ENG1003

Assignment 2

Design Document

Buzz Flightyear

Trip Planner

Team 32

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1.0 Project Background

The app is on behalf of Monash for their exchange students who want to travel internationally on exchange programs to partner universities once the COVID pandemic is over. It is intended to help the economy recover by providing students with a user-friendly helpful tool to help them plan international trips.

The app is needed to help students plan trips around the city they are based in and their destination city. Students are able to plan connecting routes in their trip if they want and view a summary of their trip before scheduling it. The students are also able to cancel and view upcoming trips, and if they choose to create an account, able to view previous trips. A user can choose to not have an account and still create a trip, where they will be considered a guest user although the trip cannot be saved for later viewing.

Students are also able to view all possible routes within a chosen country before planning their trip to gain an understanding of the possibilities open to them. The app is designed to allow a user to plan a trip within the country using domestic routes with ease.

2.0 Design Decisions

2.1 Font size

Title Heading	38pt
Page Heading	28pt
Hamburger Menu Title	28pt
Hamburger Menu Title Content	18pt
Hamburger Menu Text Content	16pt
Text Content	16pt
Buttons	18pt

2.2 Colours & Visual elements

HEX codes for the App's colours

Yellow	Grey	Orange	Black	White
#fcc438	#5e5e5e	#ef8c22	#000000	#FFFFFF

Light Mode
Logo - yellow and orange

Background
- background image is a pattern of honeycomb
- pop-ups will be white, with a blurred image of the background behind
- hamburger menu will be white with a blurred image over the relevant page

Buttons
- text buttons will be yellow with black borders.
- cancel buttons will be orange with black borders.
- back buttons (in the page header) will be white with black borders.
- back buttons (in pop-ups) will be orange with black borders.
- hamburger buttons will be grey with black borders.
- text inputs will be grey with black borders.

Header
- header will be yellow color and contain the page title, hamburger and the back arrow

List of Trip Summaries-
- trip summaries will be yellow with black borders.
- future trips will include an orange cancel button

All text will be black.

2.3 Font Style
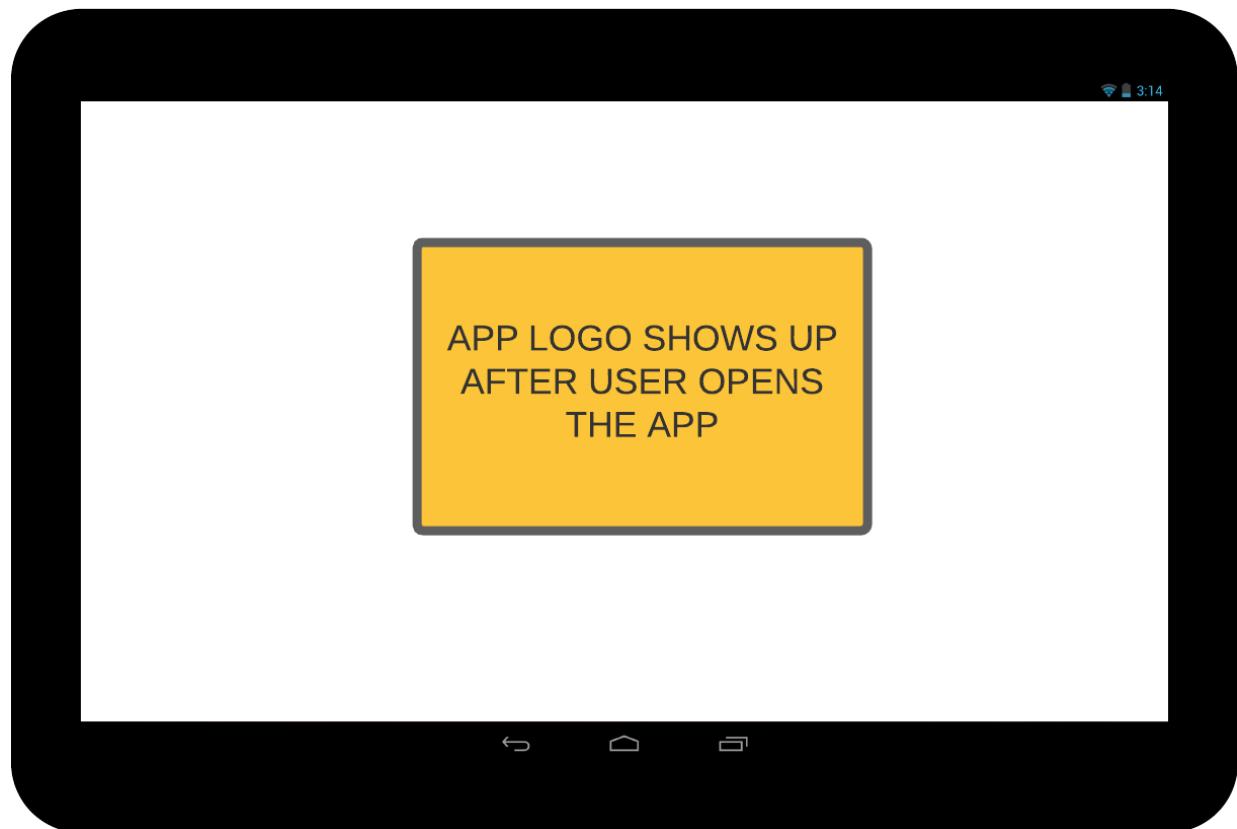
Arial*

Liberation Sans in Lucidchart

All buttons in capital letters

3.0 Wireframes
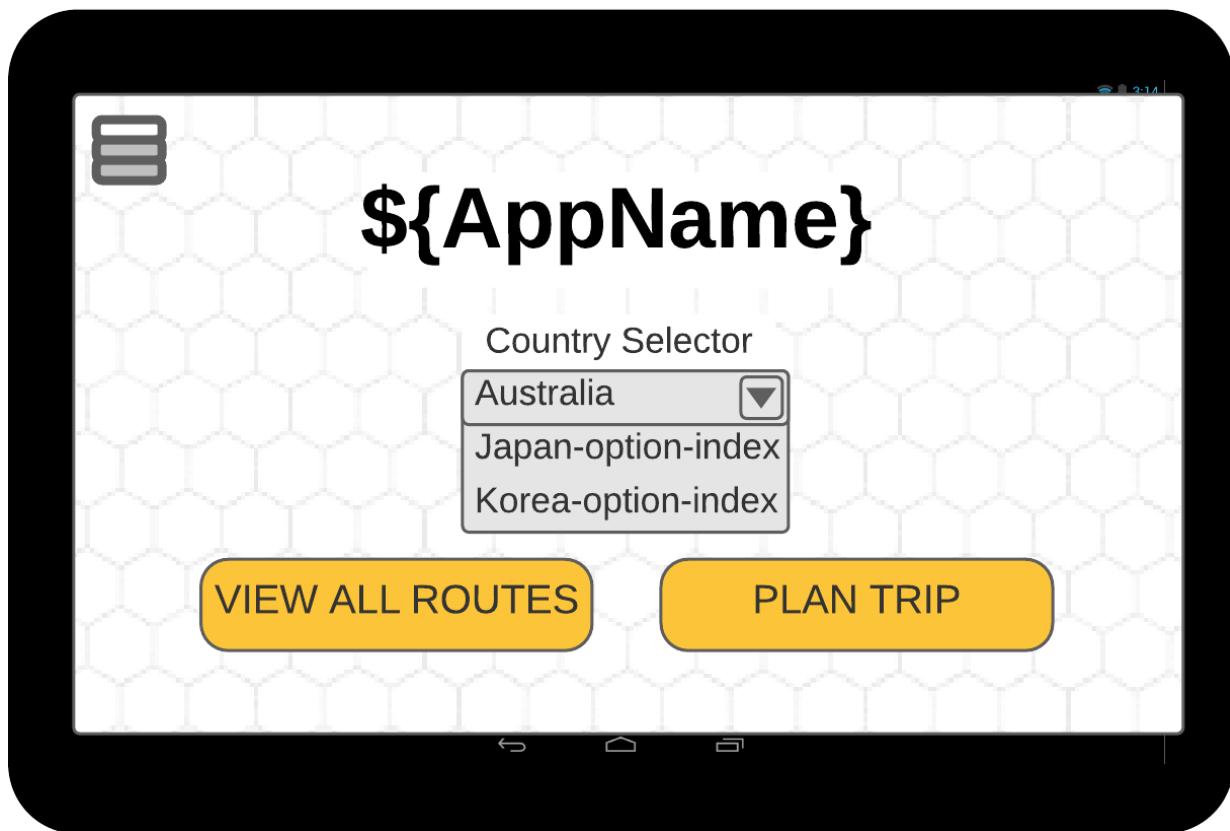
3.1 Welcome

Page Description: This will be the first page which will be visible when the user opens the app, where it shows the logo of the app with a white background. After this, the app brings the user to the homepage.

