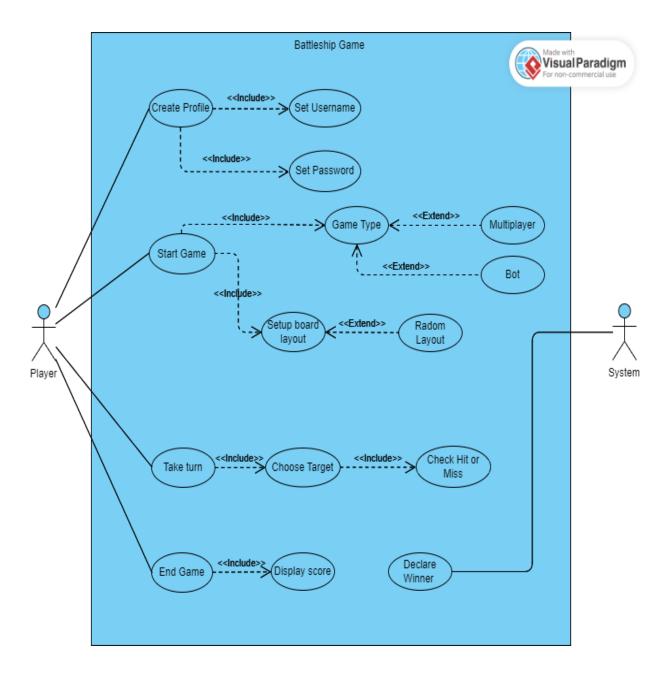**Part 1**

Part-2

UML Scenarios for Battleship game:

Use Case: Start Game	
Description: A player decides to start a new game of Battleship. **Actors:** Player **Precondition:** The player has created a profile. **Postcondition:** The player ready to select game type.	
Main success scenario:	
User:	**System:**
1. The player selects to start a new game. 3. The player chooses the desired game type.	2. The system prompts the player to choose the game type. 4. The system initializes the game based on the chosen type.
Alternative: The player enters start game without creating user profile and play game with system. **Exceptional:** Customer authentication fails repeat the login procedure.	

Use Case: Take Turn	
Description: The player selects coordinates on their opponent's grid. **Actors:** Player **Precondition:** The turn is completed. If all ships are sunk, proceed to "Declare Winner." If not, the next player takes their turn. **Postcondition:** The game board displays lates result of hit status.	
Main success scenario:	
User:	**System:**
1. The player decides which grid position to attack. **2.** The player inputs their choice into system.	**3.** The system processes the attack move. **4.** The system checks if it's a hit or miss on the opponent's board ("Check Hit or Miss"). **5.** The system updates both players' boards accordingly.
Alternative: If the move was a hit that sunk the last ship of the opponent, a message is displayed to both players indicating that the Attacking Player won the game. In this case, both players are given the option of clicking a button to start a new game. **Exceptional:** If there is a technical failure or system error the game would not be able to process the turn properly and this would result in ana exceptional scenario.	