

ENG1003  
Assignment 2

# Project Management Plan



Buzz Flightyear  
Trip Planner

Team 32

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# 1.0 Introduction and Purpose

This web application helps students plan their travel within a chosen country for the whole semester or year. The app allows a user to plan a trip by choosing routes in a selected country on a selected date.

This Project Management Plan is intended to explain the context of the app and document the decision process. If there is a new joining of anyone to the group, it will help to get started with the project so that they know the processes and plan for the project that they are joining. It provides a breakdown of each team member's responsibilities in the creation of the app, as well as the communication management in the project.

## 2.0 Project Information

### 2.1 Background and Intended Use

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. One of the highlights of the app is that the user is able to plan a trip with minimal effort. This was achieved by using the minimal information provided by the user to plan a trip in a user-friendly manner.

## 2.2 Scope

The app does not book the trip for the user, but does outline the included routes and their details. A trip is assumed to be composed of at least one route, between designated airports listed in the API while it could be booked with multiple routes as well. This causes the app to not include the information of flights such as the name of flight, duration of the trip etc. The reasons for excluding the features is that it might need additional API to let the user be aware of flight information.

The app does not let the user to reset or delete their account and also features such as “remember my password” and “save my password” were excluded as they would require complex coding. Additionally, these features will possess security problems as any person would delete an account or reset a password which could lead to misuse of the information in the app.

The guest user is not able to access all the features of the app as they are not able to save that trip but they are able to book a trip. One of the main reasons for this limitation is to differentiate between a user who has an account and a guest user. Another reason is that it helps with security purposes by saving the data of a user who has an account and preventing any other users from accessing the trip plan and causing any changes to it.

## 2.3 Deliverables

Timeline	Project Tasks	Dependencies
Week 5	Initial Project Meeting Client Interview	
Week 6	Requirements Gathering - list of features - user stories	Client Interview
Week 7	Design Document - User Interface Design - Wireframes - Storyboard - Class Design Project Management Plan	Requirements Gathering  Wireframes Storyboard Design Document
Week 8	Prototyping Phase - API Research: Limitations & Capabilities - MDL Prototyping	Design Document Design Document

Week 9	Implementation Phase <ul style="list-style-type: none"> <li>- page creation</li> <li>- css styles</li> <li>- JavaScript integration</li> <li>- MapBox API usage</li> <li>- OpenFlights API usage</li> </ul>	Prototyping Phase MDL Prototyping  API Research
Week 10	Verification Phase <ul style="list-style-type: none"> <li>- feature list</li> <li>- system tests</li> <li>- unit tests</li> <li>- test results</li> </ul>	Implementation Phase Requirements Gathering
Week 11	Client Handover <ul style="list-style-type: none"> <li>- presentation</li> </ul>	App testing success

### 3.0 Personnel Management

Team Member	Contact Details	Responsibilities
Alex Hofmann	ghof0001@student.monash.edu	Personnel Management Implementation Coordination Design UI Research
Anushka Reddy	ared0007@student.monash.edu	Deliverables Management Prototype Coordination Client Handover Organisation
Chin Yew Yeoh	cyeo0012@student.monash.edu	Communication Management Design Coordination API Research
Amarnath Ilangovan	aila0005@student.monash.edu	Resource Management Verification Coordination Git Repository Conflict Resolution

## 4.0 Decisions on Process

### 4.1 Tracking of Project Workflow and Tasks

Application used: Trello

The trello application was used to track the progress of the project as well as to understand the workflow of the project. It was helpful to understand the whole process of the project at a glance. It made the workflow organised and kept information up to date. In addition, there are 3 main segments to the application which are “done”, “doing” and “to be done”. There were also multiple customisation options available to the team to make the clear and precise description of the tasks involved in the project.

### 4.2 Communication and Project Discussion

Application used: Zoom

Type: Formal

The zoom application was one of the main modes of communication between the team members which was helpful particularly during this COVID-19 pandemic situation. The team used this application for only formal purposes and the meetings were very useful as they involve informative and important discussions. It helped us to take important decisions in the project as well as clarify and resolve all the problems experienced during the project. It was helpful to view team member's work and help each other whenever required while also assigning tasks to individual personal and explain the work involved. This helped to provide proper feedback and resolve any issues in the project.

