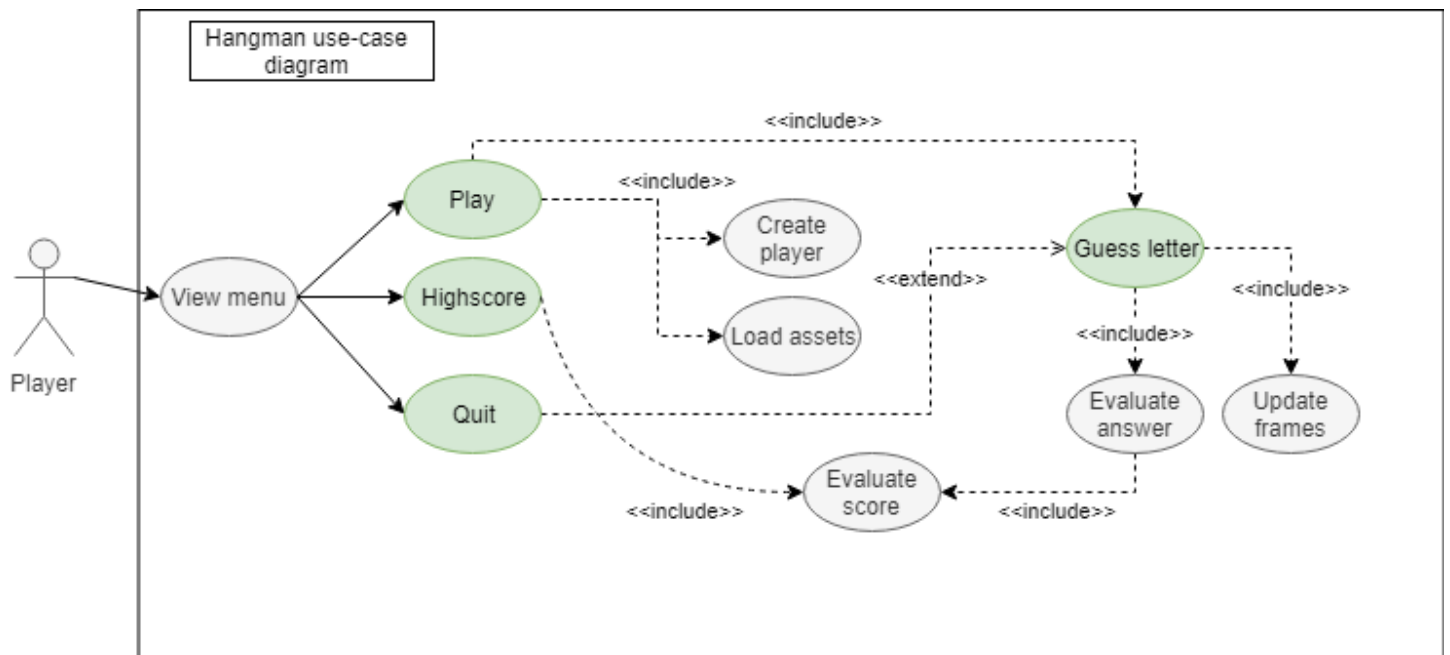


## Design & implementation

### Use-case Diagram

Below is the use-case diagram that will define the planned user interaction for the system. It will serve as a high-level blueprint of user interaction and will be approached with an agile development method.

Note: This diagram may be subject to change during the development process.



# Use-Case Play

Actor: Player

Pre-condition: Player is shown menu.

Post-condition: Player is returned to menu.

## Main Scenario

1. User wants to play.
2. A menu with options are displayed.
3. User chooses Play.
4. Player is prompted for a nickname.
5. Game assets are loaded into memory.
6. Player is prompted for a single letter.
  - 6.1 Randomized word contains letter.
  - 6.2 Number of attempts are checked.
  - 6.3 Frame is updated.
  - 6.4 Repeat 6.
7. All letters are guessed.
8. System produces Victory screen.
9. User confirms return to menu.
10. User quits the game.

## Alternative Scenarios

- 2.1 User chooses Quit game.
  1. System exits.
- 2.1 User enters invalid menu-number
  1. User is prompted for new number.
- 4.1 User enters too short nickname.
  1. User is asked to try again.
6. Player enters zero or more than 1 letter.
  1. The player is asked to try again.
- 6.1 Randomized word does not contain letter.
  1. Number of attempts are increased.
  2. Next frame is rendered.
  3. Step 6 repeated.
- 6.2. Attempts are up.
  1. Player loses game.
- 6 Player wants to abort.
  1. Player types 'abort'.
  2. Player is returned to menu.

## Use-case Highscore

Actor: Player

Pre-condition: Player is shown menu.

Post-condition: Player is returned to menu.

