

STAGE 2 - Design

Test Strategy

In order to complete my NEA I have decided to convert my SampleData2017.txt file into a CSV file and use this as the basis for the reading and writing in the program. The file itself consists originally of 8 records, however as I test and refine the program, depending on the success of my subprograms I will leave extra users within the CSV file. If at any point I commit a massive faux pas, I can always revert back to the original txt file and begin the process again. For the current members I may need to create a temporary file to read out all of the members not being updated to store them temporarily before writing them back with the edited member to the original file.

I will test the program where possible with normal, boundary and erroneous data and will cover all options from the program in their scope in the testing stage.

Some elements within the program I will test as I go with temporary print statements e.g. the 3 digit random number and year variables which will form part of the membership ID, this will be done in stages as I progress through the program, I will then refer to my test plan to test the whole sub program to see if it meets the specified requirements of the problem.

There is a debugging tool within IDLE, that I will use to debug errors, I will print screen this evidence and add it to the Debugging document.

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Initial Test Plan

Stage 2- Initial Test Plan				Stages 3 and 4 – Test Table	
Test No	Purpose of test	Test data	Expected result	Actual result	Action needed / comments
1	Menu() Does an option screen for the user appear, listing options to choose from?	This should automatically appear when F5 is presses	A menu will display along with an input message, requiring a choice from the user		
2	newMember() Does the sub program load when the right choice has been input?	"A" or "a"	newMember subprogram begins execution and first input required.		
3	newMember() Does the subprogram ask to collect a series of details	"Y","y", any other key stroke will result in the loop executing again, assuming the	Details input, displayed and then based on response either the set of questions again, or the program moves		

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	regarding the new member? Once the details have been collected, the program will display them for checking and then an input requiring a Yes/No response will either terminate the loop or loop the program back to get the correct details.	details were incorrect	on to the next part ("Y").		
4	newMember() Does the program ask the user for the amount of nights within the booking limiting the input to between 1 and 14 nights?	Normal: 12 Boundary: 1 , 14 Erroneous: 0,-1,15	12 will produce a result of the program moving on to the display of all the customer details to be stored in the table. Either will produce a result of the program moving on to the display of all the customer details to be stored in the table. These will produce an error message that states all bookings		

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			are capped at 14 nights and then will re-ask the question for how many nights.		
5	newMember() Review the details. The user should be presented with the relevant customer details for the membership table. Once they have been displayed an input requiring a Y/N response should display.	"Y","y", any other key stroke will result in the loop executing again, assuming the details were incorrect	I expect the details to display on screen, formatted so that they are easy to read. With a prompt for a response. I would expect the Y input to write the contents to the SampleData2017 file.		
6	newMember() Review the details. Check the Member ID consists of the first 3 letters of the surname, a random 3 digit number and the last two digits of	Temporary print statements would have checked this earlier, review the Membership ID Column to make final check.	I would expect that previous testing would have resulted in this being displayed correctly, which will be the first 3 letters of surname, a random 3 digit number and the last 2 digits of the year of registration e.g. Wes12317		

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	the year of registration				
7	newMember() Write the contents to the file. Open the SampleData2017.csv file and check manually that the contents have written to the file.	N/A	I would expect that when the SampleData2017.CSV file is opened, that the new member details are present as the last line of the table, in the correct order.		
8	Menu() Does the menu return once the newMember() program has finished execution?	Menu()	I would expect that once the "Y" command has been given to write the contents, that the original menu displays after its execution.		
9	existingMember() Does the sub program load when the right choice has been input?	"B" or "b"	existingMember subprogram begins execution and first input required.		

