Group Project JuggleCube -

Test Specification Document

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1. INTRODUCTION

1.1. Purpose of this Document

The purpose of this document is to provide test requirements for the game. It identifies the user input, expected output and pass criteria for each test.

1.2. Scope

This document specifies the test requirements for the JoggleCube game. It indicates the main tests to be carried out.

This document should be read by all project members. It is assumed that the reader is familiar with QA Plan and QA Test Procedure Standards.

1.3. Objectives

The objective of this document if to provide test specifications to project members, so as to verify that all Functional Requirements are met, according to the Requirements Specification document.

2. TEST SPECIFICATION

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-001	FR1	Check that the main page appears when the user presses "New Game"	Press the "New Game" button on the landing page	The main page containing the grids of letters, timer, list of correct words and score appears	The game loads with all of the required components
SE-F-002	FR2	Check that a new 3x3 grid of letters is generated when the user chooses a new game	User starts the game and selects "New Game"	A 3x3x3 grid of random letters should appear in the main page	The number of time a particular letter appears does not exceed the population amount
SE-F-004	FR3	Check that the user can select a previously generated grid of letters	User starts the game and selects "Load Game"	A list of previously saved games appears, along with the user name and the highest score achieved on these games	The current user can select any of these saved games and load them
SE-F-003	FR2	Check that a previously selected letter cannot be selected again	User selects the letters on the grids	The word should contain only the letters selected as they appear in the grid	A particular letter in the word can appear less or equal to the amount of times it appears in the grid
SE-F-004	FR2	Check that a previously selected letter cannot be selected again	User types the letters in the space provided	The word should contain only the letters selected as they appear in the grid	A particular letter in the word can appear less or equal to the amount of times it appears in the grid
SE-F-005	FR4	Check that the timer starts correctly when the user starts a new game	User starts a new game	The main game page should appear and the countdown starts immediately	The user cannot make further input when the countdown is over and his/her score is noted

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-006	FR4	Check that the timer starts correctly when the user starts a loaded game	User starts a loaded game	The main game page should appear and the countdown starts immediately	The user cannot make further input when the countdown is over and his/her score is noted
SE-F-007	FR5	Check that the user can save a game after completing it	User enters his/her name after completing a game and selects "Save Game" on the end screen	The start menu appears	The game is saved along with name and score of the user if that score is among the 10 best
SE-F-008	FR5	Check that the user can start a new game after completing a game	User completes a game and selects "New game" on the end page	The main game page appears with a newly generated grid	The user can start a new game
SE-F-009	FR5	Check that the user can load a saved game after completing a game	User completes a game and selects "Load Game"	The list of previously saved games appears, along with their highest score	The user is able to load a saved game the same way as he/she would on the start page
SE-F-010	FR6	Check that the user can type the file name to save a new game	User selects the area to enter the file name with the cursor	The game accepts the input from the user	The user is able to type the file name to save a game
SE-F-011	FR6	Check that the user can save a new grid	User completes the new game	The game prompts the user to enter his/her name and a file name to save the game	The user is then allowed to enter the file name

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-012	FR6	Check that the game accepts only legal characters when saving a new grid	User saves the game with file name "Game1"	The user is brought back to the start menu	The grid, name and score of the user is saved on the same file
SE-F-013	FR6	Check that a user cannot save a game with file name containing special characters	User saves game using file name "G@m€ !"	An error message appears informing the user that special characters are not allowed	The file names of the saved games should not contain any special characters
SE-F-014	FR6	Check that a file name should be entered to save a game	User leaves the name field blank and presses save	The game is not saved	The game will not save until the user inputs legal characters
SE-F-015	FR6	Check that the user's name and score is saved if he/she plays a loaded grid	User completes a loaded game	The game prompts the user to enter his/her name	The name and score of the user is saved in the same file as the loaded game, in an order of highest to lowest score
SE-F-016	FR7	Check that the game displays 3 grids of 9 nine letters	User starts a new or loaded game	The main page is displayed	The game appears to the user as 3 groups of 3x3 grids, containing 27 letters
SE-F-017	FR7	Check that the user can change the view of the cube	User changes the view	The grids positions are changed	The user can change his/her view of the grids according to his/her position

