

System Test Plan

Instructions. In this section, you must provide your system test plan with at least 5 test cases. **If you want to provide more than 5 test cases, add an appendix at the end of this document with the 6th, 7th, etc. test cases so that page numbers for all sections match the required template!**

Make sure:

- You provide your sample test data
- Test IDs are uniquely identified and descriptive
- Test descriptions are fully specified with complete inputs, specific values, and preconditions
 - Be sure to provide SPECIFIC INPUTs and VALUEs so that your test cases are repeatable
- Expected results are fully specified with specific output values
- All tests cover scenarios based on the problem statement
- All tests cover unique scenarios for the system
- All strategies for system testing are demonstrated in the tests (testing equivalence classes, testing boundary values, testing exceptions/unexpected inputs)

Test Data:

Sample Room File: text_testRoomTwo.txt

ROOM_ID,LENGTH,WIDTH

Home Office,12,10

Library,14,12

Game Room,16,18

Study,13,11

Home Gym,20,15

Media Room,18,20

Den,14,13

Attic,12,10

Sample Cleaning Event File: text_testCETwo.txt

TIMESTAMP,ROOM_ID,PERCENT_CLEANED

06/01/2021 13:39:01,Home Office,85

05/31/2021 09:27:45,Library,92

05/30/2021 10:14:41,Media Room,78

05/28/2021 17:22:52,Study,80

05/21/2021 09:16:33,Home Gym,89

05/23/2021 18:22:11,Media Room,95

05/23/2021 11:51:19,Den,82

05/17/2021 04:37:31,Attic,93

06/02/2021 08:45:12,Home Office,88

06/02/2021 15:20:30,Library,94

06/03/2021 11:10:50,Game Room,85

06/04/2021 14:45:29,Study,88

06/05/2021 09:30:17,Home Gym,91

06/05/2021 17:15:44,Media Room,96

06/06/2021 12:52:18,Den,84

06/07/2021 10:26:55,Attic,92

06/08/2021 14:39:21,Media Room,90

06/09/2021 13:55:37,Library,96

06/10/2021 10:12:48,Game Room,88

06/11/2021 17:30:15,Study,92

06/12/2021 14:20:22,Home Gym,94

06/13/2021 11:45:11,Media Room,97

06/14/2021 09:57:28,Den,87

06/15/2021 07:14:33,Den,93

Test ID	Description	Expected Results	Actual Results
Test #1 testID: testRoomReportValidFunctionality Strategy: Equivalence Class Test (U3)	<p>Preconditions: The program has loaded and the user has specified and loaded input files input/text_testRoomTwo.txt and input/text_testCETwo.txt correctly for both room information and cleaning event logs</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Enter the Room List File Name: input/text_testRoomTwo.txt 2. Enter the Cleaning Events Log File Name: input/text_testCETwo.txt 3. Given the four options for the program, select the action to take when prompted 4. Select the action view a report of room cleanings: Task: 2 5. Check Expected Results 	<p>A report should be printed with the following output:</p> <p>Room Report [</p> <p>Attic was cleaned on [</p> <p>06/07/2021 10:26:55</p> <p>05/17/2021 04:37:31</p> <p>]</p> <p>Den was cleaned on [</p> <p>06/15/2021 07:14:33</p> <p>06/14/2021 09:57:28</p> <p>06/06/2021 12:52:18</p> <p>05/23/2021 11:51:19</p> <p>]</p> <p>Game Room was cleaned on [</p> <p>06/10/2021 10:12:48</p> <p>06/03/2021 11:10:50</p> <p>]</p> <p>Home Gym was cleaned on [</p>	<p>The output was as followed:</p> <p>Room Report [</p> <p>Attic was cleaned on [</p> <p>06/07/2021 10:26:55</p> <p>05/17/2021 04:37:31</p> <p>]</p> <p>Den was cleaned on [</p> <p>06/15/2021 07:14:33</p> <p>06/14/2021 09:57:28</p> <p>06/06/2021 12:52:18</p> <p>05/23/2021 11:51:19</p> <p>]</p> <p>Game Room was cleaned on [</p> <p>06/10/2021 10:12:48</p> <p>06/03/2021 11:10:50</p> <p>]</p> <p>Home Gym was cleaned on [</p> <p>06/12/2021 14:20:22</p>