*User has no control over this page.
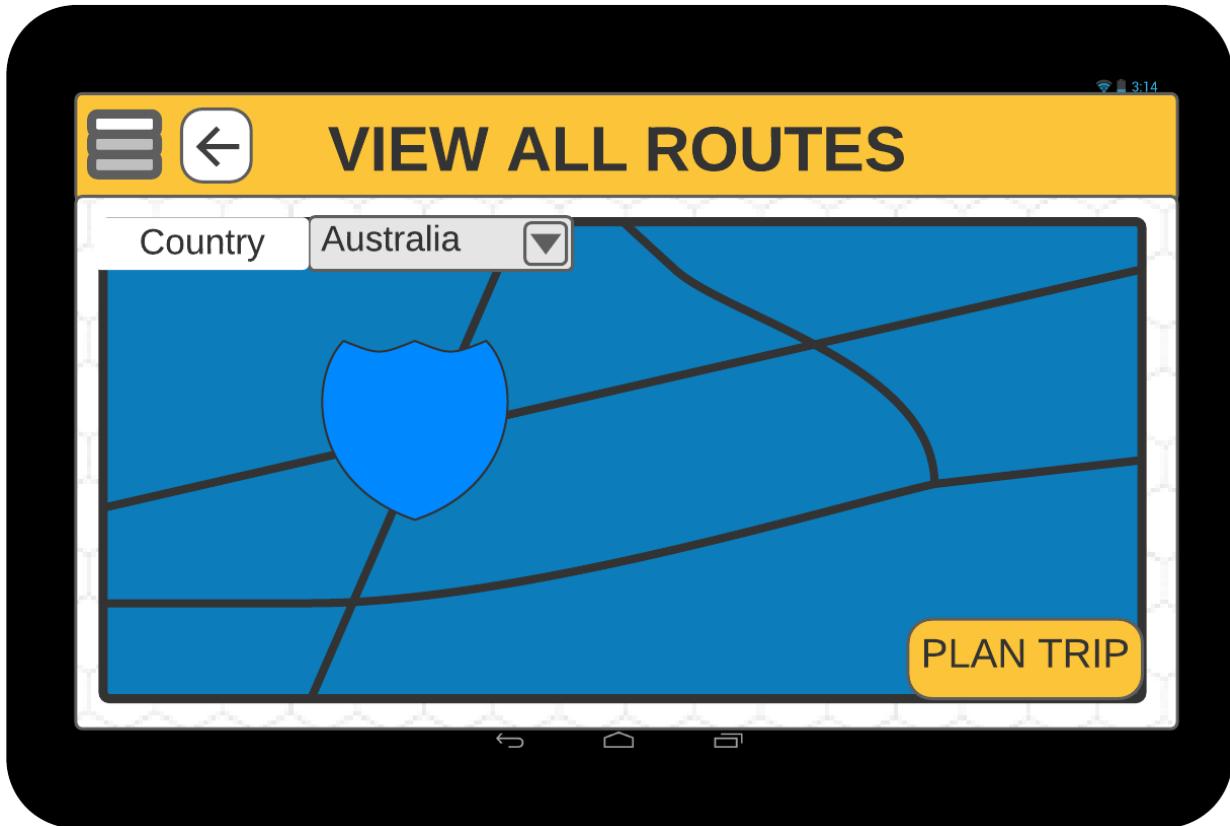
3.2 Home

Page Description: This will be the homepage where it contains an app name at the top of the page of size 38pt. Below the app name, at the centre of the page, there will be a drop-down menu for country selection. After the user has chosen the country, they can either view all routes or proceed to the trip planner.

*User must choose a country in order to click either the view all routes or trip planner buttons and access the respective pages.
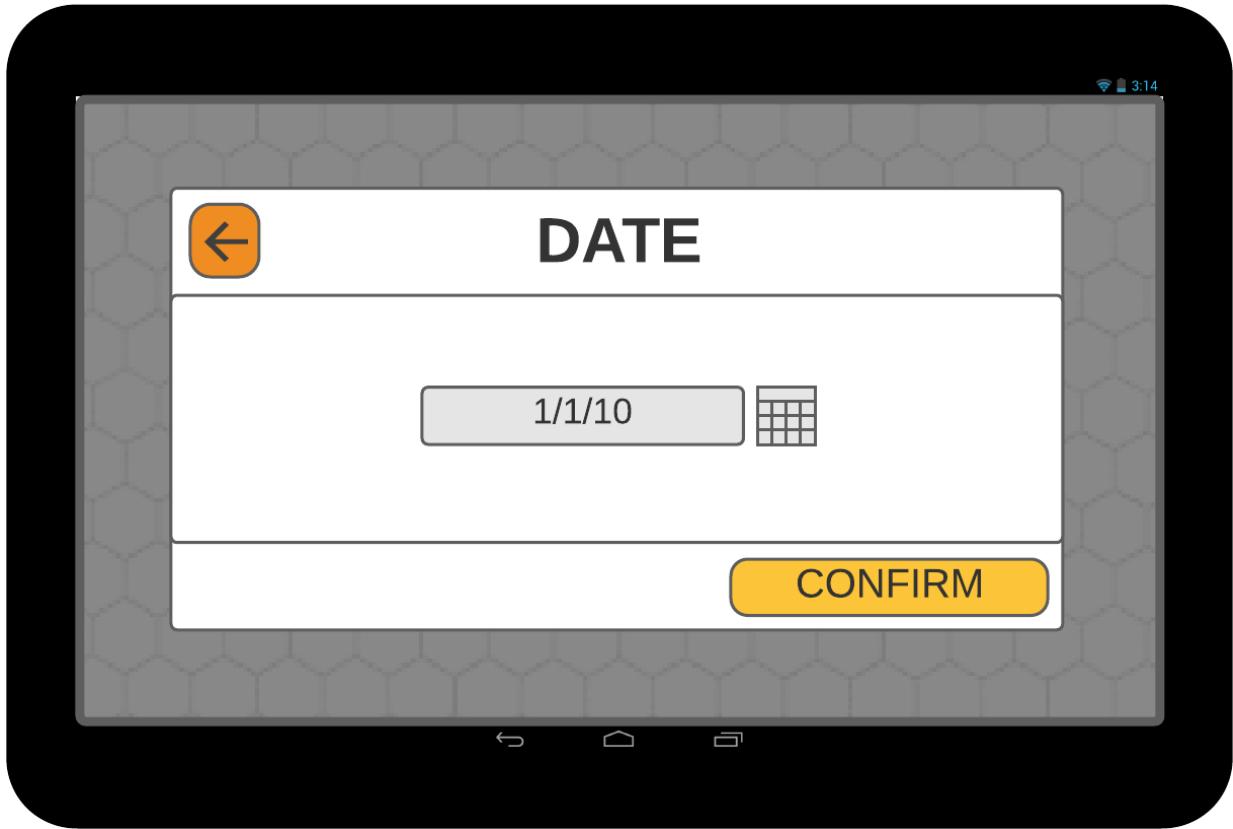
3.3 View All Routes

Page Description: This will be the view all routes page where the user gets to see all the routes to the country through a map where they will choose the desired route. There is a drop-down menu for country selection at the top left of the map if the user wishes to change the country. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. The app logo, back button and the page name will be in the page header section. Lastly, there will be a plan trip button on the bottom right of the map to proceed to the next page.

