ENG1003
SEMESTER 2 2020
ASSIGNMENT 2
REQUIREMENTS DOCUMENT

Team 133

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Contents

Project Information

Project Background

Monash University requires for a web application to be designed that will allow users to plan domestic flights within a country of their choice. The application interface should be user friendly and have information readily available. Monash University requires for a web application to be created as students would like to be able to plan trips in order to visit the country they are in. Also, due to the current COVID-19 pandemic, international borders are mostly closed however, most governments have started to allow for domestic travel to take place again to help maintain the economy. Therefore, a web application that helps students plan domestic flights has been proposed.

Summary

The web application development process follows a waterfall-agile methodology hybrid that can be split into six phases: the requirements phase, design phase, prototyping phase, implementation phase, verification phase, and handover (i.e. presentation of web application to client).

This report details the requirements phase of the project. In this stage, the requirements of the software are obtained from the client through discussions with the client. Features that are required to be added are determined through the use of user stories that are constructed based on the client's demands.

Features

1. Users can book flights within the web application.
2. Users can create an account to save their trips.
3. Users will view a summary page after booking trips.
4. If users are logged in to an account, they will be able to:
    a. View Scheduled Trips
    b. View History of Trips
    c. Change their password
    d. Log out of their accounts
5. Users, regardless of whether they have an account, will be able to view all routes in a country using the web application.

User Stories

Flight Booking

1. As a user, I want to schedule a flight on the home page so that I can quickly book a flight. *(EDP: 3)*

Acceptance Criteria
● The user should be able to book a flight from the home page.

2. As a user, I want to be able to select the country to fly domestically in so that I can book flights no matter where I am. *(EDP: 3)*

Acceptance Criteria
● When booking a flight, the user should be able to first select the country they want to visit through a data list. ● Users cannot enter countries that are not in the data list.

3. As a user I want to be able to select the date I would like to begin my trip so that I can plan when I am going to take the trip. *(EDP: 3)*

Acceptance Criteria
● The user should be able to select the date to begin the trip through a date input.

4. As a user, I want information about where the plane will land so that I know my landing options. *(EDP: 3)*

Acceptance Criteria
● The user should be able to select their destination through a dropdown list.

5. As a user, I want information about the route shown so that I can decide which route to fly. *(EDP: 4)*

Acceptance Criteria
● The user should be able to see all possible flight routes from an airport through a map.

6. As a user, I want to be able to select an airport so that it can show the routes that begin from that airport. *(EDP: 3)*

Acceptance Criteria
● The user should be able to select a starting airport through a dropdown list. ● Once the airport is selected, all the routes from that airport will be shown on a map.

7. As a user, I want to be able to cancel my planned trip so that I can change my plan anytime. *(EDP: 3)*

Acceptance Criteria
● There should be a cancel button located throughout the duration of the booking process.

8. As a user, I want to be able to repeat the step of selecting a route so that I can connect flights. *(EDP: 7)*

Acceptance Criteria
● After successfully booking one flight, the user should be able to click on a button to repeat the booking process to connect flights.

9. As a user, I want a summary of my flight before booking so that I can double check whether the information I keyed in is correct . *(EDP: 5)*

Acceptance Criteria
● After the users finishes booking, they will be redirected to a page that shows their flight details ● If they selected a wrong flight they would be able to go back to the booking change and change their details

10. As a user, I want to be able to know that my booking is confirmed *(EDP: 2)*

Acceptance Criteria
● Users will be redirected to a booking confirmation page to show that their flights is successfully booked

Account

11. As a user, I want the option to save my scheduled trip so that I can refer back to the details when my trip is nearing. *(EDP: 6)*

Acceptance Criteria
● After booking a trip, the page will be redirected to a login page,asking users to log in or register an account when the user wants to save a trip ● Brings user to another the previous web page when the user logs in or registers.

