Module: Home Menu

Test Strategy: Exploratory with positive/negative scenario

In the 'Related Defects', the attached Bug ID Will redirect to Notion, where all the bugs are documented. Faster access: backlog

N	TC ID	Test Case Description	Test Steps	Expected Result	Actual Result	Pass/ Fail	Related Defects
1	TC_01	Validating welcome message is displayed	1. Run the program	"Welcome!" message is visible after running the program	"Welcome!" message is displayed		
2	TC_02	Validating the 3 options of the menu are displayed	1. Run the program	All the 3 options are displayed in numeric points (1, 2, 3).	All options are visible to the user		
3	TC_03	Inserting a valid option and validating that the expected screen is displayed	<ol> <li>Run the program</li> <li>Insert option '1'</li> </ol>	"Data entry in the system" message is displayed, along with the customer ID input.	The correct screen was received, and the first input was prompted.		
4	TC_04	Inserting option 2 and validating that client cannot access it without having gone to option 1.	<ol> <li>Run the program</li> <li>Insert option '2'</li> </ol>	An error message is displayed to the user that needs to access option 1 first.	"You must enter the information first" was received, and the menu was received again.		
5	TC_05	Insert option 3 to confirm that the system is closed correctly.	<ol> <li>Run the program</li> <li>Insert option '3'</li> </ol>	A confirmation message that the system is closed should be received.	"Existing the system, see you soon!" after inserting option 3.		
6	TC_06	Inserting an invalid option: 0 and 4.	<ol> <li>Run the program</li> <li>Insert option '0'</li> <li>Reset and type '4'</li> </ol>	An error message is received, and the menu is displayed again.	"Invalid option" error message is received, and the menu is prompted		
7	TC_07	Validating letters in lowercase and uppercase are not accepted as options	<ol> <li>Run the program</li> <li>Type "test string"</li> <li>Reset and type "TEST STRING"</li> </ol>	An error message that only 1 character is allowed is received	Respective error message is received, only 1 character is allowed in this section.		
8	TC_08	Validating letters first with a number is not accepted	1. Run the program 2. Type 'a1', 'a2', 'a3'	An error message that only 1 character is allowed is received	Respective error message is received, only 1 character is allowed in this section.		
9	TC_09	Validating numbers first with a letter is not accepted	1. Run the program 2. Type '1a', '2a', '3a'	An error message that only 1 character is allowed is received	Respective error message is received, only 1 character is allowed in this section.		Old issue was fixed: <u>IB-5</u>

10	TC_10	Validating that "paste" functionality works with valid inputs	<ol> <li>Run the program</li> <li>Copy '1'</li> <li>Paste it on the input</li> <li>Tap 'enter'</li> <li>Repeat by copying '3' instead</li> </ol>	After passing number 1 and hitting enter, it should access the data entry section. For option 2, it should retrieve error message. For number 3, it should close the system.	Pasting number 1 + enter goes the data entry. Pasting number 2 + enter displays the expected error. Pasting number 3 + enter closes the system.	
11	TC_11	Validating that "paste" functionality works with invalid inputs	<ol> <li>Run the program</li> <li>Copy 'TEST'</li> <li>Paste it on the input</li> <li>Tap 'enter'</li> <li>Repeat with a number</li> <li>Repeat with special character</li> <li>Repeat with 'a1', 'a2', 'a3'</li> <li>Repeat with '1a', '2b', '3c'.</li> </ol>	An error message is received, and the menu is displayed again.	Received an error message when using the data mentioned, including special characters	Old issue was fixed: <u>IB-5</u>
12	TC_12	Validating empty spaces retrieve an error message	Run the program     Hit enter without typing anything	An error message is received, and the menu is displayed again.	"Invalid option" error message is received, and the menu is prompted	
13	TC_13	Valid numbers with spaces are allowed	<ol> <li>Run the program</li> <li>Type '1 '</li> <li>Hit enter</li> </ol>	An error message is received, and the menu is displayed again.	"Invalid option" error message is received, and the menu is prompted	
14	TC_14	Valid numbers with spaces and additional letters are not allowed	<ol> <li>Run the program</li> <li>Type '1 sdsd '</li> <li>Hit enter</li> </ol>	An error message is received, and the menu is displayed again.	"Invalid option" error message is received, and the menu is prompted	Old issue was fixed: <u>IB-6</u>
15	TC_15	Validating special characters are not allowed	1. Run the program 2. Type "[][]{}_+.,,."	An error message is received, and the menu is displayed again.	"Invalid option" error message is received, and the menu is prompted	

 ${\bf Module: Option \ 1 (Entering \ information \ about \ the \ streaming \ plan) - Data \ Entry \ Section}$ 

Test Strategy: Boundary Value Analysis | Exploratory: Negative | Pre-condition: 1. Run the program > 2. Access option 1.