*User has to choose a route in the map in order to click the plan trip button and move on to the next page.
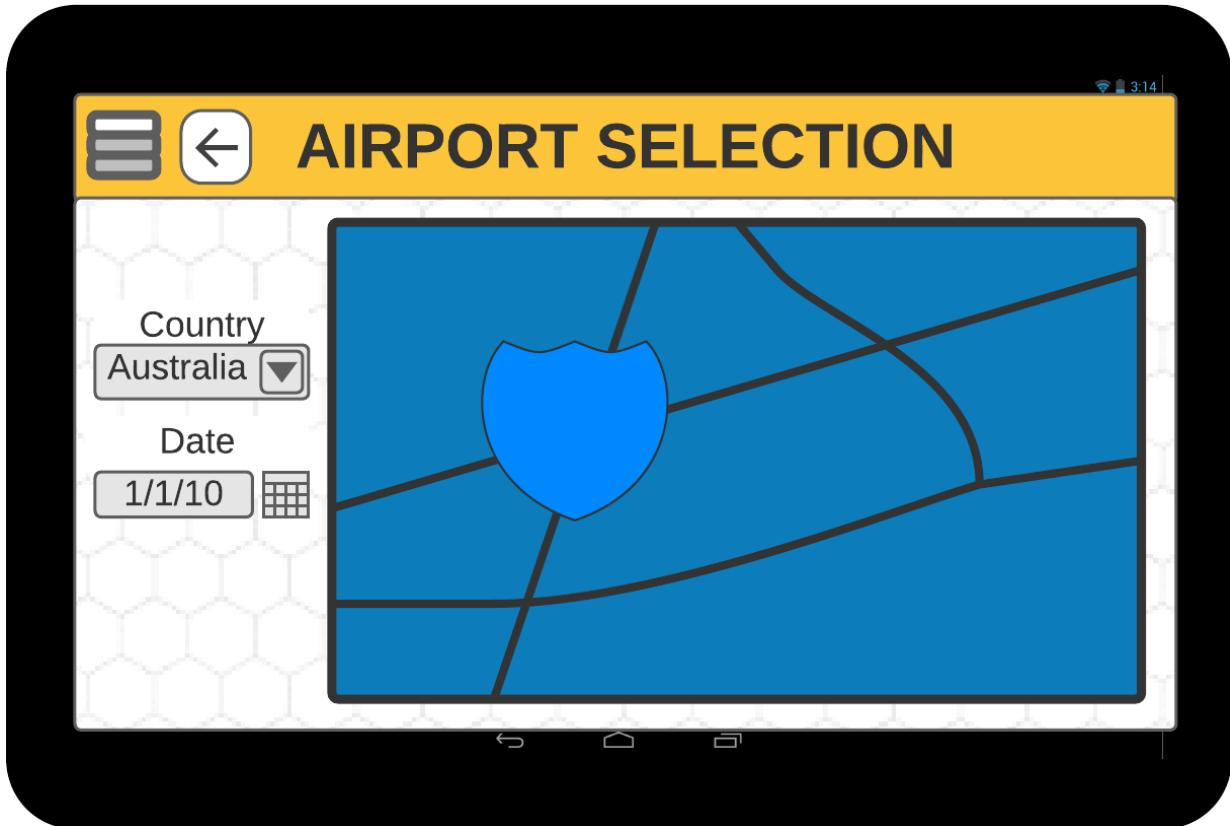
## 3.4 Date Selector Pop-Up

Page Description: This will be a pop-up page where it will ask the user to enter the desired date. There will be a back button on the top left of the pop-up page to go to the view all routes page and on the bottom right, there is a confirm button to proceed to the next page.

*User needs to choose a date in order to click the confirm button and move to the next page.
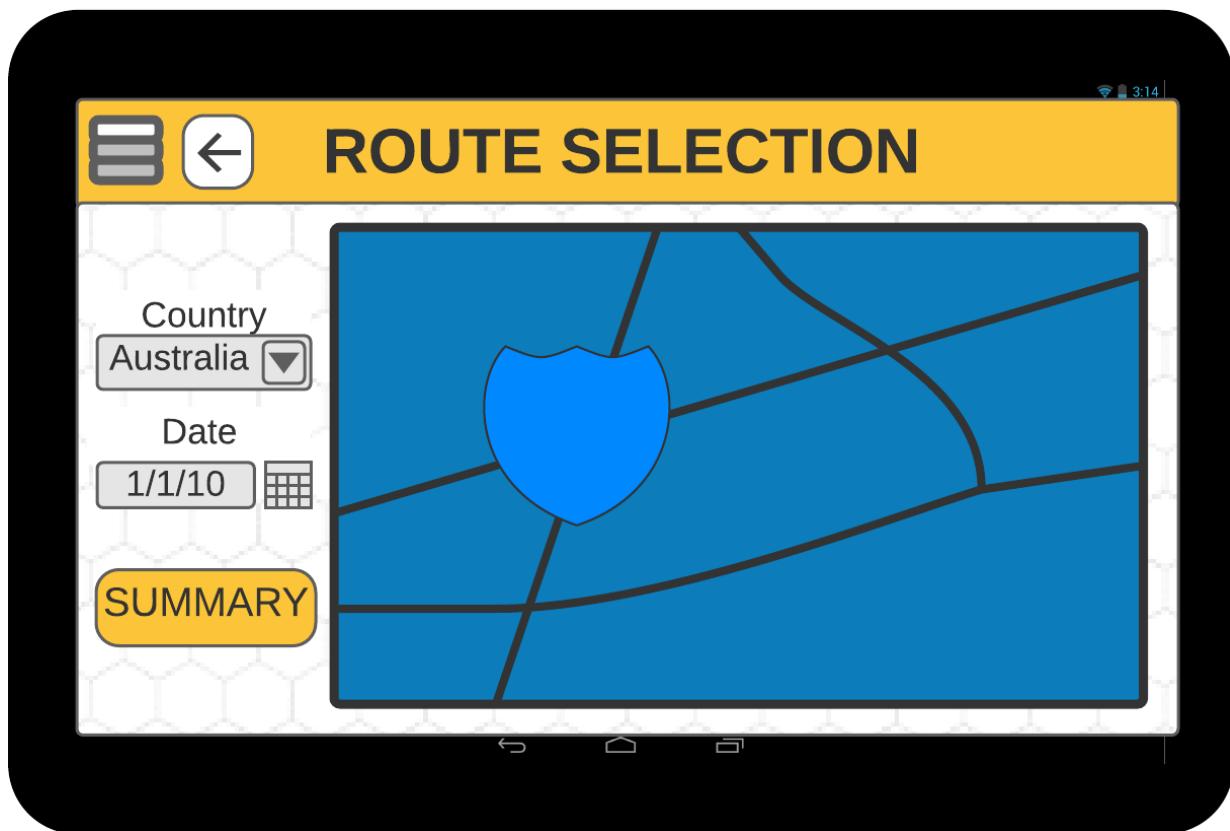
3.5 Airport Selection

Page Description: This will be the airport selection page where there will be a map showing the available airports in the chosen country and date. There will be a dropdown menu for country selection and below this, there will be a date selection for the user if they wish to make any changes to their selection. On the top right of the page, there will be a route selection button for the user to move to the next page. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name and the route selection button will be in the page header section.