### Main Scenario

1. User wants to view Highscore.
2. A menu with options are displayed.
3. User chooses Highscore.
  - 3.1 User is presented with Highscores.
  - 3.2 User confirms return to menu.

### Alternative Scenarios

- 3.2 User does not confirm return to menu.
  1. System idle until confirmation.

## Use-case Quit

Actor: Player

Pre-condition: Player is shown menu.

Post-condition: Player is returned to menu.

### Main Scenario

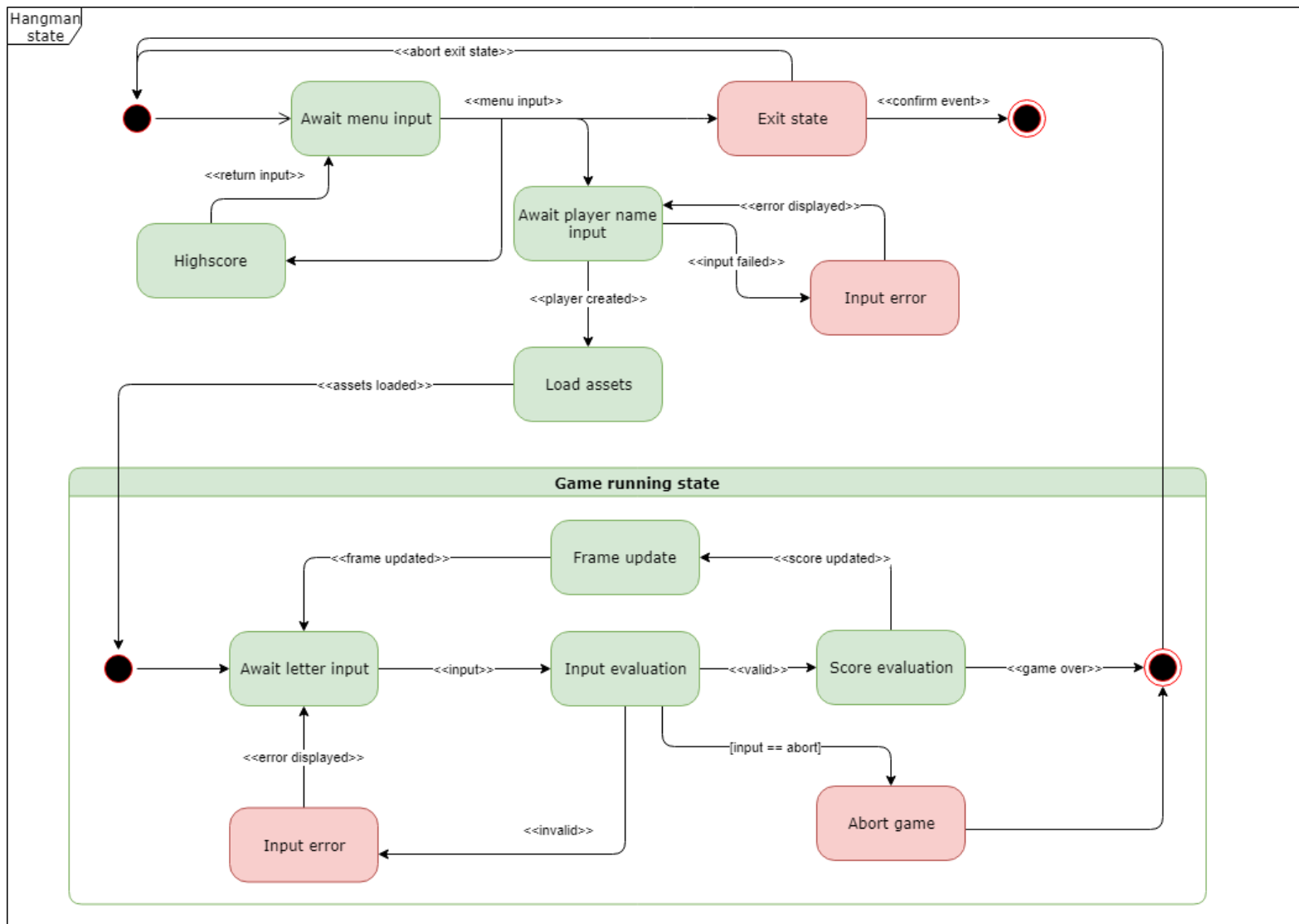
1. User wants to Play.
2. A menu with options are displayed.
3. User chooses to quit.
  1. System exits.

### Alternative Scenarios

3. User chooses to Play.
  1. User wants to quit.
  2. User enters 'abort'.
  3. Player is returned to menu.
  4. Player chooses to quit.
  5. System exits.

## State-machine Diagram

Below is a diagram description of the different state transitions of the game.  
As with the use-case diagram it could be subject to change in later iterations.



## Class diagram

Following diagram further describes the relationships and structure of the java classes.

Hangman Class diagram

