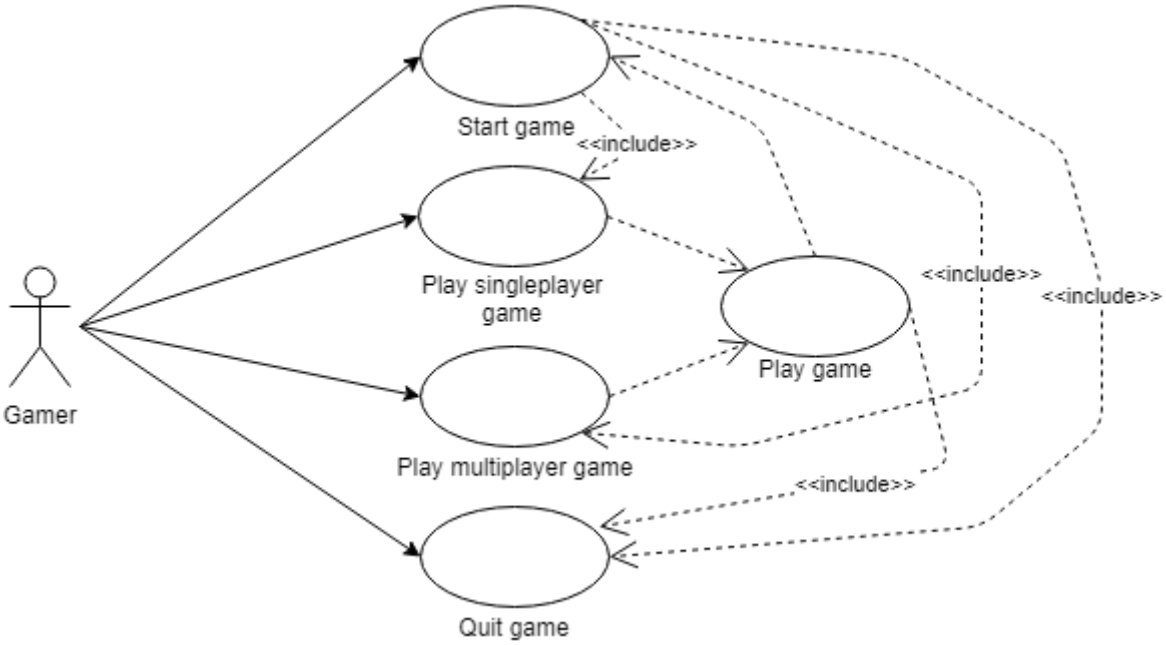
Use Case Diagram



UC 1 Start Game

Precondition: none.

Postcondition: the game menu is shown.

Main scenario

1. Starts when the player wants to begin a session of the hangman game.
2. The system presents the main menu.
3. The player makes the choice to play a single player game.
4. The system opens a single player game (see Use Case 2).

Repeat from step 2

Alternative scenarios

3.1 The player makes the choice to play a multiplayer game.
1. The system begin a multiplayer game (see Use Case 3)

3.2 The player makes the choice to quit the game.
1. The system quits the game (see Use Case 5)

3.3 Invalid menu choice
1. The system presents an error message.
2. Go to 2 in main scenario.

UC 2 Play Single Player Game

Precondition: System is running

Postcondition: A single player game has been played

Main scenario

1. Starts when player wants to play single player game.
2. The player chooses to play a new game.
3. System creates new game and play the game (See Use Case 4).
4. Return to menu (See Use Case 5)

Alternative scenarios

2.1 The player chooses to return to previous game.

1. Play previous game (See Use Case 4). If there is no previous game, play a new game.

UC 3 Play multiplayer game

Precondition: The system is running

Postcondition: A multiplayer game has been played.

Main scenario

1. Starts when the player wants to play a multiplayer game.
2. Rules of multiplayer version is shown and player 1 is asked to enter a word.
3. Player enters a word.
4. System set the word and ask for confirmation that the player want to use this word.
5. Player confirms
6. System display that player 2 should now guess the word, player is asked to confirm to continue.
7. Player confirms.
8. The game is played (See use case 4).
9. Player 2 managed to guess the word.
10. Program display that player 2 won the game and is asked to confirm to continue.
11. Player confirms
12. Return to menu (See Use Case 5).

Alternative scenarios

3.1. The player enters invalid word

1. Error message is shown
2. Player is asked to enter a new word.
3. Player enters a new word.

5.1 Player does not confirm

1. Player is asked to enter a new word
2. Player enters a new word.
3. Go to 4 in main scenario.

7.1 Player does not confirm

1. System continues to wait, player must confirm.

9.1 Player 2 did not manage to guess the word

1. System display that player 1 won the game and is asked to confirm to continue.
2. Go to 11 in main scenario.

UC 4 Play game

Precondition: The system is running.

Postcondition: A hangman game has been played.

Main scenario

1. Starts when the player wants to play a game.
2. System show choices and clues and tell player to enter a letter or a choice.
3. Player enters a letter.
4. System tells where in the word that letter is placed.
5. System presents that game is won and ask player for confirmation to continue.
6. Player confirms.
7. Return to previous state.

Alternative scenarios

3.1 The player makes invalid input.

1. Error message is shown.
2. Player is asked to make a new input
3. Player makes new input

3.2 The player makes the choice to quit the game.

1. The system quits the game (see Use Case 6)

3.2 The player makes the choice to return to menu.

1. Player is asked to confirm.
2. Player confirms.
   2.1 If player do not confirm: Go to 2 in main scenario.
3. The game returns to the menu. (See UC 1)

4.1 Word does not contain letter.

1. Add part of hangman.
2. Letter is added to guessed letters.
3. Go to 2 in main scenario.

5.1 All the letters in the word is not guessed yet

1. Go to 2 in main scenario.

5.2 Max number of wrong guesses is reached.

1. Game presents game over and ask player to confirm to continue.
2. Player confirms
3. Return to previous state.

UC 5 Quit Game

Precondition: The system is running.

Postcondition: The system is terminated.

Main scenario

1. Starts when the player wants to quit the game.
2. The system prompts for confirmation.
3. The player confirms.
4. The system terminates.

Alternative scenarios

3.1. The player does not confirm

1. The system returns to its previous state