Application used: Messenger/Hangouts

Type: Informal

The messenger/hangouts application was used to plan meetings and discuss any important information and make the team members be aware of it. It is a quick and effective way to communicate within the team members. Mainly, the team used it for informal discussions and to keep the team members connected with each other. So, that if a problem arises, we could help each other and overcome the issue.

## **4.3 Project Documents**

Application used: Google Docs/Google Drive

The google docs was useful to type in all the required documents for the project and combine all the research work and findings into a document. It helps to easily integrate all the work of each team member with ease. The google drive also helps to keep all the work involved in the project safely. This provides quick and safe integration of the project documents. The team members could easily access it to view the progress of the project documents while also making any necessary changes to the required project documents.

## **4.4 StoryBoard, Class Diagrams and User Interface design**

Application used: LucidChart

The lucidchart application was used for the class design of the project, wireframes and storyboards. It was a user-friendly application as the team members can easily create different types of class diagrams, wireframes and storyboards. The team member's work could be easily integrated and all the team members can work on the same document at the same time where they could make changes to the document at the same time which is helpful and effective.

## **4.5 Project Data Storage**

Application used: Git repository

The Git repository was useful to keep the project coding work safe and accessible where the team members can make any necessary changes and view the progress of it. It helps with most of the merge conflicts where there could be errors with multiple changes done by different team members which is important as it helps to keep the project coding work secure and organised.

## **4.6 Coding Work of Project**

Application used: Vscode

The Vscode application was important as the team members used it for typing code for the project. It was user-friendly with a lot of features. One of the main reasons for it being helpful is that the code work could be easily stored in the Git repository which is secure and useful. The team members could easily access it and make any required changes during the project.

## 5.0 Communications Management

The communication is mostly handled by Messenger applications and sometimes through email. For keeping everyone up to date with the progress of the task we use Trello. We also use Git to keep our code at one place and be easily accessible. Emails are used when we want to share documents like storyboarding, wireframes, google documents etc and messenger is used when we have to decide on something, for example team, meeting outside the class, timings or the app logo images sharing. We have chosen emails for all documents sharing because it's very direct and messenger for opinions and preferences as everyone checks it in a few hours.

Expected response time is 2-3 hours. Since, we all live in different time zones, our sleep and eating schedules are very different. We drop a message as early as possible so that it doesn't affect our submission deadlines. If we need an instant reply, we check their time zone's timing too to get a better idea if the member's trying his/her best or is not responsible.

## 6.0 Risk Management

The main bulk of potential issues arise in the coding portion of Assignment 2, as parts of the PMP, wireframes, and storyboards are relatively independent, and as such can be easily re-distributed among other team members.

There are multiple aspects of the application that feed into each other, for example the selected data in a dropdown menu will be fed into the MapBox API to show a map of that area, the selected route on a map to be fed into a field containing details of said route, or details of a planned route to be moved into an array with other upcoming routes.

It is this reason that should 1 member fall ill or otherwise be unable to code their part of the application, the member in charge of the dependent part of the application (and also other members, albeit to a lesser extent) will either be unable to successfully code their own portion of the application, or be required to code both the dependent (their own) and independent (the ill team member) parts of the application.

Given the current state of the world, the risk that any 1 of the 4 team members would fall ill is low, however this potential risk can be mitigated by assigning one of the other members as a backup to code a particular section. The backup member should not be coding sections of the application of which they are relying on the main member to prevent a deluge of tasks.

The platform on which we are hosting all of our code is the Monash GitLab repository. There is a minute chance that Gitlab will fail, as there are most likely

redundant servers and DCs hosted by Monash. Even if Gitlab does fail, all team members have a local copy of the code, albeit with potentially different versions. The difference in team members' code can be mitigated by creating a Git pull & push schedule, so that everyone has the same version of code at any one time. From there, it is relatively easy to migrate to another Git host (Github, for example), and still maintain Git functionality. Yet another option is to manually send changes as html files through Messenger, thereby still preserving code but losing Git functionality.