*User must choose an airport in order to click the route selection button and proceed to the next page.
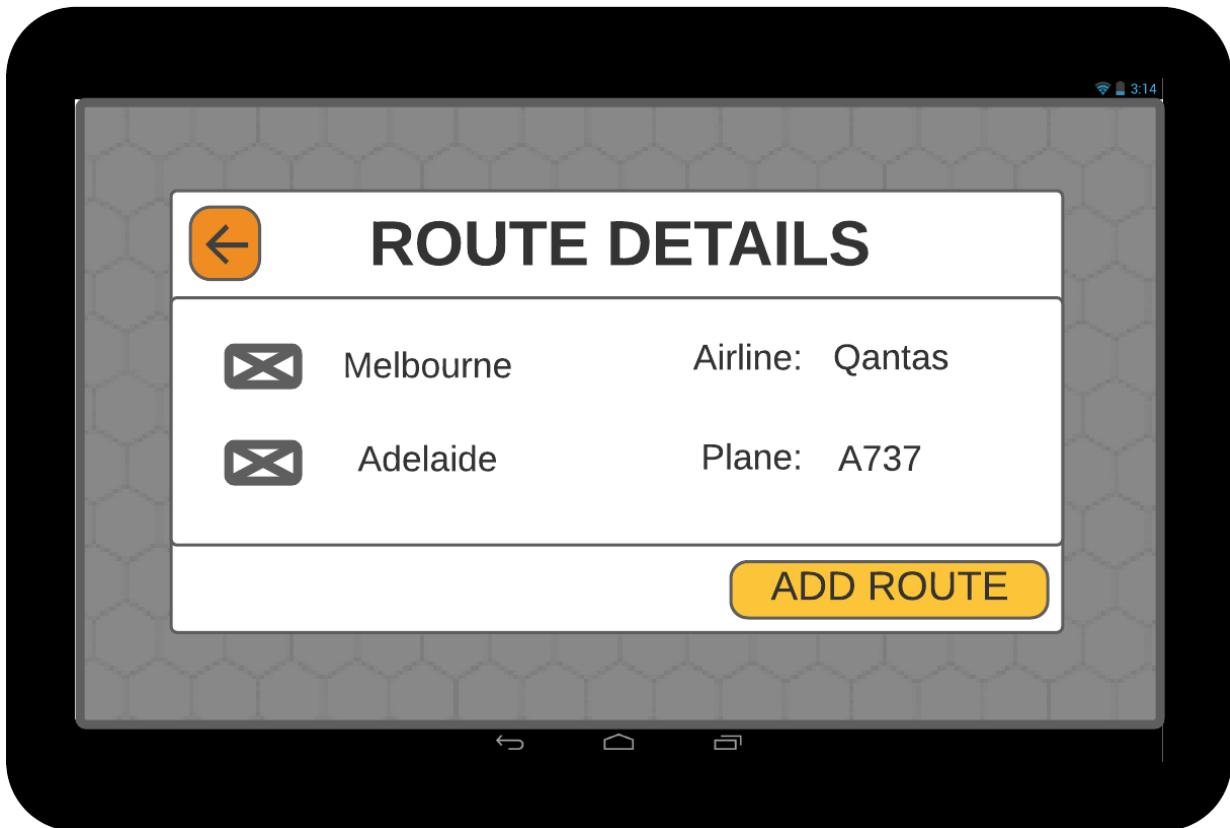
3.6 Route Selection

Page Description: This will be the route selection page where there will be a map showing the available routes in the chosen country and date. On the left side of the page, there will be a dropdown menu for country selection and below this, there will be a date selection for the user if they wish to make any changes to their selection. On the bottom left of the page, there will be a summary button for the user to move to the next page. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name will be in the page header section.
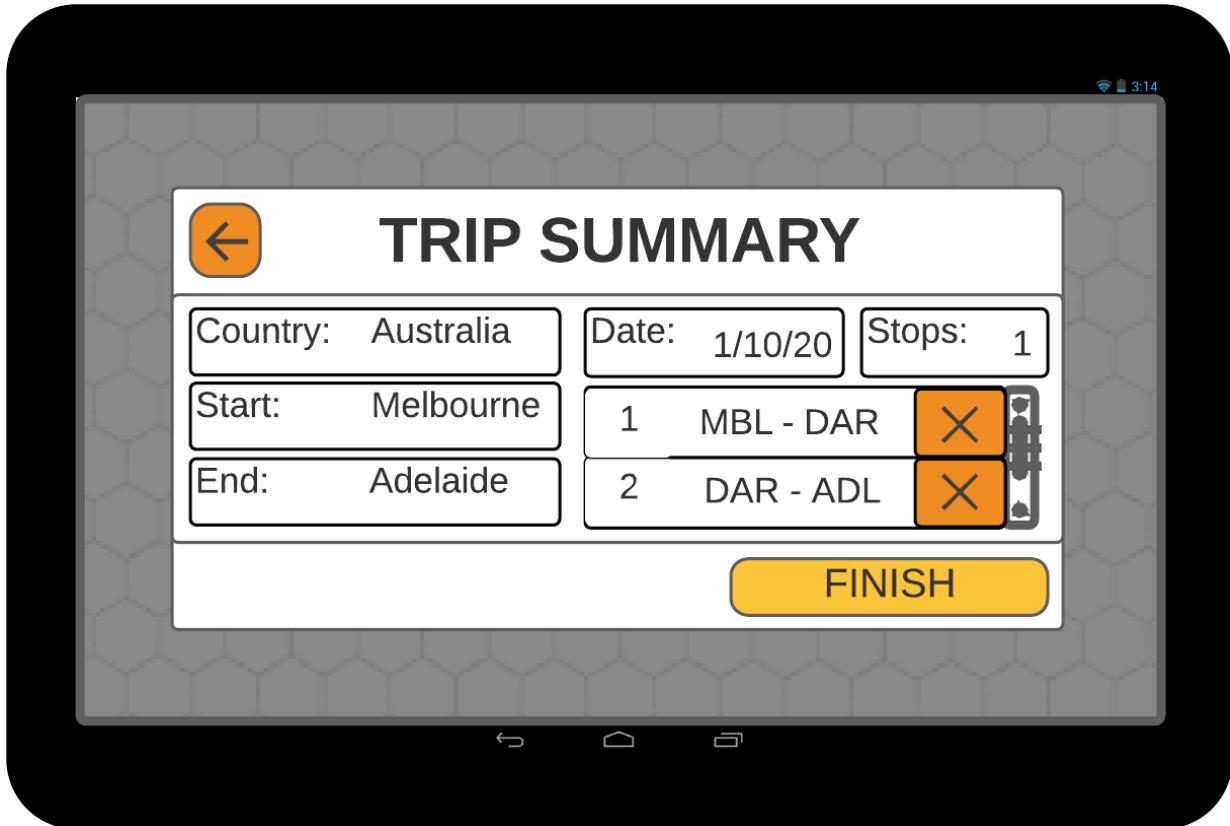
*User must choose the route in the map in order to click the summary button and proceed to the next page.