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-018	FR8	Enter a legal four-letter word with at least one letter with a value of more than 1. Check that it is accepted and the score is calculated correctly	User types the word and presses the "Add word" button	The word appears in the word list	The game accepts a word that the user types
SE-F-019	FR8	Enter a four-letter illegal word. Check that the word is not accepted and an error message is displayed	User types the word and presses the "Add word" button	The word is cleared from the input area and an error message is displayed	The game does not accept the illegal word
SE-F-020	FR8	Leave the input field blank. Check that the game does not accept a blank input	User leaves the input field blank and presses "Add word"	An error message is displayed prompting the user to enter a word	The game does not accept blank inputs
SE-F-021	FR8	Check that the word entered by the user consists of letters that are adjacent to each other in the grids	User types a four- letter legal word, consisting of three letters that are adjacent to each other and a forth one which is not	The forth letter is ignored and does not appear in the input area	All letters that are not adjacent to the previously selected one are not accepted. To clear the input are, the user must press the "Clear word" button
SE-F-022	FR8	Check that the word entered by the user does not contain special characters	User types a four- letter word, consisting of three letters that are adjacent to each other and a forth one which is a special character	The forth character is ignored and does not appear in the input area	The game does not accept special character from the user

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-023	FR8	Check that the only letters that are adjacent to each other can be used to make a word. User selects letters which are adjacent to each other	User selects the letters	The selected letter is highlighted as well as the letters adjacent are highlighted in a different color	The letters selected are highlighted and the adjacent letters are also highlighted in a different color to help the user know which letters are adjacent
SE-F-024	FR8	Check that the game unselects all previously selected grids if the user selects a grid that is not adjacent to the one he previously selected	User selects three adjacent letters and selects a forth one that is not adjacent	All the previously highlighted grids are unselected and only the currently selected grid is highlighted	The game unselects the previously entered letters and highlights only the last one selected
SE-F-025	FR8	Check the word selected by the user is legal	User selects a legal four-letter word and presses "Add word"	The word along with its corresponding score appears in the word list	The game check that the word entered is legal and then calculates its score
SE-F-026	FR8	Check if the word selected by the user is illegal	User selects and illegal four-letter word and presses "Add word"	An error message appears informing the user that the word does not exist	The game checks if this word does not appear in the dictionary
SE-F-027	FR9	Check that an error message is displayed if no word is selected and the "Add word" button is pressed	No word is selected and the "Add word" button is pressed	A message appears, prompting the user to enter a word	The error message displays correctly
SE-F-028	FR9	Check that the word the user enters/selects are adjacent to one another in the proper order	User enters/selects letters that are adjacent	The word appears in the list	The word made should only contain letters that are adjacent to one another

Test Ref	Req being tested	Test content	Input	Output	Pass Criteria
SE-F-029	FR9	Check that once a letter is selected for a word, it cannot be selected twice for that same word	Letters are selected only once	The word appears in the list	The game should prevent the user from selecting/entering a letter twice for the same word
SE-F-030	FR9	Check that once a letter is selected for a word, it cannot be selected twice for that same word	A letter is selected twice for same word	The letter cannot be selected	The game prevents the letter from being selected twice
SE-F-031	FR9	Check that a particular word cannot be submitted twice	A word is submitted for second time	The game displays an error message, mentioning that this has already been submitted before	The game does not allow two similar word from being submitted twice, even if it can be composed in several ways
SE-F-032	FR10	Check the score for one word, which can be formed from the letters of the grid, is calculated properly	The word is input by the user	The calculated score for this word appears next to it in the word list	The score of the word is the square of the scrabble score for that word
SE-F-033	FR11	Check that the total score is calculated properly	The user completes a game	The total score appears	The total score is the sum of the scores for each legal word the user has submitted

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DOCUMENT HISTORY

Version	CCF No.	Dates	Changes made to document	Changed by
1.0	N/A	25/02/18	Creation of the test documentation	jty
1.1	N/A	06/03/18	Addition of test specification	mai15
2.0	N/A	03/05/18	Modification of test specification according to feedback	mai15