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10	existingMember () Does the sub program display a welcome message and the require you to review the current registered users onscreen to make a selection?	N/A – the file is read and the row[0] is displayed	I would expect that a welcome message identifying the subprogram as the current member part would display.....		
11	existingMember () Reading the file. Do the first entries in each line of the table display on screen for the user to make a selection?	N/A – the file is read and the row[0] is displayed followed by a cascading list of all existing members that could then be used to copy and paste in to the input message.		
12	existingMember () Once the member ID has been input do the details of that member display on screen?	Normal: Hug91714	I would expect that the details for this user would then display, correctly formatted and easy to read. I would expect that the details for these		

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		Boundary: Lee44213, Gri33415 Erroneous: Tac56412	users would then display, correctly formatted and easy to read. I would expect this to result in the program returning to the menu.		
13	existingMember () Does the program ask the user for the amount of nights within the booking limiting the input to between 1 and 14 nights?	Normal: 12 Boundary: 1 , 14 Erroneous: 0,-1,15	12 will produce a result of the program moving on to the display of all the customer details to be stored in the table. Either will produce a result of the program moving on to the display of all the customer details to be stored in the table. These will produce an error message that states all bookings are capped at 14 nights and then will re-ask the question for how many nights.		

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14	existingMember () Does the redemption day whole number division variable work and does it display an amount of days available for redemption?	Contents of file will be read and the number of points divided by 25000.	I would expect this to trigger a statement that either confirmed an amount of nights available for redemption or triggered a statement that stated it was unavailable at the time (due to not enough points)		
15	existingMember () If the user does use redemption figure are the correct number of points deducted from the balance of that member? Is the value capped at the amount of nights available to redeem?	Temporary print statements to test these and then available in the final table.	I would expect the value to be capped at the amount of nights available and that the points are deducted from the members balance.		
16	existingMember ()	Read the contents of file and check status, multiply the next stay by the	I would expect that dependent on status the correct amount of points are multiplied		

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	Does the program check the current status of the member and add the relevant points according to their status.	points assigned to that status	by the new amount of nights being added to the booking.		
17	existingMember() Review the details. The user should be presented with the relevant customer details for the membership table. Once they have been displayed an input requiring a Y/N response should display.	Temporary print statements would have checked this earlier, review the Status, nights booked and points balance to ensure these values have increased	I would expect that previous testing would have resulted in this being displayed correctly, with both points balance and nights booked increasing, status is dependent on certain figures being reached.		
18	existingMember() Write the contents a dummy list EXCLUDING the	OverwriteList[] Details[]	I would expect that when the SampleData2017.CSV file is opened, that the existing member details are present as		

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	member being updated. Then append the current member details to it, before writing back to the original file. Open the SampleData2017.csv file and check manually that the contents have written to the file.		the last line of the table, in the correct order.		
19	Menu() Does the menu return once the existingMember() program has finished execution?	Menu()	I would expect that once the "Y" command has been given to write the contents, that the original menu displays after its execution.		
20	ViewTable() Does the sub program load when the right choice has been input?	"C" or "c"	ViewTable subprogram begins execution and first input required.		

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21	ViewTable() Does the program read the contents of the file in the implementation folder and display all records in a well presented format.	SampleData2017.csv v	I would expect that a table appears, neatly formatted with the headings at the top, and followed by each line of the file for the amount of members currently registered on the file (minimum 8).		
22	ViewTable() Does the program read the contents of the file and total the amount of members, and the totals of individual status's and display the information underneath the table.	SampleData2017.csv v	I would expect that the contents of the file were read and for each line a tally was kept based on membership status. Once the table had been displayed a further 4 lines, detailing the total amount of members plus a breakdown of their status's is displayed.		
23	ViewTable() menu() Does the program wait 20 seconds	Import time Time.sleep(20)	I would expect there to be a 20 second pause before the menu displayed again.		

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	and then reload the menu?				
24	ExitMessage() Does the sub program load when the right choice has been input?	"Q" or "q"	ExitMessage subprogram begins execution and first input required.		
25	ExitMessage() Does a goodbye message display before a process box appears asking if you wish to kill the program?	Quit()	I would expect there to be a message in a similar style to the headings of all other sub programs appear before the dialogue box for killing the process appeared.		

Add more rows as required.