

Report

Task

Task 1

Status: **completed**

Outlining: create `BattleShip.java` and extends `AbstractBattleShip` class. In constructor, use Random object to define the `shiporientation` and init other params. Write the member functions which define in `AbstractBattleShip`. Finish the `checkAttack` method. Check all possible situation. Define a array `shipCoordinatesRecord` to record the coordinate which has been hit.

Task 2

Status: **completed**

Outlining: Create `GameGrid.java` and extends `AbstractGameGrid`. Create the `initializeGrid()`. Finish the `generateShips()`. Finish the `placeShip()`. Create `PlayerGameGrid.java` and `OpponentGameGrid.java`, extends `GameGrid`. Define `printGrid()` in them.

Task 3

Status: **completed**

Outlining: Create `Game.java` and implement `GameControls`. create player's and opponent's grid and implement getter methods of them. Implement `exitGame()` method. Implement `checkVictory()`. Implement `playRound()` to make robot smart.

Task 4

Status: **completed**

Outlining: Create `RunGame.java` and start it by create a `Game` object. Use params to get the height, hight and the number of ships. Use while loop function to make sure rounds are loop. Use regex `^[0-9]+, [0-9]+$` to match corret input and use `exitGame()` function which in game object to check the `exit`.

Task 5

Status: **completed**

Outlining:

Fast Start

Switch to the JAVA project root directory `assignment`

- package the project

```
mvn package
```

- run the jar with you params which are **width**, **height** and **number of ships**

```
java -jar .\target\assignment-1.0-SNAPSHOT.jar 5 5 3
```