

Use Cases for Hangman game

UC 1 Start Game

Precondition: none.

Postcondition: the game menu is shown.

Main scenario

1. Starts when the user wants to begin a session of the hangman game.
2. The system presents the main menu with a title, the option to play, get instructions and quit the game.
3. The player makes the choice to start the game.
4. The system requests the player to select the difficulty level (see Use Case 2).

Alternative scenarios

3.1 The player makes the choice to quit the game.

1. The system quits the game (see Use Case 2)

3.2 The player makes the choice to ask for instructions

1. The system displays the instructions of how to play the game.

4.1 Invalid menu choice

1. The system presents an error message.
2. Go-to 2

UC 2 Select Difficulty

Pre-Condition: Start Game

Post Condition: Difficulty Menu is shown

Main Scenario:

1. The system presents the difficulty menu with a title, which displays the level of difficulty with three options (Easy, Medium and Difficult).
2. The player selects the difficulty from the three options.
3. The system then starts the game on the desired difficulty level.

Alternate Scenarios:

2.1 The player makes the choice to quit the game.

1. The system quits the game (see Use Case 2)

2.2 The player desires to go back to the main menu.

1. The system goes back to the main menu.

3.1 Invalid menu choice

1. The system presents an error message.
2. Go-to 2

UC 3 Play the Game

Pre-condition: Player has selected the difficulty level

Post Condition: The game starts running.

Main Scenario:

1. The player is presented with several dashes which denotes the number of letters in the word to be guessed.
2. There is an On-Screen Alphabet button collection from which the player selects an alphabet.
3. The word to be guessed consists of the selected alphabet and no lives are reduced.
4. All the letters of the word are guessed correctly and the game ends without hanging the man.
5. The system then comes out of the game.

Alternate Scenarios:

2.1. Error from keyboard Input

1. If the player types in a letter from the keyboard, an error is displayed.

3.1. Incorrect letter guess

1. The player guesses an incorrect letter of the word, for which he loses one life in the game.

4.1. All Lives lost

1. Depending on the difficulty, if the player makes maximum incorrect guesses, then the game ends with hanging the man.

2. The system comes out of the game after all lives are lost.

5.1 Player quits on will

1. The player selects the pause button and can either resume the game or go back to the main menu or exit the game, the latter both of which implying that the system will end that session of the game.

UC 4 Pause Game

Precondition: Game is running.

Postcondition: Display pause menu.

Main Scenario:

1. Starts when the user wants to pause the game.
2. A menu is displayed with three options (Resume game, Main Menu and Exit game) during which your game will be paused temporarily to avoid losing progress.
3. The player wishes to continue his current session of the game and clicks on the resume button.
4. The system resumes the game from where he left off.

Alternate Scenario:

3.1 Select Main Menu

1. The player wishes to go back to the main menu and clicks on the main menu button displayed.
2. The system ends the current session where the player loses the current progress and displays the main menu.

3.2 Select Exit

1. The player wishes to exit the game and clicks on the Exit button displayed.
2. Another window pops up with a confirmation message to confirm his selection.
3. The player clicks yes, and the system ends the current game session and comes out of the program.

UC 5 Quit Game

Precondition: The game is running.

Postcondition: The game is terminated.

Main scenario

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

Alternative scenarios

3.1. The user does not confirm

1. The system returns to its previous state