Software Engineering Group Project
User Interface Specification, Use Case Document

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1 INTRODUCTION

1.1 Purpose of this Document

This document describes the main use cases of the system. It should be read in the context of the Group Project, taking into account the JoggleCube Requirements Specification [1]

1.2 Scope

This document covers who the typical users of the system are, their needs, use cases and any errors they may come across.

The document should be read by the developers working on implementing the system.

1.3 Objectives

This Document aims to:

- define who the users of the system are.

- identify their specific needs.

- explain the use cases of the system for each type of user.

- identify possible error conditions and what is to be done about them.

2 Typical Users

2.1 Second Year Computer Science Students

As described in the JoggleCube Requirements Specification [1], these users are familiar with standard software tools, and with WIMP software. They are by default, quite lazy, and so the software should provide the indicated features with the fewest possible mouse movements and keystrokes.

3 Use Cases

3.1 Second Year Computer Science Students

3.1.1 Play against a new Grid

The user wil click the Start Game button and a new grid will be generated for the user to compete against, the user will now be able to play the game (please see use case: 3.1.3).

3.1.2 Compete against a saved grid

The user will click the load Grid button and a screen will be displayed where the user can select a saved grid from a list of recently saved grids or load a grid from a file using a standard fileChooser. Once that has happened the user can click the start grid button to load the grid, the user will now be able to play the game (please see use case: 3.1.3).

3.1.3 Playing the game

The user will be faced with a 3d cube with the 27 letters in a 3x3x3 grid. Space for the words that the user has found, an input bar for building words from the letters, a button for confirming the found word and pause and end game buttons.

The user can then repeat these actions until the timer runs out.

3.1.3.1 Cube rotation

The user will be able to rotate the cube by holding the right mouse button and moving the mouse.

3.1.3.2 Finding a Word

The user can select letters by clicking on the relevent boxes on the 3d cube with the mouse, to build up a word, or they can enter the letters manually into the input box. They can then press the confirm word button to check that is it a valid word. If it is valid, the button will go green and the word will be added to the found words list and the input box will be cleared ready for the next word. If it is not a valid word the button will go red, the user may then change the letters to try alternative words.

3.1.4 Pausing

The user can pause the game by pressing the pause button with the mouse or pressing the escape key.

3.1.5 Ending the game

The user can finish the game early before the timer runs out by clicking the exit game button or the timer will run out.

3.1.6 Save Score

3.1.7 Save Grid

3.1.8 View Overall highscore

From the home screen the user can press the HighScores button to view the current overall highscores.

3.1.9 View Grid Highscore

Click the load grid button on the home screen then a screen will be displayed where the user can select a saved grid from a list of recently saved grids or load a grid from a file using a standard fileChooser. Once that has happened the user can click the View Grid scores button to display the high score for this grid.

Or when a user finishes the game the user will be displayed the high score for that grid and have the option to save their score to the highscore table(see 3.1.6 on saving a score).

3.1.10 Finding help

From the home screen or pause screen the user can press the help button to bring up a helpful guide on how to play.

4   Error Conditions

REFERENCES

[1] *Software Engineering Group Projects* JoggleCube Game Requirements Specification. C. J. Price SE.QA.CSRS. 1.0 Release.

DOCUMENT HISTORY

Version	CCF No.	Date	Changes made to Document	Changed by
0.1	N/A	2018-02-01	Initial creation	NAW21
0.1.1	N/A	2018-02-02	Begun writing the introduction and Typical Users Section	NAW21
0.1.2	N/A	2018-02-06	Started writing use cases	NAW21