

Project Proposal  
On  
“MyCity” Android App

For  
SIT 708- Mobile Systems Development

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# 1.Executive Summary

Unit SIT708 – Mobile Systems Development requires students to propose an idea of designing an Android with an App Proposal Document. The App Proposal Document covers all the important technical details and other information about the app titled– **MyCity**.

This document includes:

- Problem Statement, Background, Market Research, Competitor Analysis
- User Stories, UI/UX design details, Other Requirements
- Minimum Viable Product

## Background

Modern day travelers are becoming more and more tech savvy, they're relying less on old paper maps and local guidebooks and are relying more on their smartphones as their travel companion and guide.

International travelers and local urban explorers are looking for new and easier ways to access more useful information to make their stay pleasant. **"MyCity"** app proposal will explain how my app idea will try to give users an easy one stop app for information, viz; places to visit, restaurants, hotels, shops, tourist routes, weather information and other points of interest.

## Market Research and Motivation

After analyzing the market, I was able to find a few products that are trying to achieve the same result as my proposed app. However, a lot of these apps have their own shortcomings.

### 1. Visit A City

About the app –

**Developer:** Visit A City  
**Release date:** 23<sup>rd</sup> April 2015  
**Category:** Travel & Local  
**Compatibility:** Android 4.0 and up  
**Languages:** English  
**Price:** Free  
**Review:** 4.6 out of 5.0

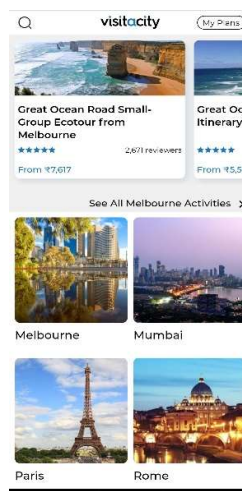


Figure 1.1

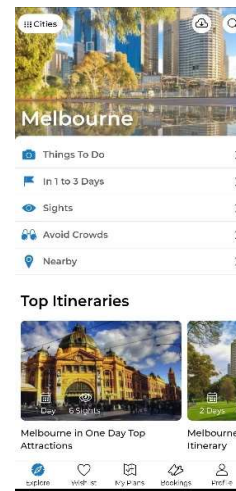


Figure 1.2

Description –

It is a trip planning app. It makes planning a trip to a city easy. It includes a thorough city guide with places to visit and current events happening. It has over 3000 cities in its database. It is free and a lot of its features are free.

It does not have a comprehensive guide of the city. Most of the app includes paid tours. No information on restaurants, public toilets, weather information and ATMs.

## 2. Melbourne – City Guide

## About the app –

<b>Developer:</b>	<b>Timothy Parsons</b>
<b>Release date:</b>	<b>16<sup>th</sup> April 2018</b>
<b>Category:</b>	<b>Travel &amp; Local</b>
<b>Compatibility:</b>	<b>Android 4.0 and up</b>
<b>Languages:</b>	<b>English</b>
<b>Price:</b>	<b>Free</b>
<b>Review:</b>	<b>No Ratings</b>

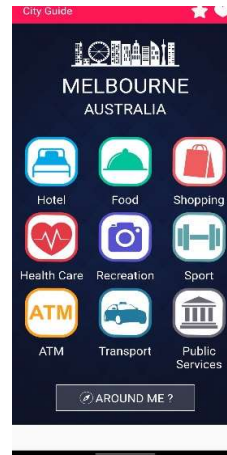


Figure 1.3

Description –

It is a simple city guide app for Melbourne that includes information about hotels, restaurants, shopping, recreational areas, ATMs.

### Shortcomings –

The app has intrusive ads and it is no longer supported by the developer.