3.7 Route Details Pop-Up
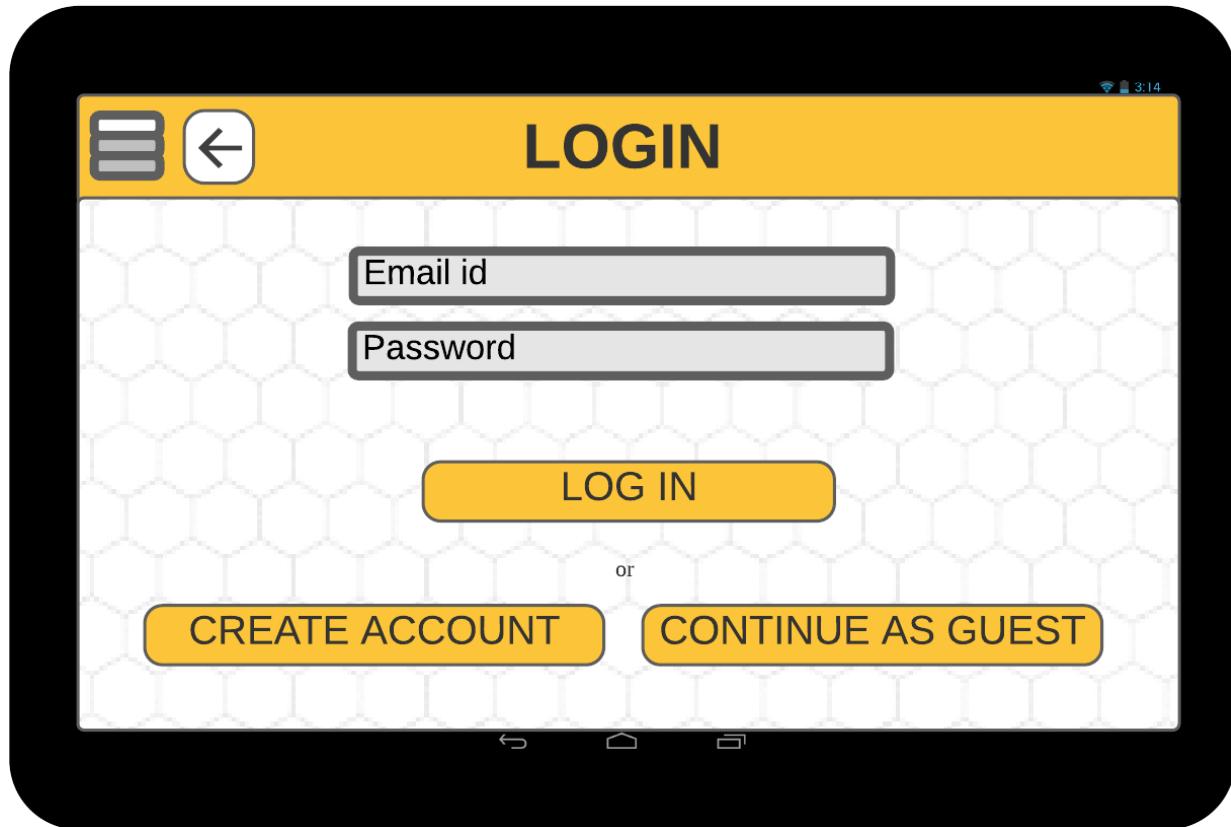
Page Description: This will be a pop-up page where it will show the user the details of the chosen route. There will be a back button on the top left of the pop-up page to go to the route selection page and an add route button on the bottom right to add another route to the trip. Beside it, there is a view trip summary button to proceed to the next page.

3.8 Trip Summary (Unconfirmed Trip)
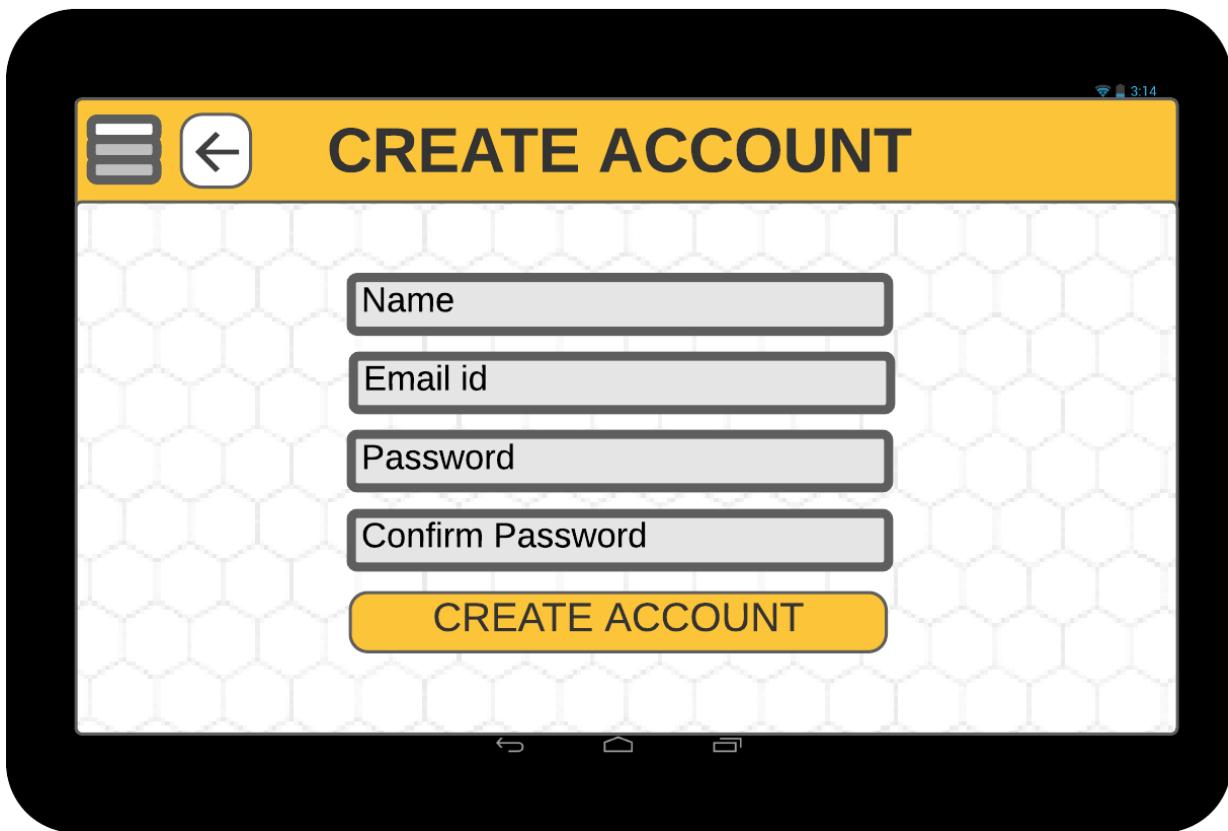
Page Description: This will be a pop-up page where it will show the user the trip summary. There will be cross-shaped icons beside each selected route for user to delete if they want to make changes to the trip. There will be a back button on the top left of the pop-up page to go to the route selection page and on the bottom right, there is a finish button to confirm the trip.

3.9 Login Page
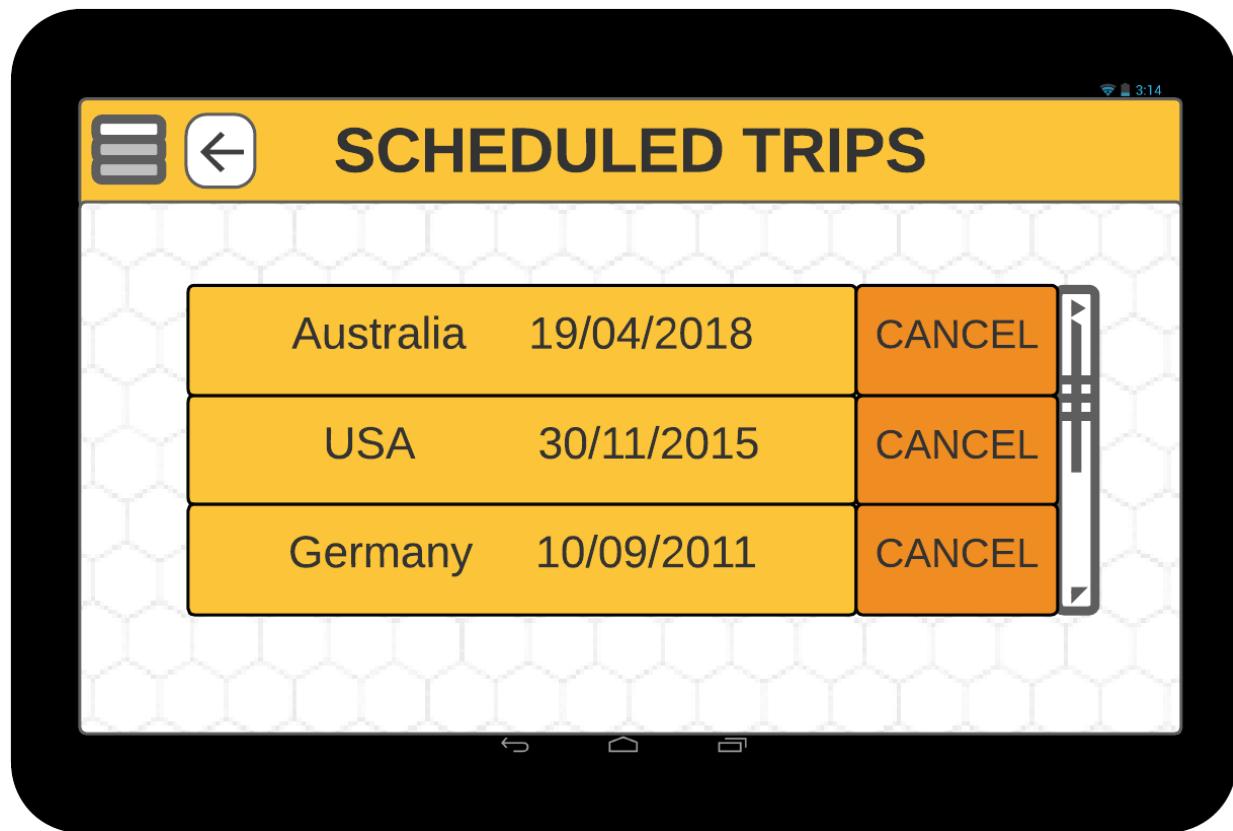
Page Description: This will be the login page and there will be 2 input fields at the center of the page for the user to enter the email id and password. Below this, there will be a log in button and below this, there will be 2 buttons beside one another which are the create account and continue as guest buttons. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name will be in the page header section.

