Assignment 2 Test Plan

ENG1003 - Team 44

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  Here you can write tests for the entire feature starting from when you enter the feature

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  Unit tests are tests of singular functions within the feature

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  A summary of all tests - identify any failed tests and indicate if any work was undertaken to rectify the error, and ID of re-test

PROJECT INFORMATION

Document purpose

A Test plan is a formal piece of documentation that takes place during the verification phase of the project. The aim of this document is to outline the testing procedure as well as the test cases with data. The document outlines both system/ integration tests and unit tests that are created based on the acceptance criteria in the requirements document. The document includes the test cases used to verify that the code behaves as intended and the results of the test cases.

Specification of the feature being tested

The page will have a large table which includes the booking index, date of the flight as well as the departing city and destination city. On the bottom left of the page is another table containing more specific trip details: number of stops, connecting flights, plane type as well as the Airline. In order to see the specific trip details, the user can select a specific trip from the main table. When the user has selected a specific trip from the table, a map will appear on the bottom right of the page which shows the routes of the trip.

Acceptance criteria

- The saved trips page should be divided into 3 different sections.
- The top left section should contain detailed information about the selected trip.
- The top right section should display a map with that trip's routes.
- The bottom section should contain a table with brief information about each saved trip organised in clickable rows.
- The trip information area should cover a sufficient amount of space in the top left corner of the Saved Trips page so that all the information fits perfectly next to other elements of this page.
- The trip information should include all the information available in the APIs that relates to the selected trip which includes the details of its routes and airports.
- The detailed trip information section should modify itself based on which trip is selected in the saved trips table section.
- The saved trips map should contain only the routes for a single saved trip that is selected from the saved trips table.
- When a trip is selected from the table, the map should zoom to fit all the airports and the routes of that selected trip alone.
- The styling of the map should be similar to the map in the route selection page.
- But this map must be smaller in size (the exact value yet to be determined) and located in the top right corner.
- The saved trips table must contain all of the signed-in user account's saved trips.
- When a signed-in user saves a trip, this table should be appended with brief information about that trip.

- This brief information should contain ID (corresponds to creation order), airline, initial airport, final airport, date of departure and number of connecting flights/stops as 6 different columns.
- If a row in this table (which should contain a trip) is clicked, then the row must be slightly shaded to indicate selection and the detailed trip information section and the saved trips map section must be modified to display this selected trip.
- The table must be scrollable.
- There should be a cancel trip feature

SYSTEM/ INTEGRATION TESTS

System and integration tests are forms of dynamic testing where the code is tested upon execution.

Integration testing involves testing multiple parts of the code together. This ensures that different parts interact with each other in the intended way.

System testing is an extension of integration testing and involves testing the complete application from the beginning to the end.

Test Number	Reason for Test	Input/action	Expected result	Test passed
1	To test that the trip's routes information is displayed in the detailed trips table	Click on the row of the trip	Trip displayed in detailed trips table	Test passed
2	To test that the detailed trip information section modifies itself based on which trip is selected in the saved trips table section.	Click on the row of the trip	That trips details appears in the saved trips table	Test passed
3	To test the map zooms in to display all airports of the selected trip	Click on the row of the trip	The map zooms in to an area that includes all the selected trip's airports	Test passed
4	To test that the saved trips table contains all of the user's saved trips	Not applicable	Table contains all the results the user has booked	Test passed
5	To check that the trip's ID is displayed in the detailed trips section	Click on the row of the trip	The selected trip's id is displayed in the detailed trips section	Test passed
6	To test that the trip's airline is displayed	Click on the row of the trip	Trip's airline is displayed	Test passed
7	To test that the trip's initial airport is displayed in the details trip table	Click on the row of the trip	The trip's id is displayed in the detailed trips section after being selected	Test passed

8	To test that the trip's final airport is displayed in the details trip table	Click on the row of the trip	The selected trip's final airport is displayed in the detailed trips section	Test passed
9	To test that the date of departure is displayed in the details trip table	Click on the row of the trip	The selected trip's date of departure is displayed in the detailed trips section	Test passed
10	To test that the number of connecting flights/stops is displayed in the details trip table	Click on the row of the trip	The selected trip's number of stops is displayed in the detailed trips section	Test passed
11	To test that the table scrolls after exceeding a height of [Insert number] pixels	Book some trips	The table scrolls instead of extending once it exceeds a height of [insert pixels] pixels.	Test passed
12	To test that all of a particular user's saved trips are saved to his account	Not applicable	The saved trips table displays all of the user's scheduled flights	Test passed
13	To test that the table is updated once the user books a new trip	Book a trip	Table is appended with the new trip	Test passed

UNIT TESTS

5. Saved Trips Display.

Unit testing falls under the category of dynamic testing where the code is being executed. In unit testing, small portions of code is under testing at a time. Each test will generally test a function or a method of a class (in object-oriented code). Unit testing is required in order to implement that portion of the code.

Test Number	Reason for Test	Input/action	Expected result	Test passed
1	To test that the trip's airport information is displayed in the detailed trips table	Not applicable	Trip's airport information is displayed in detailed trips table	Test passed
2	To test that the trips in saved trips is current.	Not applicable	Dates of trips are from today's date onwards	Test passed
3	The saved trips page is divided into 3 sections: map at the top right, all trips table top left, detailed trips bottom	Not applicable	There are 3 sections: map, detailed trips table and all saved trips table	Test passed
4	The achieve consistency with how the map looks	Not applicable	Map in route selection page should be similar to the map in the saved trips page but the latter is slightly smaller	Test passed
5	To test that clicking cancel trip removes the trip from the table	Clicking cancel trip for a selected row	That particular trip's row is deleted from the table	Test passed

TEST RESULT SUMMARY

13 system and integration tests were conducted and 5 unit tests were conducted at this stage of the project. After having conducted all the tests, the results showed that all the tests successfully passed.