### 3. Melbourne Travel Guide

## About the app –

<b>Developer:</b>	ETIPS INC
<b>Release date:</b>	4 <sup>th</sup> May 2017
<b>Category:</b>	Travel & Local
<b>Compatibility:</b>	Android 4.0 and up
<b>Languages:</b>	English, French, Spanish, Italian
<b>Price:</b>	Free
<b>Review:</b>	No Ratings

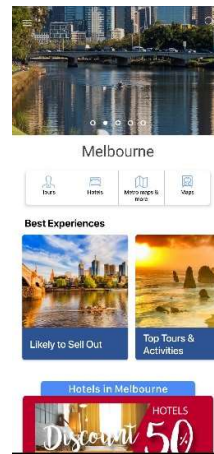


Figure 1.4



Figure 1.5

Description –

It is a simple city guide app for Melbourne. It has most of the required information such as paid tours hotels, metro maps. It also has multiple language support.

Shortcomings –

The UI is a little clunky and the information is not readily displayed. It has a paid membership which means it is not completely free. Most of the maps in the app need to be downloaded and are not interactive.

## 2. Context

“**MyCity**” app is designed to help travelers coming to the city to explore. It is specifically developed to help International visitors get more information readily available about Melbourne. Giving information about lesser known places in Melbourne is the main goal of the proposed app.

It will be immensely helpful for me as an international student to have a detailed guide of the city I will be staying in on my smartphone.

### Product Summary

My app will be a digital, interactive city guide to international travelers and visitors to Melbourne. The app will have a simple UI, designed around Google’s Material UI design guidelines.

The users will have a login screen. The app will keep a track of all the places users have visited. It will also have a short description of each tourist destination with opening and closing timings. The proposed product has a lot of potential for further addition of features to make it a more fleshed out product.

## 3. Asset List

Following is the list of tools and technologies that will be required for the proposed app:



- **Android Studio IDE:** Android Studio is the official IDE developed by JetBrains’ IntelliJ IDEA for android development. Android Studio also has a very easy to configure Android Emulator. The minimum targeted SDK will be SDK 16 (Android Jellybean).



- **Kotlin:** Kotlin is a cross platform language that is supported by google. It is lightweight and far cleaner compared to java.



- **Google Firebase:** Firebase is a Database API that will help synchronize data across android devices. It is backed up by Google and is has great integration with Android



- **Google Maps API:** Google maps is the most popular maps API on the platform with great navigation. This API will be used to access the city map and get directions for the requested destination.



- **Zomato API:** It will help retrieve a detailed list of restaurants from Zomato’s database. It is one of the most popular restaurant APIs.



- **Adobe XD:** Adobe XD is a user experience design tool for mobile applications and web applications. It allows for the creation of interactive UI elements and wireframes with a lot of useful plug-ins.



- **Microsoft Teams:** Teams is required to communicate with the professor.
- **flaticon.com:** It is a website that allows us to download and use royalty free icons both free and paid that are submitted by users.
- **photopea.com:** It is a web-based image editing tool that is free to use. It can be considered as a free online photoshop tool. It will be used to make the app icon.



- **unsplash.com:** This website provides a huge catalogue of royalty free pictures that are free to use and download.

## 4. Product Purpose

The purpose of the product is to give detailed information about the city's attractions. Hence, the main target demographic of the app are tourists. The main idea of the app is to provide international and local travelers with high quality information about Melbourne in one single easy to use app.

Exploring a new city is a very exciting yet a very daunting task as there may be many places that the city is very well known for, especially when a city is as expansive as Melbourne. I, as an International Student myself, struggled to get all the information in one place. There are many apps that do this, however most of them provide incomplete information and do not give all the required information such as restaurants, ATM locations etc.

The UI will follow Google's material UI design template and will be easy to use a new user. A login screen to keep track of the places already visited and a list of the most popular spots in Melbourne to not confuse the user. The app will also have a short description and images of the spot.

## 5. Intended Behavior

### 5.1. Requirements

The app should have the following core functionalities –

- Signup/Registration functionality
- Login Functionality
- Maintaining user data
- User should be able to access information about the places they want to visit
- The app should have key features such as a list of places to visit available offline

## 5.2. Components of the App

- **Login/Registration Screen**

This is the first page the users will land on when they open the app for the first time on their smartphones. If the user is already registered, then they can login with their email. New users can register with their email address or they may use Google's auto login system. Google's Firebase will be used to keep sensitive user data secure.

