

Unit Test Case for Requirements FR-001, FR-002, FR-003

Project Name: Scrabble game Functionality

Module Name: Values Calculating Functionality

Created By: Yunzhu Wang

Created Date: 24-09-2021

Executed by: Yunzhu Wang

Executed Date: 24-09-2021

Requirements	Test Case ID	Description	Test Step	Preconditions	Test Data	Expected Result	Actual Result	Status
FR-001	TC_FR-001_R02	Use assertEqual(a,b) Method to verify the functionality of assigning correct value for each letter.	1. Define a method called "test_letter_value"; 2. Use assertEquals(a,b) to check whether the value of letters equal with the value as required.		Letter: b Assert Value: 3	OK	As expected	Pass
	TC_FR-001_R26				Letter: z Assert Value:10	OK	As expected	Pass
	TC_FR-001_F02			TC_FR-001_R01 to TC_FR-001_R26 tests all pass	Letter: b Assert Value: 4	F. Assertion Error	As expected	Pass
FR-002	TC_FR-002_R01	Assert values to verify the functionality of adding up the values correctly for a given word.	1. Define a method called "test_word_value"; 2. assert values to check specific words.	TC_FR-001 tests all pass	Word: cabbage Assert Value: 14	OK	As expected	Pass
	TC_FR-002_F02				Word: cabbage Assert Value: 13	F.	As expected	Pass
FR-003	TR_FR-003_F01	Verify the functionality of assigning same value to upper-or lower-case input letters.	1. Under the "test_word_value" method, inputting words mixed with upper-case and lower-case or all upper-case, check the value.	TC_FR-002 tests all pass	Word: Cabbage Assert Value: 14	OK	Not as expected	Fail
	TR_FR-003_R02				Word: Cabbage Assert Value: 14	OK	As expected	Pass
	TR_FR-003_R03				Word: CABBAGE Assert Value: 14	OK	As expected	Pass

Unit Test Case for Requirements FR-004, FR-005, FR-006, FR-007

Project Name: Scrabble game Functionality

Module Name: Input Checking Functionality

Created By: Yunzhu Wang

Created Date: 26-09-2021

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Requirements	Test Case ID	Description	Test Step	Preconditions	Test Data	Expected Result	Actual Result	Status
FR-004	TC_FR-004_R01	Use assertIn(a,b) Method to verify the functionality of generating a word of 3-10 length randomly.	1. Define a method called "test_generate_random_letter"; 2. Use assertIn(a,b) to check the random.randint method.		List_length = [3,4,5,6,7,8,9,10]	OK	As expected	Pass
FR-005	TC_FR-005_R01	Use assertTrue Method to verify the functionality of checking correct length of input.	1. Define a method called "test_word_length"; 2. Use assertTrue to check whether the length of input is same with the required length.		Word: university Require length: 10	OK	As expected	Pass
	TC_FR-005_F02				Word: university Require length: 9	F.	As expected	Pass
	TC_FR-005_R02				Word: study Require length: 5	OK	As expected	Pass
FR-006	TC_FR-006_R01	Verify the functionality of checking whether users enter alphabet.	1. Define a method called "test_word_alphabet"; 2. Assert different input mixed with numbers and other symbols		Word: university	OK	As expected	Pass
	TC_FR-006_F02				input: uni45@#oty	F.	As expected	Pass
FR-007	TR_FR-007_R01	Verify the functionality of checking whether users enter a valid word from a dictionary	1. Define a method called "test_dictionary"; 2. Assert word from dictionary and fake word.	TR_FR-006 test all pass	Word: cabbage	OK	As expected	Pass
	TR_FR-007_F02				Word: cabagge	F.	As expected	Pass

Unit Test Case for Requirements FR-008, FR-009

Project Name: Scrabble game Functionality

Module Name: Timer Functionality

Created By: Yunzhu Wang

Created Date: 28-09-2021

Executed by: Yunzhu Wang

Executed Date: 28-09-2021

Requirements	Test Case ID	Description	Test Step	Preconditions	Test Data	Expected Result	Actual Result	Status
FR-008	TC_FR-008_R01	Verify the functionality of 15-seconds timer.	1. Define a method called "test_timer"; 2. Use threading to check countdown function.		Timer: 15 seconds	OK	As expected	Pass
FR-009	TC_FR-009_F01	Verify the functionality of giving higher score if less time is used.	1. Define a method called "test_time_score"; 2. Use "assertGreater" to verify that higher score will get if less time is used by putting same word.	TC_FR-008 test pass.	Word: cabbage My_timer:5 My_timer:8	F.	As expected	Pass
	TC_FR-009_R01				Word: cabbage My_timer:5 My_timer:3	OK	As expected	Pass