N	TC ID	Test Case Description	Test Steps	Expected Result	Actual Result	Pass/ Fail	Related Defects
16	TC_16	Customer ID input with BDA Data (in amount on numbers): negative, 8, 9, 10, 50	Insert the numbers mentioned in the data     Insert the 9-digit number	1. For negative, 8, 10, 50 should return "Invalid ID number, please try again!". Re-enter menu is received. 2. For 9 numbers, should move forward to "full name" entry.	<ol> <li>Expected error message is received.</li> <li>Moved forward to second input</li> </ol>		
17	TC_17	Customer ID input with negative entry	<ol> <li>Submit with no data</li> <li>Submit 9 numbers</li> <li>separated by spaces</li> <li>Insert a letter and 9</li> <li>numbers</li> <li>Insert 9 numbers and a letter</li> <li>Insert special characters</li> </ol>	1. Error messages are triggered for all scenarios	Error messages successfully received		Previous issue was fixed: <u>IB-6</u>
18	TC_18	Full name input negative	<ol> <li>Insert a number</li> <li>A letter with a number</li> <li>A number followed by a letter</li> <li>Submit special characters</li> <li>Submit empty input</li> </ol>	1. Error messages are triggered for all scenarios	Error messages successfully received		
19	TC_19	Full name input positive	Insert a valid name, last name and second name     Localization ES: Submit: ñ and é	1. For both, the user is redirected to "invoice number" input.	Input is now accepting áéíóú/ÁÉÍÓÚ, üÜ and ñ		Previous issue was fixed: <u>IB-3</u>
20	TC_20	Invoice ID input with BDA Data (in amount on numbers): negative, 5, 6, 7	1. Insert the numbers mentioned in the data 2. Insert the 6-digit number 3. Type 000012.	1. For negative, 5, 7 should return "Invalid ID number, please try again!". Re-enter menu is received. 2, 3. For 6 numbers, should move forward to "hours watched" entry.	1 and 2 working as expected 3. Numbers starting with 0 are accepted		Old issue was fixed: IB-4
21	TC_21	Invoice ID input with negative entry	1. Submit with no data 2. Submit 6 numbers separated by spaces	Error messages are triggered for all scenarios	Error messages successfully received		Old issue was fixed: <u>IB-6</u>

			<ul><li>3. Insert a letter and 6 numbers</li><li>4. Insert 6 numbers and a letter</li><li>5. Insert special characters</li></ul>			
22	TC_22	Hours Watched input with BDA Data: -1, 0, 1, 9, 10, 11, 12, 39, 40, 41, 50, 51, 52, 99, 100, 101 Adding also: 719, 720, 721	1. Insert the numbers mentioned on the test description data.	1. For -1 an error should be received 2. For 0 it should allow user to proceed and select minutes instead 3. For 1, 9 and 10 > no additional charge is received 4. For 11, 12, 39, 40, 41, 50 > 10% is charged 5. For 51, 52, 99, 100 > 10% + 20% is charged 6. For 101, 719, 720 > 10% + 20% + 30% is charged 7. For 721, an error is received.	All entries are working as expected, however, we need to allow users to enter minutes watched if the hours watched are less than 1.	Suggestion: IB-1  This will be handled in future, not a priority now.
23	TC_23	Hours Watched Negative input	<ol> <li>Insert a letter</li> <li>Type a special character</li> <li>Type with 'a1', 'a2', 'a3'</li> <li>Type with '1a', '2b', '3c'.</li> </ol>	1. Should get an error message for all inputs	Error message is received, and the reattempt works as expected	Fixed: <u>IB-12</u>
24	TC_24	Exempt from taxes? Exploratory: Positive- Negative	<ol> <li>Insert any letter != Y    N</li> <li>Insert a number</li> <li>Submit empty</li> <li>Type 'y y y' or 'n n n'</li> <li>Type '1y' and 'y1'</li> <li>Type a special character</li> <li>Type 'y' or 'Y'</li> <li>Type 'n' or 'N'</li> </ol>	<ol> <li>Error messages are received from step 1 to 6.</li> <li>No taxes are applied on the total price</li> <li>Taxes are applied, 13% of the total amount to be paid</li> </ol>	<ol> <li>All the combinations return an error message</li> <li>No taxes are applied</li> <li>Taxes are applied</li> </ol>	Fixed <u>IB-6</u>
25	TC_25	Yes/No Menu Exploratory: Positive- Negative	1. Insert any letter != Y    N 2. Insert a number 3. Submit empty 4. Type 'y y y' or 'n n n' 5. Type '1y' and 'y1' 6. Type a special character 7. Type 'y' or 'Y' 8. Type 'n' or 'N'	<ol> <li>Error messages are received from step 1 to 6.</li> <li>Redirects to the main menu</li> <li>Continue to show the same question until step 7 is triggered.</li> </ol>	1. All the combinations return an error message 2. Redirected to the main menu 3. Continue to show the question	Fixed <u>IB-6</u>