The figures below show the login screen and the options for logging into the app –

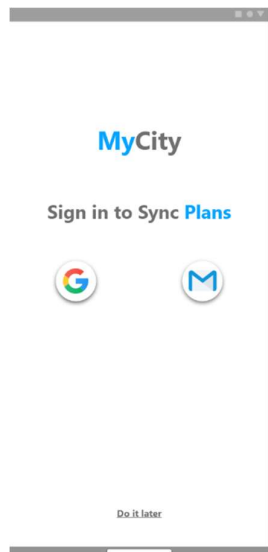


Figure 5.2.1

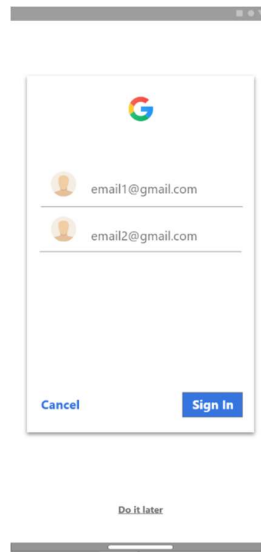


Figure 5.2.2

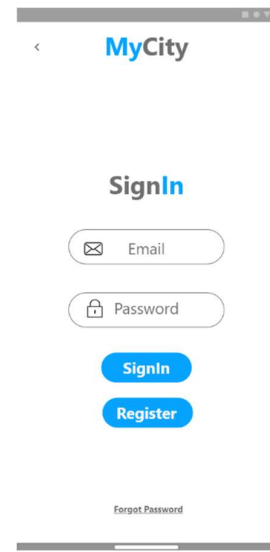


Figure 5.2.3

The user can also register themselves. They will also be provided a way to reset their password. Below are the figures showing these two functionalities –

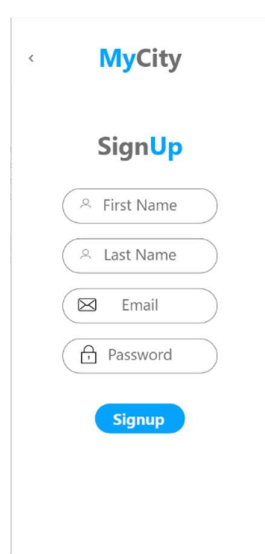


Figure 5.2.4

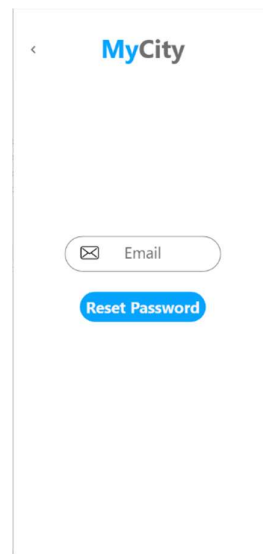


Figure 5.2.5

User Story	Acceptance Criteria	Story Points	Priority
As a new user to the platform I want to be able to register to the app.	<ol style="list-style-type: none"> <li>1. Easy to understand design of the main login page.</li> <li>2. On opening the app user should be presented with both options- <b>login to the app, register as new user.</b></li> <li>3. If it is a new user, they should immediately be taken to the login screen after registering</li> </ol>	Story Points- 7	Priority: High

User Story	Acceptance Criteria	Story Points	Priority
I want to be able to login to the app even if I don't remember my password. The app should have a <b>"Forgot password"</b> option available.	<ol style="list-style-type: none"> <li>1. After the user opens the app, they should be presented with the option of resetting the password.</li> <li>2. The option to do this should be clearly visible to the user. A clean UI will ensure this</li> </ol>	Story Points- 7	Priority: High



- **Main Screen**

The main screen of the app will have a list of places that the user has been at the top and after that a list of all the tourist attractions in Melbourne. Once the user clicks on one of the places, he will be greeted with its description page. The description and the images will be available without any internet connection to the user.

