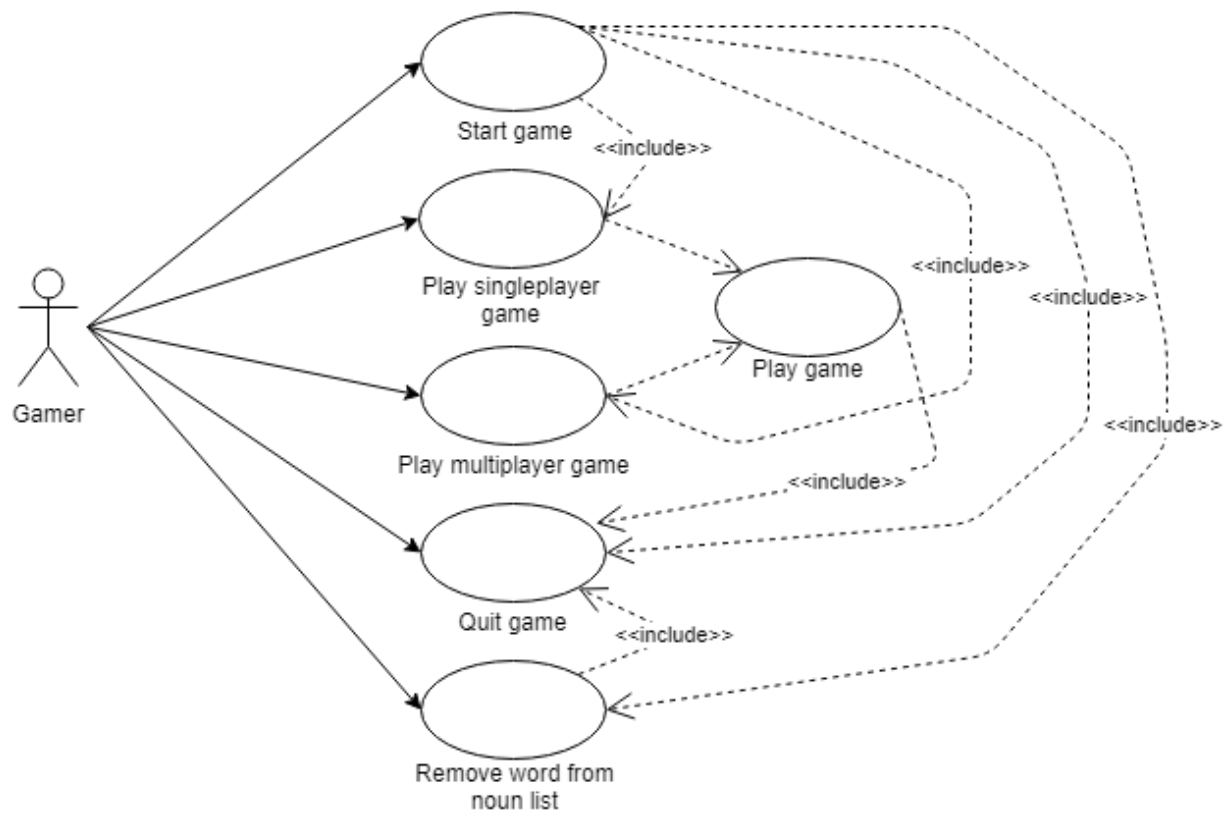


## Use Case Diagram



## 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 Starts when the player makes the choice to play a multiplayer game.
  1. The system begin a multiplayer game (see Use Case 3)
- 3.2 Starts when the player makes the choice to remove a word from noun-list.
  1. The system goes to remove word (see Use Case 5)
- 3.3 Starts when the player makes the choice to quit the game.
  2. The system quits the game (see Use Case 6)
- 3.4 Starts when the player makes an 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
4. Play the game (See Use Case 4).
5. Game was lost.
6. Return to menu (See Use Case 1)

### **Alternative scenarios**

2.1 Starts when the player chooses to return to previous game.

1. Go to 4. If there is no previous game, play a new game.

5.1 Starts when the game was won.

1. System raises high score and go to 3.

## **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 1).

### **Alternative scenarios**

3.1. Starts when 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 Starts when the 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.

9.1 Starts when 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.
6. Return to previous state.

### **Alternative scenarios**

3.1 Starts when 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 Starts when the player makes the choice to quit the game.

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

3.2 Starts when 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 Starts when the 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 Starts when all the letters in the word is not guessed yet

1. Go to 2 in main scenario.

5.2 Starts when max number of wrong guesses is reached.

1. Game presents game over.
2. Return to previous state.

## **UC 5 Remove word from noun-list**

Precondition: The system is running.

Postcondition: Word is removed from txt-file.

### **Main scenario**

1. Starts when player want to remove a word from noun-list.
2. The system asks the player to enter the word to be removed or a menu choice.
3. The player enters a word.
4. The system check that the word is part of the list and asks for confirmation to remove the word if it is.
5. The player confirms.
6. The system confirm that the word is removed and ask for confirmation to continue.
7. The player confirms.
8. Go to 2.

### **Alternative scenarios**

3.2 Starts when the player makes the choice to quit the game.

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

3.3 Starts when 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 Starts when the word is not part of the list

1. System prompts that word is not part of the list.
2. Go to 2.

5.1 Starts when the player does not confirm.

1. The system confirm that the word was not removed and ask for confirmation to continue.

## **UC 6 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. Starts when the player does not confirm
  1. The system returns to its previous state