols while the board of the player is populated with the word "ship" where ships are located and "0" where they are not.  
**(15 pts.)**
5. The player and computer can not guess or place ships outside the designated area.  
**(10 pts.)**
6. Players can enter names and the computer is assigned a random name  
**(5 pts.)**
7. First player is chosen randomly  
**(5 pts.)**

**Bonus feature (5 pts. extra credit):**

Make a mode for ships larger than one point