The figure below shows the main screen of the product –

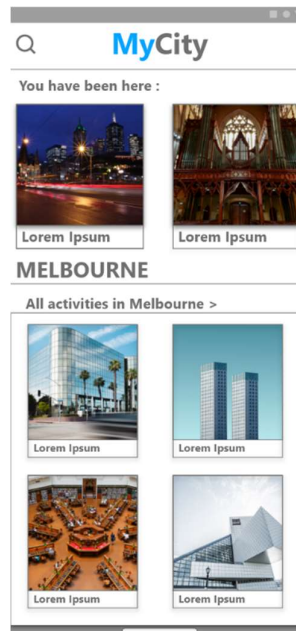


Figure 5.2.6

User Story	Acceptance Criteria	Story Points	Priority
After logging in I want to see a list of all the tourist spots available in Melbourne	<ol style="list-style-type: none"> <li>1. Once the user has opened the app, they will have a small section where a few spots will be listed.</li> <li>2. The user can then click on “All activities in Melbourne”, it will then open a list of all the tourist spots in the city.</li> <li>3. The user can also click on one of the tabs and open a description of the place.</li> </ol>	Story Points- 8	Priority: High

User Story	Acceptance Criteria	Story Points	Priority
As a user I want to be able to see all the places I have already visited.	<ol style="list-style-type: none"> <li>1. After the user has logged in, they should see all the places they've visited at the top.</li> <li>2. If this is the first time the user will not have any places listed</li> </ol>	Story Points- 5	Priority: Medium

- **Description Screen**

The description screen will open when the user clicks on one of the tiles displaying the tourist spots. This screen will contain information about the history of the place, the timings, and the directions to the spot. Initially the description will be short, however if the user wants more information they may click on “**Read More**” to get more detailed information.

Figures below will show the description screen –

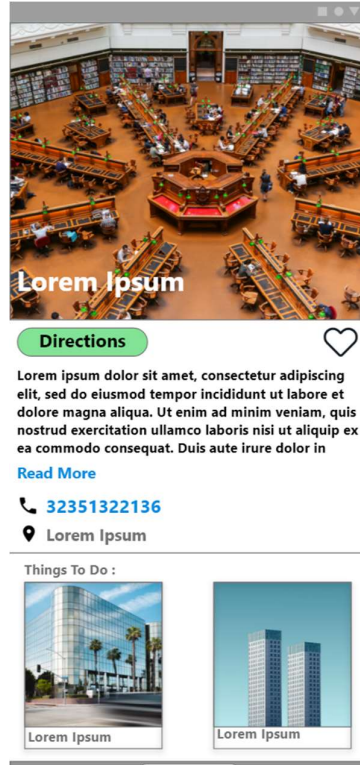


Figure 5.2.7

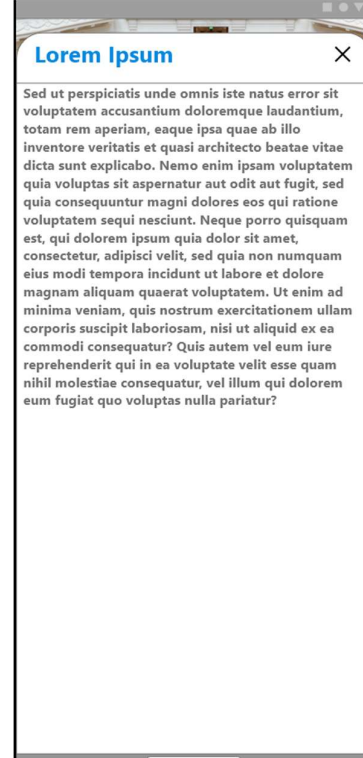


Figure 5.2.8

User Story	Acceptance Criteria	Story Points	Priority
Being a registered user of the app, I want to be able to have some sort of knowledge about the place I will visit.	<ol style="list-style-type: none"> <li>1. The user must click on one of the places they want to visit.</li> <li>2. Once they do that a new view will open on the app that will give them a short paragraph with information regarding the place they're visiting.</li> <li>3. The user can then click on "Read More", this will open a window on top of the current view giving them detailed information about the spot.</li> <li>4. This page will also have a phone number for the location and its timings.</li> </ol>	Story Points- 7	Priority: High