3.10 Create Account Page

CREATE ACCOUNT

Name

Email id

Password

Confirm Password
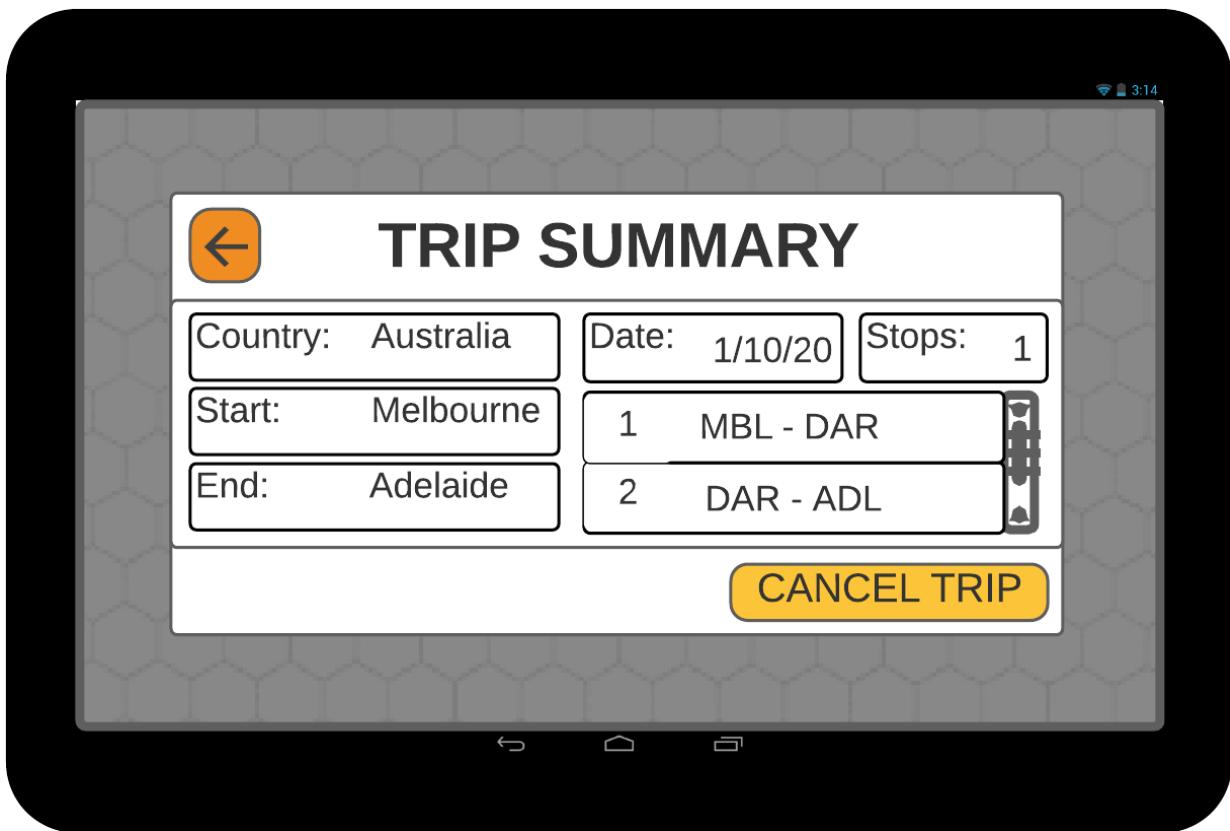
CREATE ACCOUNT

Page Description: This will be the create account page and there will be 4 input fields at the center of the page for the user to enter the name, email id, password and confirm password. Below this, there will be the create account button. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name will be in the page header section.

3.11 Scheduled Trips Page
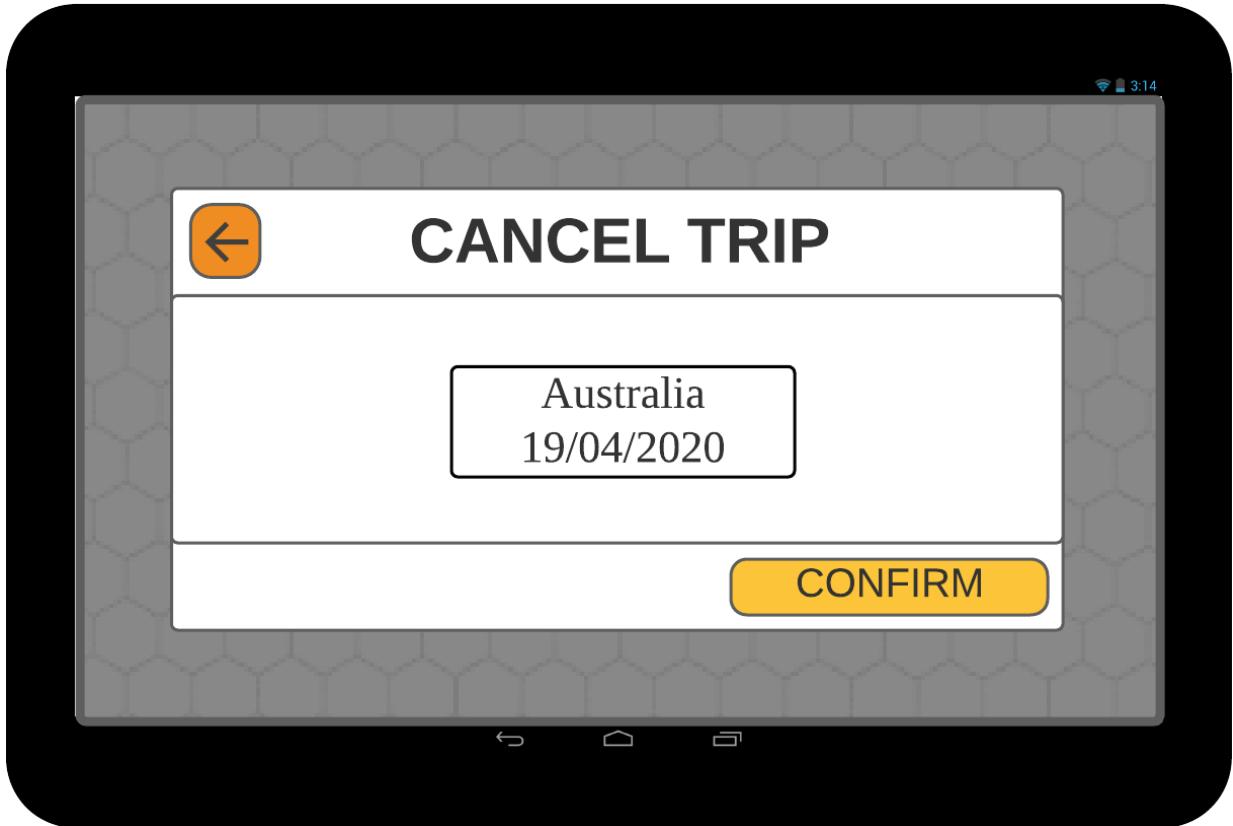
Page Description: This will be the scheduled trips page where it shows the list of trips that are being scheduled by the user. It will be shown in the center with each row containing the specific details of each trip with the most recent at the top and the oldest at the bottom. There will be a cancel button in each column beside each trip for the user to delete the trip if they want to make changes. There will be a scroll bar on the right side of the scheduled trips list. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name will be in the page header section.

