

Akin Omisakin report:

To run code use `-jar assignment1-1.0-SNAPSHOT.jar 4 4 1` this means a 4 X 4 grid and 1 ship are created each are 3 spaces long

Task 1_1: after I did set name in constructor then used to the `Random ()` to randomly pick between 0- 1 0 for vertical 1 for horizontal

Task 1_2: I implemented the inherited methods from Abstract battleship straight forward not much time spent.

Task 1_3: check Attack was the took the longest because I had to search ship Coordinates for match values as the method parameters

Task 2_1: To populate the game Grid with grid dots required double for loops

Task 2_2: Converted the counting number (Starting from 1) by adding it to "Ship" String then storing each one into ships

Task 2_3: first step was to get the random values I decided to split the random numbers into 4 to make it easy

second step respect the horizontal and vertical orientation by working out add each value to the temporary array

third step equal game Grid random coordinates to '*' then `setShipCoordinates = tempArray`

Task 2_4: extend GameGrid to PlayerGameGrid and OpponentGameGrid. Need to use `print` instead of `println` to form grid structure. Hide ships on OpponentGameGrid by replacing them with '.'. Everything else showed up

Task 3_1: inherited the GameControls to Game then implemented the methods. return type of `getOpponentssGrid` and `getPlayersGrid` had to be the same a `AbstractGameGrid` so I created 2 object fields and returned them

Task 3_2: used `System.exit(1)` to shut code when condition was met, or it would loop if another string were entered

Task 3_3: used two local variables win and lose to determine what the output would be if I won the game or lost if returned true then the appropriate message would print.

used the `||` to return both Boolean variables, do not work with `&&` since they can be different values.

Task 3_4: definitely the hardest one, not much success when trying to do both grid under one loop so slit them up. First thing I did was set values in local variable so I could control it better.

I had a trouble getting a good accuracy using only one shipCoordinates of a single '*' so I added 2 more. then did the same with the miss because there was an error were only miss (%) would appear on the grid.

`exitGame ()` had to be at the start of playground so minimize errors in the game.

Task 4_1: used 1 instance of game that require parameters when run.

Task 4_2: code runs continuously as long checkVictory = false.

Task 4_3: if user inputs exit code will shut down. also, if checkVictory = true which it does when ALL ships are destroyed, they print "you have won" or "lost"

Task 4_4: input is passed into PlayedRound(input) -> localString

Task 4_5: Incorrect input using input mismatch exception