User Story	Acceptance Criteria	Story Points	Priority
As a user of the app I want the app to have the functionality to give me directions to the spot I want to visit	<ol style="list-style-type: none"> <li>1. Once the user has selected an option from the main screen a new view will open.</li> <li>2. This view will give them a short description of the spot. It also has the option of giving them directions.</li> <li>3. Google Maps API will be used to give users accurate directions to the spot they wish to visit.</li> </ol>	Story Points- 9	Priority: High

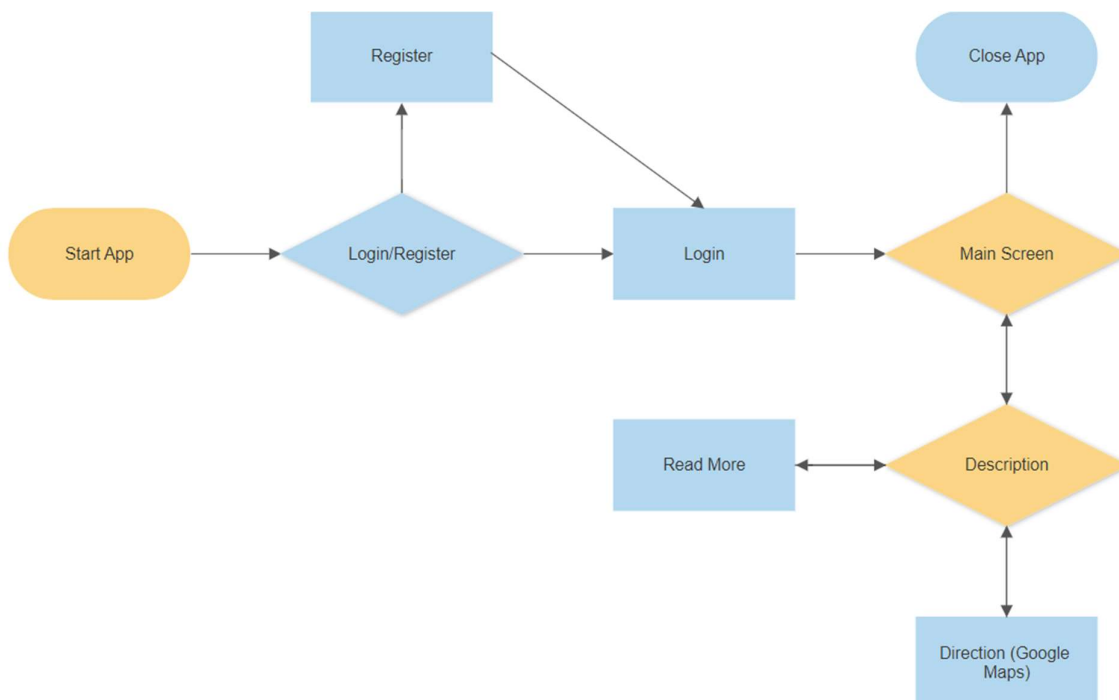
## 6. Minimum Viable Product

The minimum viable product must have the following functionalities for the app to go live:

- New users should be able to register in the app.
- Users who have already registered should be able to login.
- Users should be able to reset their passwords if they forget.
- Once the user has logged in, they should be able to see all the Tourist spots without any internet connection.
- When the user has selected an option, a new window should open with more options and a short description
- The user should be able to get live directions to their destination.

## 7. Flowchart

The figure below will show the general flow of the app when the user will open it. This flow chart is based around the minimum viable product i.e. it is based on the bare minimum functionalities the product will provide to any user.



## 8. UI/UX Design and Wireframe

- **Wireframe**

Figure below is the wireframe prototype of the app. This wireframe is made as per the minimum viable product. The wireframe was made in Adobe XD.