3.12 Trip Summary Pop-up Page (Scheduled Trip)

TRIP SUMMARY

Country: Australia

Date: 1/10/20

Stops: 1

Start: Melbourne

End: Adelaide

| 1 | MBL - DAR |
| 2 | DAR - ADL |

CANCEL TRIP
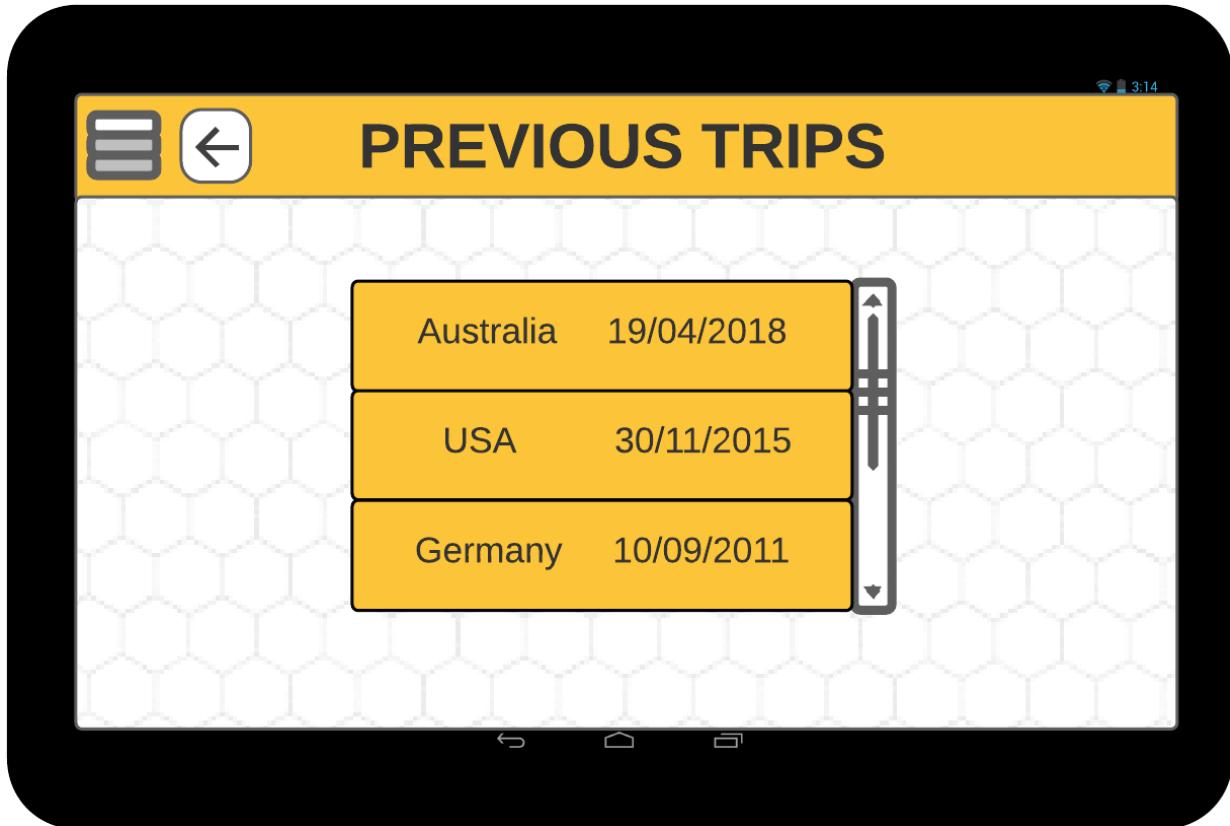
Page Description: This will be a pop-up page where it will show the user the trip summary if the user clicks a specific trip column in the scheduled trips page There will be a back icon button on the top left of the pop-up page to go to the route selection page and on the bottom right, there is a cancel trip button to delete the trip.

3.13 Cancellation Confirmation Pop-Up Page
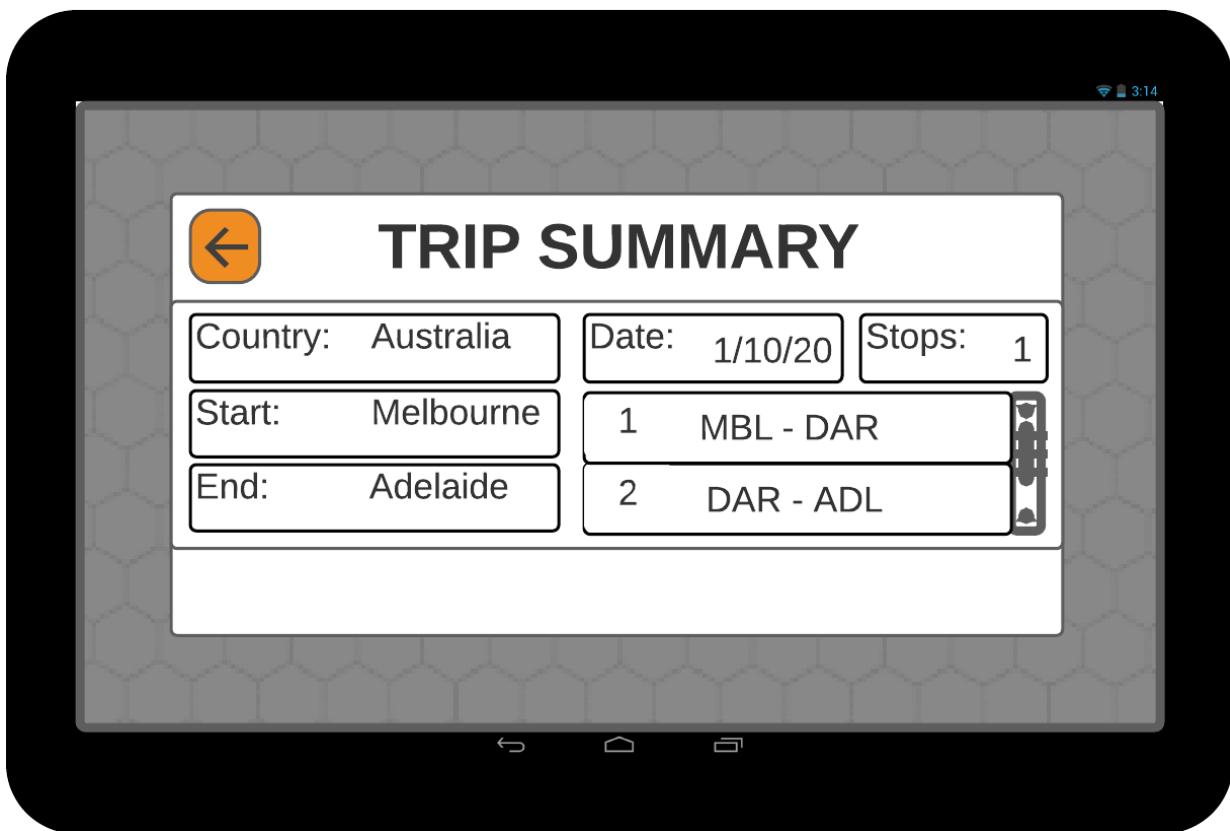
Page Description: This will be a pop-up page where it will ask the user to confirm if they want to delete the trip. There will be a back button on the top left of the pop-up page to go to the trip summary page and on the bottom right, there is a confirm button for the user to provide confirmation to delete the trip.

