

# Use cases for the Hangman project

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March 21, 2019

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## 1 UC 2 - Play Game

Precondition: the game has been started.

Postcondition: the game is ended.

### 1.1 Main scenario

1. Starts when the gamer has started the game.
2. The system presents the gamer with the number of letters of the word which have not been input yet, the letters which have been input which were right as well as the letters which have been input which were wrong.
3. The gamer inputs a correct letter to the system.
4. The system show the letter in the word and the number of letters remaining.
5. The gamer repeats steps 3-4 until all letters of the word has been input.
6. The system presents the gamer with the word and the choice of solving a new word, going to the main menu or quit the game altogether.
7. The gamer chooses to quit the game.
8. The game ends.

### 1.2 Alternative scenarios

- a\*. At any time, the gamer indicates that he/she wants to quit the game.
  - a\*.1. The system quits the game (see UC 3)
- 3.1. The gamer inputs an incorrect letter to the system
  - 3.1 a. The gamer has input an incorrect letter less times than or equal to the allowed number of incorrect letters.
    - 3.1 a.1 The system indicates that the letter was incorrect and the number of incorrect answers allowed which remain.
    - 3.1 a.2 Goto 2

3.1 b The gamer has input an incorrect letter more times than the allowed number of incorrect letters.

3.1 b.1 The system indicates that the letter was incorrect and presents the gamer with the correct word and presents the gamer with the choice of restarting at the difficulty level, quitting or going to the main menu.

3.1 b.1 The gamer chooses to quit.

- The game ends.

3.1 b.2. The gamer chooses to restart.

- The system presents a new word, goto 2.

3.1 b.3. The gamer chooses to go to the main menu.

- The system presents the main menu.

7.1. The gamer chooses to solve a new word.

7.1.1 Goto 2.

7.2. The gamer chooses to go to the main menu.

7.2.1 The system presents the main menu (see UC 1).

## **2 UC 3 - Authentication for Manage Words**

Precondition: The user is located in the "main" menu.

Postcondition: The user has moved into the "manage words" menu.

### **2.1 Main Scenario**

1. Starts when the user has chosen "Manage words." from the main menu.
2. The system asks for an authentication password.
3. The user provides the correct password.
4. The system present the "manage words" menu.

## **2.2 Alternative scenarios**

- 3.1 The user provides an incorrect password.
- 3.2 The system informs the user that the password was incorrect.
- 3.3 The system present the main menu.

## **3 UC 4 - Manage Words**

Precondition: The admin is located in the "manage words" menu.

Postcondition: The admin has managed a word (added, adjusted, removed).

### **3.1 Main Scenario**

- 1. Starts when the admin has chosen to open the manage words menu.
- 2. The system presents the admin with the choices of adding a word, removing a word, adjusting a word or quitting the menu.
- 3. The admin chooses to add a word.
- 4. The admin adds a word according to UC 5 (see UC 5).
- 5. The system presents the admin with the choice of adding another word or going back to the manage words menu.
- 6. The admin chooses to go back to the manage words menu.
- 7. Goto 2.

### **3.2 Alternative scenarios**

- 3.1. The admin chooses to go to the main menu.
  - 3.1.1 The system presents the main menu (see UC 1).
- 3.2. The admin chooses to remove a word.
  - 3.2.1 The admin removes a word according to UC 6 (see UC 6)

3.2.2 The system presents the admin with the choice of removing another word or going back to the manage words menu.

3.2.2.a The admin chooses to go back to the manage words menu.

3.2.2.a.1 Goto 2.

3.2.2.b The admin chooses to remove another word.

3.2.2.b.1 Goto 3.2.

3.3. The admin chooses to adjust a word.

3.3.1 The admin adjusts a word according to UC 7 (see UC 7)

3.3.2 The system presents the admin with the choice of adjusting another word or going back to the manage words menu.

3.3.2.a The admin chooses to go back to the manage words menu.

3.3.2.a.1 Goto 2.

3.3.2.b The admin chooses to adjust another word.

3.3.2.b.1 Goto 3.3.

6.1. The admin chooses to add another word.

6.1.1 Goto 4.

## 4 UC 5 - Add Word

Precondition: The admin has chosen to add a word.

Postcondition: The admin has added a word.

### 4.1 Main Scenario

1. Starts when the admin has chosen to add a word to the list of words.
2. The system prompts the admin to input the word.
3. The admin inputs the word.
4. The system prompts the admin to choose a difficulty associated with the word.

5. The admin chooses an allowed difficulty.
6. The system indicates that the word has been added.
7. The system presents the admin with the choice of adding another word or going back to the manage words menu (see UC 4, step 5).
8. The admin chooses to go back to the manage words menu.
9. The system presents the manage words menu (see UC 4).

## **4.2 Alternative Scenarios**

- a\*. At any time, the admin indicates that he/she wants to quit the menu.
  - a\*.1. The system quits the menu and presents the main menu.
- 5.1. The admin chooses an disallowed difficulty.
  - 5.1.1 The system presents an error message.
  - 5.1.2 Goto 4.
- 7.1. The admin chooses to add another word.
  - 7.1.1 See UC 4, step 6.1.1.

## **5 UC 6 - Remove Word**

Precondition: The admin has chosen to remove a word.

Postcondition: The admin has removed a word.

### **5.1 Main Scenario**

1. Starts when the admin has chosen to remove a word to the list of words.
2. The system displays the words on file and prompts the admin to choose the word to remove.
3. The admin chooses a word.
4. The system asks the admin if he/she wants to remove the word.

5. The admin answers yes.
6. The system indicates that the word has been removed.
7. The system presents the admin with the choice of removing another word or going back to the manage words menu (see UC 4, step 3.2.2.).
8. The admin chooses to go back to the manage words menu.
9. The system presents the manage words menu (see UC 4).

## 5.2 Alternative Scenarios

a\*. At any time, the admin indicates that he/she wants to quit the menu.

a\*.1. The system quits the menu and presents the main menu.

3.1. The admin chooses a word which does not exist.

3.1.1 The system presents an error message.

3.1.2 Goto 2.

4.1. The admin chooses no.

4.1.1 The system indicates that no word has been removed.

4.1.2 Goto 7.

7.1. The admin chooses to remove another word.

7.1.1 See UC 4, step 3.2.2.b

## 6 UC 7 - Adjust Word

Precondition: The admin has chosen to adjust a word.

Postcondition: The admin has adjusted a word.



## 6.1 Main Scenario

1. Starts when the admin has chosen to adjust a word in the list of words.
2. The system displays the words on file and prompts the admin to choose the word to adjust.
3. The admin chooses a word.
4. The system asks the admin to input the adjusted word.
5. The admin inputs the adjusted word.
6. The system asks the admin if he/she wants to adjust the word accordingly.
7. The admin answers yes.
8. The system indicates that the word has been adjusted.
9. The system presents the admin with the choice of adjusting another word or going back to the manage words menu (see UC 4, step 3.3.2.).
10. The admin chooses to go back to the manage words menu.
11. The system presents the manage words menu (see UC 4).

## 6.2 Alternative Scenarios

- a\*. At any time, the admin indicates that he/she wants to quit the menu.
  - a\*.1. The system quits the menu and presents the main menu.
- 3.1. The admin chooses a word which does not exist.
  - 3.1.1 The system presents an error message.
  - 3.1.2 Goto 2.
- 6.1. The admin chooses no.
  - 6.1.1 The system indicates that the word has not been adjusted.
  - 6.1.2 Goto 2.
- 10.1. The admin chooses to adjust another word.
  - 10.1.1 See UC 4, step 3.3.2.b