Module: Option 2(showing the receipt with the information entered in the option 1) – Data Entry Section Test Strategy: Exploratory: Positive – Negative

N	TC ID	Test Case Description	Test Steps	Expected Result	Actual Result	Pass/Fail	Related Defects
26	TC_26	Confirm structure of the receipt is the expected	<ol> <li>Run the program</li> <li>Complete TC Option 1</li> <li>When back in menu, type option 2.</li> </ol>	The format is the expected and no non-related value is received	The structure of the receipt is correct, no non-wanted values are presented		Old issue was fixed: <u>IB-2</u>
27	TC_27	Retrieving information from TC Option 1.	<ol> <li>Run the program</li> <li>Complete TC Option 1</li> <li>When back in menu, type option 2.</li> </ol>	The results are displayed based on the selection of TC Option 1.	Data is presented as expected and calculations are correct.		
28	TC_28	Yes/No Menu Exploratory: Positive- Negative	1. Run the program 2. Insert any letter besides Y or N 3. Insert a number 4. Submit empty 5. Type 'y y y' or 'n n n' 6. Type '1y' and 'y1' 7. Type a special character 8. Type 'y' or 'Y' 9. Type 'n' or 'N'	<ol> <li>Error messages are received from step 1 to 6.</li> <li>Step 7 redirects to the main menu</li> <li>Step 8 continue to show the same question until step 7 is triggered.</li> </ol>	1. All the combinations return an error message 2. Redirected to the main menu 3. Continue to show the question		Fixed <u>IB-6</u>

Module: Whole program

Test Strategy: E2E for price calculation.

Precondition: Run the program and access option 1.