3.14 Previous Trips Page
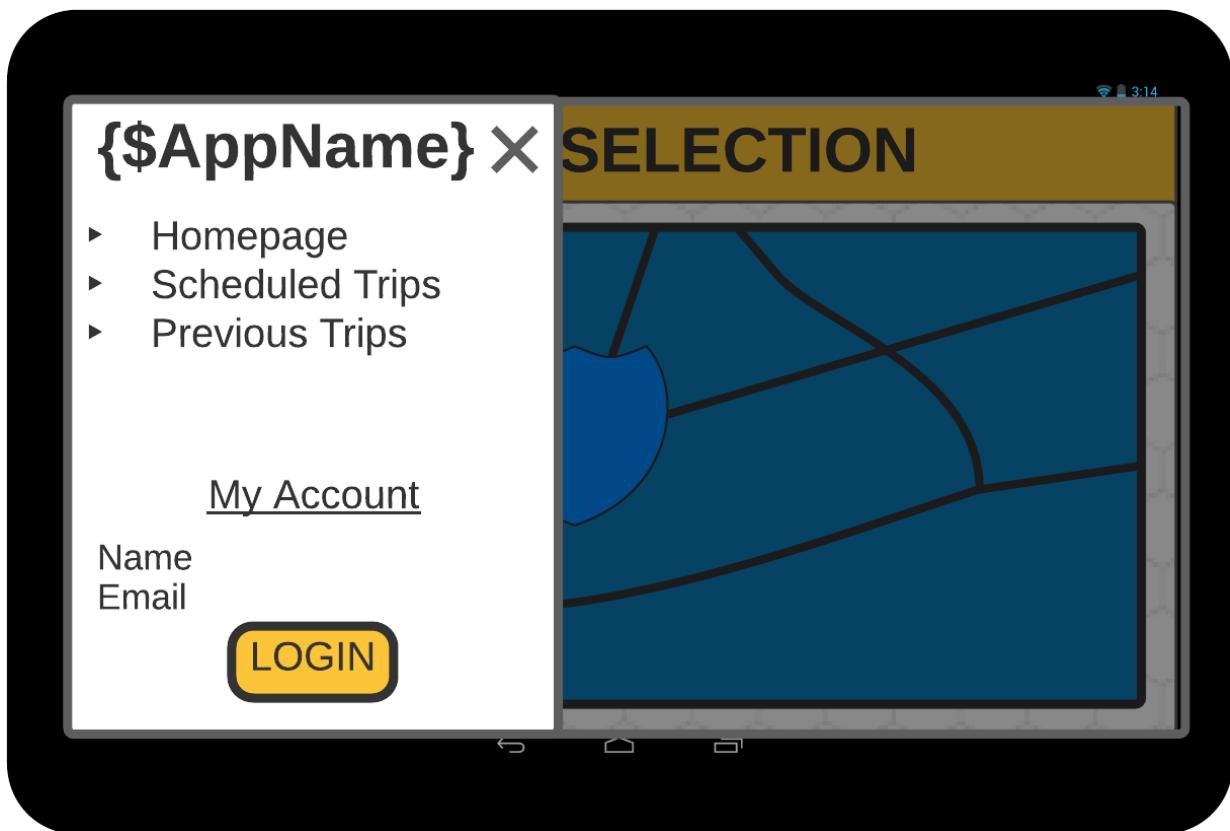
Page Description: This will be the previous trips page where it shows the list of trips that were previously scheduled by the user. It will be shown in the center with each row containing the specific details of each trip with the most recent at the top and the oldest at the bottom. There will be a scroll bar on the right side of the scheduled trips list. There is the app logo on the top left of the page which acts as the menu bar for the side panel. Beside it there will be a back icon for users if they wish to visit the previous page. These app logo, back button including the page name will be in the page header section.

3.14 Trip Summary Pop-up Page (Past Trip)

Page Description: This will be a pop-up page where it will show the user the trip summary of past trips if the user clicks a specific trip row in the previous trips page. There will be a back-icon button on the top left of the pop-up page to go to the previous trips page.

3.15 Hamburger Menu

Page Description: This will be the contents in the sidebar. This can be viewed by the user when they click on the app logo at the top left of the page which acts as a menu bar for the sidebar. In the sidebar, at the top there will be the app's name of size 38pt. Below this, there will be a list of pages for users to access. Below this, there is the account details of the user which will be displayed which contains the name and email id. At the bottom of the sidebar, there will be a login button for the user which when clicked, will bring them to the login page.

4.0 Class Design

Account
constructor(name, emailId, password) -_name:string = name -_emailId:string = emailId -_password:string = password -_tripList:array = []

+get name()
+get emailId()
+get password()
 	
+set password(password)
+addTrip(trip)
   _tripList += trip
 	
+viewScheduledTrips()
   return tripList (future trips)
+viewPastTrips()
   return tripList (past trips)
+fromData()
+toString()

Trip
constructor(date, country) -_date:int = date -_country:string = country -_routes:array = [] -_start: string = "" -_end: string = "" -_stops:int = 0

+get date()
+get country()
+get routes()
+get start()
+get end()
+get stops()
 	
+addRoute(route)
   _start = routes[1][sourceAirport]
   _end = routes[end][destinationAirport]
   _routes += route
   _stops = length(routes)-1
 	
+toString()

Route
constructor(sourceAirport, destinationAirport, equipment, airline) -_start:string = sourceAirportr-_end:string =desttinationAirpor - airline:string = airline -_equipment:string = equipment
+get start() +get end() +get airline() +get equipment() +toString()

0..1   0..*   1   0..*

PREVIOUS TRIPS

Australia	19/04/2018
USA	30/11/2015
Germany	10/09/2011

APP LOGO SHOWS UP AFTER USER OPENS THE APP

{$AppName} ✕
- Homepage
- Scheduled Trips
- Previous Trips

My Account

Name
Email

LOGIN

User can login from any page from this menu, and be returned to that page afterwards

SELECTION

TRIP SUMMARY

Country:	Australia	Date:	1/10/20	Stops:	1
Start:	Melbourne		1	MBL - DAR	
End:	Adelaide		2	DAR - ADL	

Trip Summary has different buttons depending on the type of trip:
Unconfirmed: Routes can change
Scheduled: Trip can be cancelled
Past: N/A

${AppName}

Country Selector
Australia
Japan-option-index
Korea-option-index

VIEW ALL ROUTES   PLAN TRIP

Buttons will be disabled until a country is selected

AIRPORT SELECTION

Country
Australia

Date
1/1/10

Select an airport on the map to continue

ROUTE SELECTION

Country
Australia

Date
1/1/10

SUMMARY

Changing the country or date will require the trip planning to be restarted

Button is disabled until at least one route is added

ROUTE DETAILS

✉ Melbourne   Airline: Qantas

✉ Adelaide   Plane: A737

ADD ROUTE

Adding a route will return the user to the map with new routes to choose from

Images:
Plane Landing
Plane Taking off

VIEW ALL ROUTES

Country   Australia

Searchable dropdown list, allowing the country to be changed

PLAN TRIP

DATE

1/1/10

Button will be disabled until a date is selected

CONFIRM

TRIP SUMMARY

Country:	Australia	Date:	1/10/20	Stops	1
Start:	Melbourne		1	MBL - DAR	✕
End:	Adelaide		2	DAR - ADL	✕

FINISH

LOGIN

Email id
Password

LOG IN

— or —

CONTINUE AS GUEST   CREATE ACCOUNT

User can choose to login or continue as guest, however as guest will not be able to save the trip

CANCEL TRIP

Australia
19/04/2020

CONFIRM

Cancellation must be confirmed before a scheduled trip is removed

TRIP SUMMARY

Country:	Australia	Date:	1/10/20	Stops:	1
Start:	Melbourne		1	MBL - DAR	
End:	Adelaide		2	DAR - ADL	

CANCEL TRIP

SCHEDULED TRIPS

Australia	19/04/2018	✕
USA	30/11/2015	✕
Germany	10/09/2011	✕

Clicking on a trip makes the Trip Summary pop-up

CREATE ACCOUNT

Name
Email id
Password
Confirm Password

CREATE ACCOUNT

Passwords must match and all fields must be filled in before button can be clicked