

1. There are 3 types of thread which are being used. One, the Server is used to handle the new socket connection. Second, the PlayerHandlingThread is used to handle the player clients and the last one, ViewerHandlingThread is used to handle the viewer clients.

2. The server will create PlayerHandlingThreads only for the first 2 clients who connect to the server. Also, the other 8 remaining clients will be handled by the ViewerHandlingThreads.
3. As soon as 2 PlayerHandlingThreads created, the server will trigger both threads to start.
4. The PlayerHandlingThreads will send the signal to the players to set-up their boards. It will keep looping until all the ships are placed into the boards.
5. After the players have set-up their boards, the PlayerHandlingThreads notifies them that the game is started and whose turn it is. The player sends the location of the bomb to the PlayerHandlingThread. It will validate the bomb location and decide who the winner is. After that, both PlayerHandlingThread and ViewerHandlingThread will send the verification of the location and winner to all of the clients. If there is no winner, it will notify the players whose turn.
6. The game will not stop until there is only one player who is the winner of this game.

CLASS DIAGRAM

