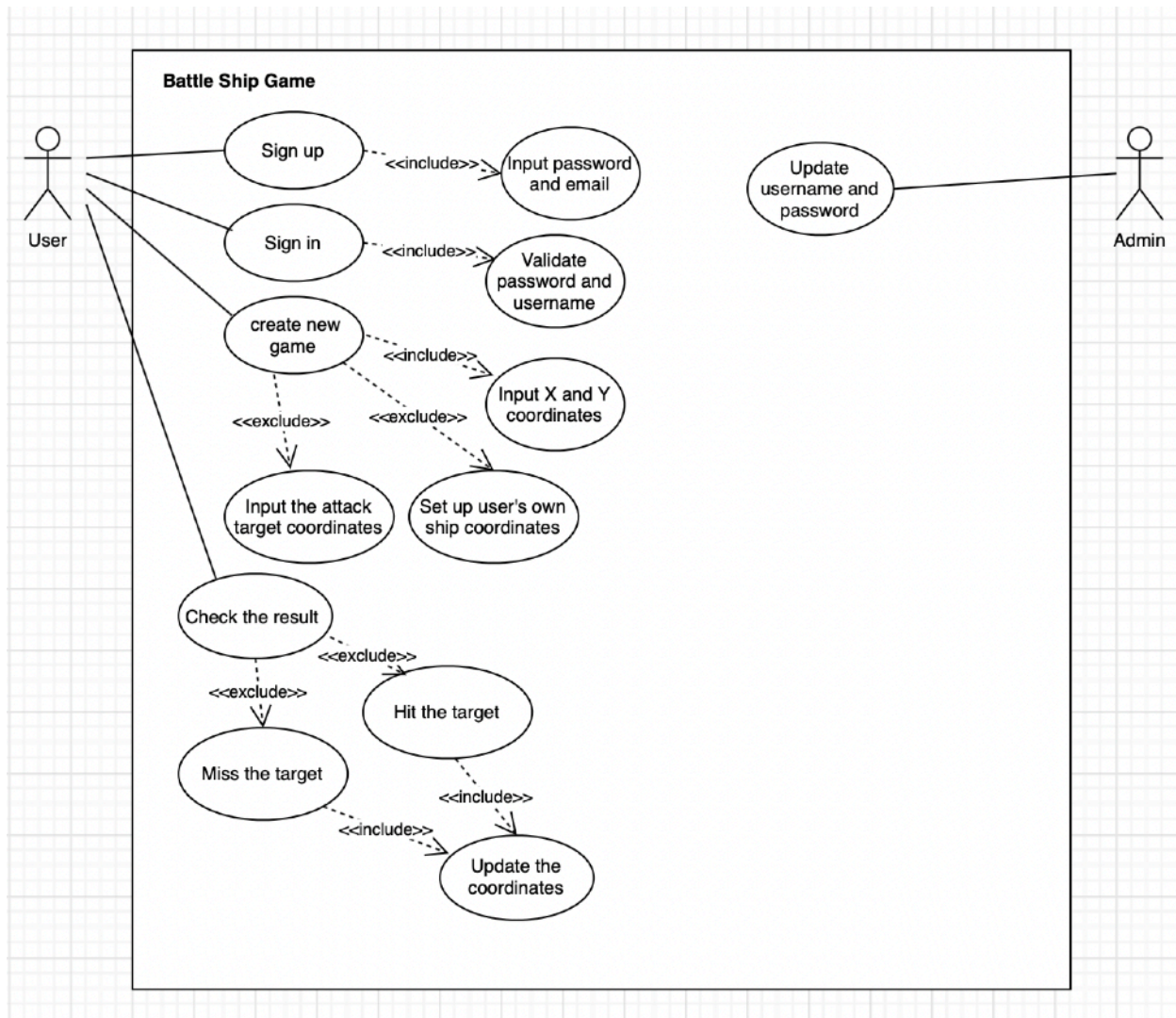


Assignment 2 - UML Use Case Modeling

Student Name: Runnan Guo

Student Number: 8533795

- Use Case Diagram



- Use Case Scenario

Use Case: Sign up	
Description: New users sign up for an account	
Actors: User	
Precondition: The user does not have an existing account	
Main success scenario	
User Enters the user email and password Confirms the password Verify the email address	System Check if the user information is already in the database Validate if the password is strong enough Send verification to user's email address Show the successful page to users and update the database
Alternative: User finishes registration without verifying his/her email.	
Exceptional: The password set by user is not strong enough: repeat the validate procedure.	

Use Case: Sign in	
Description: An existing user login to his/her account	
Actors: User	
Precondition: The user already have an account in the database	
Main success scenario	
User Enters the email address and password Click sign in	System Check if the email address is in the database Check if the password matches with the email address in the database If not, send the verification to the email address. Else, show the successfully logged in page.
Alternative: User entered the wrong password but was verified through the email.	
Exceptional: User entered the wrong password and was not verified by the email.	

Use Case: Create new game	
Description: Users play the game by entering the coordinates of ships	

Actors: Users	
Precondition: The user is registered	
Main success scenario	
User First enters five coordinates of his/her own ships Then enters the coordinates if the ship he/she wants to attack	System Carry out “Input X and Y coordinates” Set the chosen coordinates as user’s own ship Check if the user’s ship’s coordinates contain the coordinates that the other user wants to attack. If it does, set those coordinates as ‘killed’ and show the result to users If it does not, show ‘missed’ to the user Show the result of the game when all five of the user’s ships are marked as ‘killed’
Alternative: User left the game right before the end of the game.	
Exceptional: Users entered the wrong format of X and Y coordinates.	