12. As a client, I want the users to create an account in order to book a flight. *(EDP: 6)*

Acceptance Criteria
● After booking a trip, the page will be redirected to a login page,asking users to log in or register an account when the user wants to save a book a trip. ● Brings user to the sign up page when they click sign up in the log in page ● Brings user to another the previous web page when the user logs in or registers.

13. As a user, I want the option to not create an account so that my personal details are not made public. *(EDP: 4)*

Acceptance Criteria
● There will be a button located at the sign up page after a user has booked a trip. ● Clicking the button will allow the user to skip the account creation process but result in their trip data not being saved.

14. As a client, I want the users to log in to the app to save their planned trips so that their privacy is protected. *(EDP: 6)*

Acceptance Criteria
● Users can only view the details of their planned trip if they have an account.

15. As a user, I want to maintain a history for my previous trips so that I can have a record of the places that I have been to. *(EDP: 3)*

Acceptance Criteria
● After the date of a trip has passed the current date, the details are recorded in a history page.

16. As a client, I want the user to provide their name and email address to create an account so that the user can be verified. *(EDP: 3)*

Acceptance Criteria
● The account creation will contain three text input fields: Username, email and Password. ● Username must be unique, if it the username is already taken by another user, an error message will appear ● The email input must also be a valid email address format

17. As a client, I want the user to set a password for their account so that their information is protected. *(EDP: 4)*

Acceptance Criteria

● When users set a password, 8 characters are required as a valid password
● No spaces are allowed in the password
● If password requirements are not met, a message is displayed informing the user that password is invalid.
● Password verification is also required while creating an account
  ○ To prevent users from mistyping their password
  ○ Ensure both password entered are the same

18. As a client, I want the user to be able to delete their scheduled trips if they want to. *(EDP: 5)*

Acceptance Criteria
● Scheduled trips will be displayed as cards and a delete button will be shown on each card ● User will be able to delete the specific scheduled trip ● An alert message will show to confirm with user if they want to delete the trip

19. As a user, I want to be able to log out of my account so that I can log in using different accounts. *(EDP: 3)*

Acceptance Criteria
● There should be a logout button located in the user profile page. ● Clicking this will display a message asking the user whether they want to log out or not. ● Upon clicking, the web app returns to the home page and the user will be using the web app with no account.

Summary Page

20. As a user, I want a summary of the whole trip to be shown so that I can check whether the information I chose was correct. *(EDP: 4)*

Acceptance Criteria
● Display a summary of the selected options after booking a flight successfully. ● This brings the user to a new webpage.

21. As a user, I want more specific details about my trip so that I can view complete information about my trip. *(EDP: 5)*

Acceptance Criteria
● Button for the user to click when they want to view more specific information. ● Specific information in a new webpage. ● Information includes : country,date, departure airport, arrival airport, number of stops and name of airport stops, and trip route.

22. As a user, I want a map displayed in the summary so that I can visualise my route of my flight. *(EDP: 7)*

Acceptance Criteria
● Show a detailed map of the route ● A mapbox map will be used. ● Departure and arrival airports are marked with red markers whereas transit airports are marked with blue colour. ● Lines connecting the airports will be displayed on the map to show the route of the trip.

General

23. As a client, I want the app to have a logo so that it is identifiable. *(EDP: 1)*

Acceptance Criteria
● A logo will have to be designed for the web app.

24. As a user, I do not want to see tabs in the user interface as I want the user interface to be simple. *(EDP: 2)*

Acceptance Criteria
● Ensure that throughout the development of the web application, no tabs should be created.

View All Routes

25. As a user, I want to view all the available flight routes in the country. *(EDP: 4)*

Acceptance Criteria

● Ensure that all domestic flight routes within the country is displayed on map
● All available airports in chosen country is marked with a marker
● Have a drop down list to show which country is available.
● Check if the country inputted by the user is valid.
    ○ If valid, display a map of the country with all domestic flight routes.
    ○ Else, display an error message.

Expected Development Points (EDP) Scale

1 (Fastest) -- 10 (Slowest)