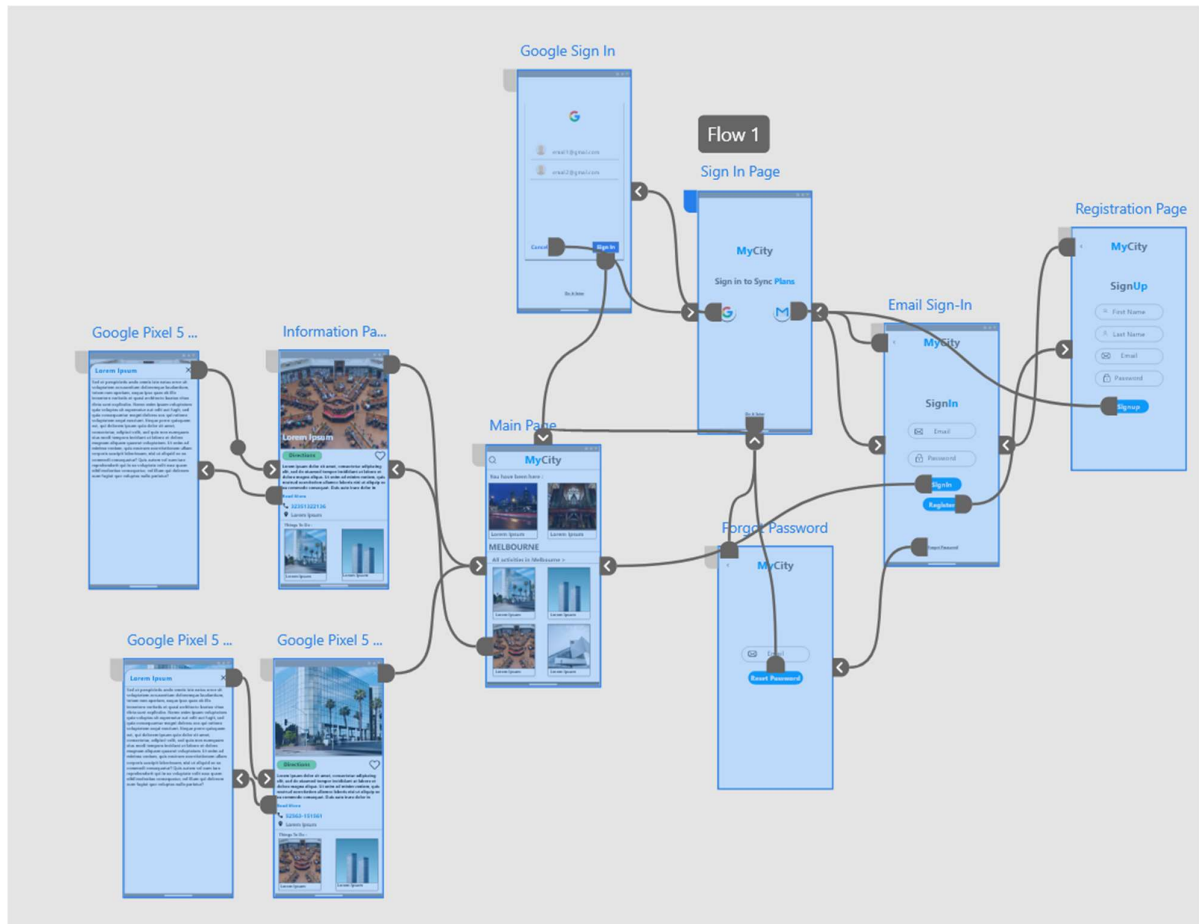


Figure 8.1

- **Summary of Wireframe:**

This will be one complete cycle of the app for a first-time user:

**Step 1:** Once user opens the app, they will be greeted with the login screen

**Step 2:** From the login screen the user can either sign in if they are already a registered user, or they can sign up.

**Step 3:** Once the user has signed up, they will be taken to the login screen to login. Once logged in they will be taken to the Main Page.

**Step 4:** On the main page the user will get a list of all the tourist spots in Melbourne. User once they've clicked on a spot a new screen will open

**Step 5:** This screen will have a short description of the spot, the option to favorite the spot and the directions.

**Step 6:** The user will have the option to “**Read More**”. This option will open a screen with more information about the spot.