N	TC ID	Test Case Description	Test Steps	Expected Result	Actual Result	Pass/Fail	Related Defects
29	TC_29	Scenario with no additional charge and no tax included: 10 Hours Watched	<ol> <li>Insert valid information.</li> <li>In hours watched insert 10</li> <li>In taxes section type 'y'.</li> <li>Type 'Y' to return to the main menu and access option</li> <li>2.</li> </ol>	1. No tax is applied, and the final price is broken down: 15\$ fixed expense 10 x 2= \$20 Without taxes: \$35	\$35 is the amount in the total pay section, and expected data is received as well.		
30	TC_30	Scenario with no additional charge and tax included: 10 Hours Watched	<ol> <li>Insert valid information.</li> <li>In hours watched insert 10</li> <li>In taxes section type 'n'.</li> <li>Type 'Y' to return to the main menu and access option</li> </ol>	1. Tax is applied, and the final price is broken down: 15\$ fixed expense 10 x 2= \$20 Tax: \$4,55 With taxes: \$39,55	\$39,55 is the amount in the total pay section, and expected data is received as well.		
31	TC_31	Scenario of additional charge of 10% and no tax included: 50 Hours Watched	<ol> <li>Insert valid information.</li> <li>In hours watched insert 50</li> <li>In taxes section type 'y'.</li> <li>Type 'Y' to return to the main menu and access option</li> </ol>	1. No tax is applied, and the final price is broken down: 15\$ fixed expense 10 x 2= \$20 40 x 2 * 1,10 = \$88 Without taxes: \$123	\$123 is the amount in the total pay section, and expected data is received as well.		
32	TC_32	Scenario of additional charge of 10% and tax included: 50 Hours Watched	<ol> <li>Insert valid information.</li> <li>In hours watched insert 50</li> <li>In taxes section type 'n'.</li> <li>Type 'Y' to return to the main menu and access option</li> </ol>	1. Tax is applied, and the final price is broken down: 15\$ fixed expense 10 x 2= \$20 40 x 2 * 1,10 = \$88 Tax: \$15,99 With taxes: \$138,99	\$138,99 is the amount in the total pay section, and expected data is received as well.		
33	TC_33	Scenario of additional charge of 20% and no tax included: 100 Hours Watched	<ol> <li>Insert valid information.</li> <li>In hours watched insert 100</li> <li>In taxes section type 'y'.</li> <li>Type 'Y' to return to the</li> </ol>	1. No tax is applied, and the final price is broken down: 15\$ fixed expense 10 x 2= \$20	\$243 is the amount in the total pay section, and expected data is received as well.		

	1			402 * 4.40 600		
			main menu and access option	40 x 2 * 1,10 = \$88		
			2.	50 x 2 * 1,20 = \$120		
				Without taxes: \$243		
34	TC_34	Scenario of additional	1. Insert valid information.	1. Tax is applied, and the final price	\$274,59 is the amount in the	
		charge of 20% and tax	2. In hours watched insert 100	is broken down:	total pay section, and	
		included: 100 Hours	3. In the taxes section type 'n'.	15\$ fixed expense	expected data is received as	
		Watched	4. Type 'Y' to return to the	10 x 2= \$20	well.	
			main menu and access option	40 x 2 * 1,10 = \$88		
			2.	50 x 2 * 1,20 = \$120		
				Tax: \$31.59		
				With taxes: \$274,59		
35	TC_35	Scenario of additional	1. Insert valid information.	1. No tax is applied, and the final	\$1855 is the amount in the	
		charge of 30% and no tax	2. In hours watched insert 720	price is broken down:	total pay section, and	
		included: 720 Hours	3. In taxes section type 'y'.	15\$ fixed expense	expected data is received as	
		Watched	4. Type 'Y' to return to the	10 x 2= \$20	well.	
			main menu and access option	40 x 2 * 1,10 = \$88		
			2.	50 x 2 * 1,20 = \$120		
				620 x 2 * 1,30 = \$1612		
				, ,		
				With no taxes: \$1855		
36	TC_36	Scenario of additional	1. Insert valid information.	1. Tax is applied, and the final price	\$2096,15 is the amount in	
		charge of 30% and tax	2. In hours watched insert 720	is broken down:	the total pay section, and the	
		included: 720 Hours	3. In the taxes section type 'n'.	15\$ fixed expense	expected data is received as	
		Watched	4. Type 'Y' to return to the	10 x 2= \$20	well.	
			main menu and access option	40 x 2 * 1,10 = \$88		
			2.	50 x 2 * 1,20 = \$120		
				620 x 2 * 1,30 = \$1612		
				Tax: \$241,15		
				with taxes: \$2096,15		

## White Box

Most of the test cases I have used are a mix of white box and black box, by making sure that all the paths are executed, looking more for the internal structure of the code and the different decisions it has.

For example, Value Boundary Analysis is a great example of a black box covering white box, but from a user perspective.

I focused decision testing mainly on the calculation of the hours, since it is the only one having a specific decision-taking, for other features include a loop or a decision also.

Here's an example on how it should be tested:

Making sure to go through each of the decisions, based on the conditions in the code, and this specific scenario can be confirmed by TC: Module: Whole program E2E.

This TC covers some parts of the Value Boundary Analysis and goes through each of the categories seen in the diagram below, coming from the data entry first(hours), also if it is exempt from the taxes, and then calculation which is displayed and visible on option 2 of the main menu.

This type of test is useful to understand how the application works and create strong test cases, however, black box also tackles this from a different perspective.