		06/12/2021 14:20:22 06/05/2021 09:30:17 05/21/2021 09:16:33] Home Office was cleaned on [06/02/2021 08:45:12 06/01/2021 13:39:01] Library was cleaned on [06/09/2021 13:55:37 06/02/2021 15:20:30 05/31/2021 09:27:45] Media Room was cleaned on [06/13/2021 11:45:11 06/08/2021 14:39:21 06/05/2021 17:15:44 05/30/2021 10:14:41 05/23/2021 18:22:11]]	06/05/2021 09:30:17 05/21/2021 09:16:33] Home Office was cleaned on [06/02/2021 08:45:12 06/01/2021 13:39:01] Library was cleaned on [06/09/2021 13:55:37 06/02/2021 15:20:30 05/31/2021 09:27:45] Media Room was cleaned on [06/13/2021 11:45:11 06/08/2021 14:39:21 06/05/2021 17:15:44 05/30/2021 10:14:41 05/23/2021 18:22:11] Study was cleaned on [
--	--	---	---

		<p>Study was cleaned on [</p> <p>06/11/2021 17:30:15</p> <p>06/04/2021 14:45:29</p> <p>05/28/2021 17:22:52</p> <p>]</p> <p>]</p> <p>]</p>	<p>06/11/2021 17:30:15</p> <p>06/04/2021 14:45:29</p> <p>05/28/2021 17:22:52</p> <p>]</p> <p>]</p>
<p>Test #2</p> <p>testID: testFrequently CleanedBound ary</p> <p>Strategy: Boundary Value Test (UC 2)</p>	<p>Preconditions: Test #1 Has Run</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Select the action get the most frequently cleaned rooms: Task: 1 2. Enter the number 0 for the number of rooms to be reported 	<p>A report should be printed with the following output:</p> <p>Number of rooms must be greater than 0.</p>	<p>Number of rooms must be greater than 0.</p>

Test #3 testID: testFrequency EquivalentClasses Strategy: Equivalence Class (UC 2)	Preconditions: Test #2 Has Run Steps: <ol style="list-style-type: none"> 1. Select the action get the most frequently cleaned rooms: Task: 1 2. Enter the number 5 for the number of rooms to be reported 	A report should be printed with the following output: Frequency of Cleanings [Media Room has been cleaned 5 times Den has been cleaned 4 times Home Gym has been cleaned 3 times Library has been cleaned 3 times Study has been cleaned 3 times]	The report is as followed: Frequency of Cleanings [Media Room has been cleaned 5 times Den has been cleaned 4 times Home Gym has been cleaned 3 times Library has been cleaned 3 times Study has been cleaned 3 times]
Test #4 testID: estimateRemainingValueException	Preconditions: Test #3 Has Run Steps: <ol style="list-style-type: none"> 1. Select the get vacuum bag life action: Task: 3 	A report should be printed with the following output: “Date & time must be in the format: MM/DD/YYYY HH:MM:SS”	Date & time must be in the format: MM/DD/YYYY HH:MM:SS

**Strategy: Test
Exceptions
(U4)**

**2. Enter the date and
time: 05/09/2021
8:44:23**

<p>Test #5</p> <p>testID: checkRemaing VaccumBagValid</p> <p>Strategy: Equivalence Class (U4)</p>	<p>Preconditions: Test #4 Has Run</p> <p>Steps:</p> <ol style="list-style-type: none"> 3. Select the get vacuum bag life action: Task: 3 4. Type the date and time: 06/05/2021 17:00:00 	<p>A report should be printed with the following output:</p> <p>Vacuum Bag Report (last replaced 06/05/2021 17:00:00) [Bag is due for replacement in 2846 SQ FT]</p>	<p>A printed output:</p> <p>Vacuum Bag Report (last replaced 06/05/2021 17:00:00) [Bag is due for replacement in 2846 SQ FT]</p>
--	---	--	--