**Step 7:** Clicking on the directions button will open Maps.

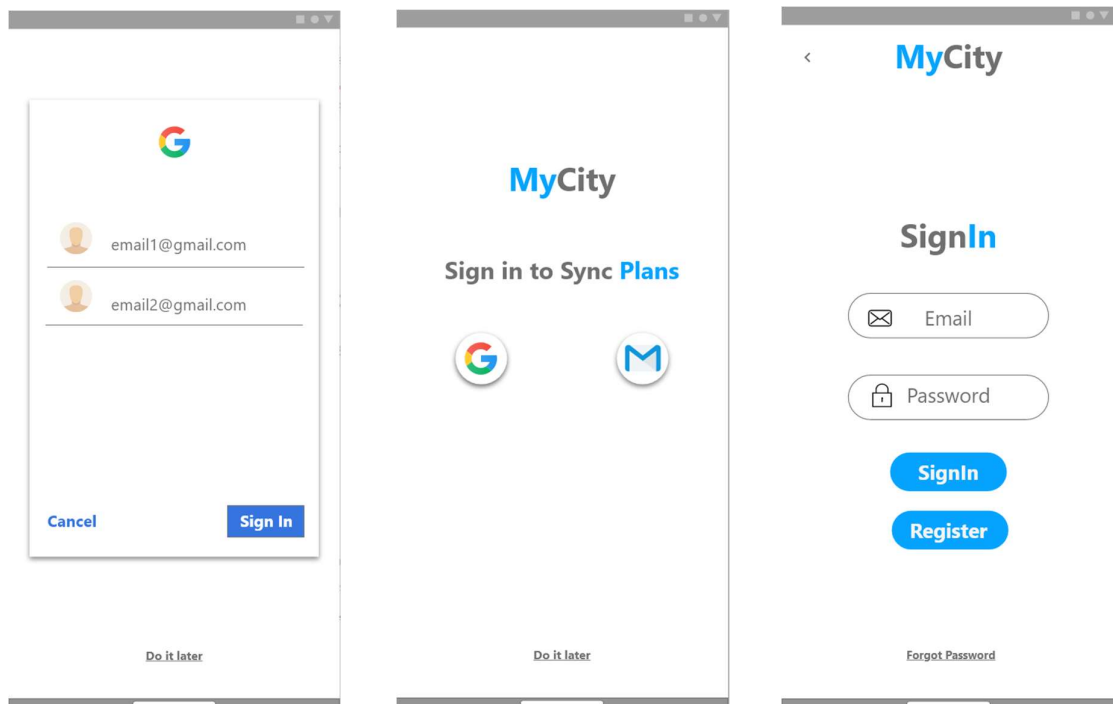
- **UI/UX Design**

Adobe XD does not offer a simple way to share the UI prototype. The link below is the OneDrive link to the file.

The file is available for download. Once downloaded the file can be opened using Adobe XD and the prototype can be run on the system.

[https://deakin365-my.sharepoint.com/:u:/g/personal/dnargund\\_deakin\\_edu\\_au/EXNHMGvpBQINgmunIJtfx4oBPhg6ExSzpxRSjtne-5Zp3A?e=j8l9p7](https://deakin365-my.sharepoint.com/:u:/g/personal/dnargund_deakin_edu_au/EXNHMGvpBQINgmunIJtfx4oBPhg6ExSzpxRSjtne-5Zp3A?e=j8l9p7)

- **Login Screen**



- Registration and Forgot Password Screen:

MyCity

### SignUp

First Name

Last Name

Email

Password

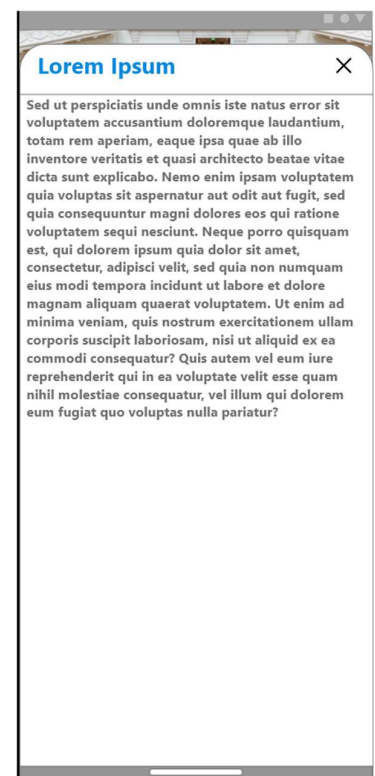
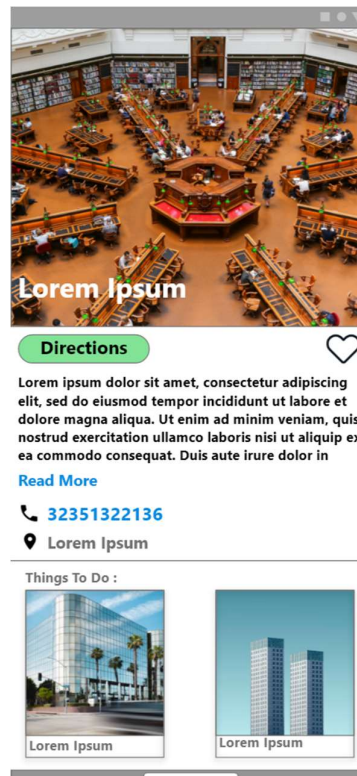
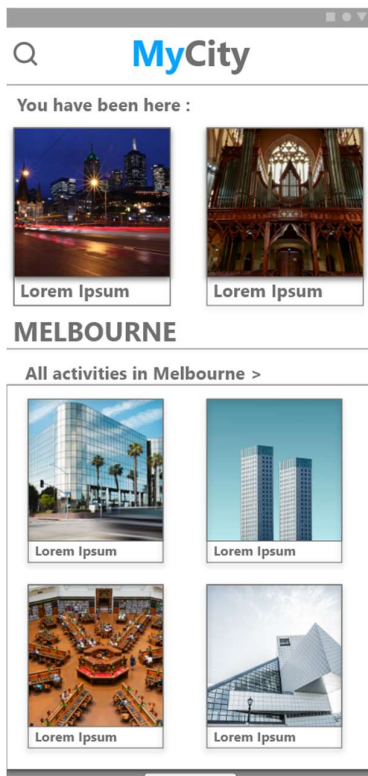
Signup

MyCity

Email

Reset Password

- Main Screen and Description Screen:



## 9.Sprint Plans

- **Sprint 1 (Week 1 - 4) –**

**Aim:** Main aim of the first sprint is preparing a product proposal document with a complete market analysis, proposal background and feasibility of the product.

The product proposal must also include UI/UX prototyping from either Adobe XD or Figma along with the wireframe.

- **Sprint 2 (Week 4 - 9) –**

**Aim:** The second sprint's main aim is to develop a fully fleshed out login and registration system using Google Firebase as the backend database.

**Sprint Backlog:**

- **Development of the first user story:** User Registration system
- **Development of the second user story:** User Login system and password recovery system

- **Sprint 3 (Week 9 - 12) –**

**Aim:** Third sprint's main goal is to work on adding the actual data i.e. tourist spots, their description, and directions.

**Sprint Backlog:**

- **Development of the third user story:** Main screen/ Homepage
- **Development of the fourth user story:** Developing a system to remember where the user has visited
- **Development of the fifth user story:** Description page
- **Development of the sixth user story:** Integration with Google Maps to give user direction to their destination



## 10. Artifact Management

The tools listed below will be used for knowledge gathering and useful artifacts for the project.

- **Microsoft Teams:** Microsoft teams will be used to communicate with the professor
- **OneDrive:** To share project data and prototypes.

**OneDrive Link:**

<https://deakin365->

[my.sharepoint.com/:f:/g/personal/dnargund\\_deakin\\_edu\\_au/EpWRt71QZwxHovN](https://deakin365-my.sharepoint.com/:f:/g/personal/dnargund_deakin_edu_au/EpWRt71QZwxHovNYw47zJA4BSSVHyXOftxc3CsUw5173Tw?e=dVD0dn)  
[Yw47zJA4BSSVHyXOftxc3CsUw5173Tw?e=dVD0dn](https://deakin365-my.sharepoint.com/:f:/g/personal/dnargund_deakin_edu_au/EpWRt71QZwxHovNYw47zJA4BSSVHyXOftxc3CsUw5173Tw?e=dVD0dn)