



# **FlyDreamAir**

## **Flight & Customer Management System**



# Brought to you by

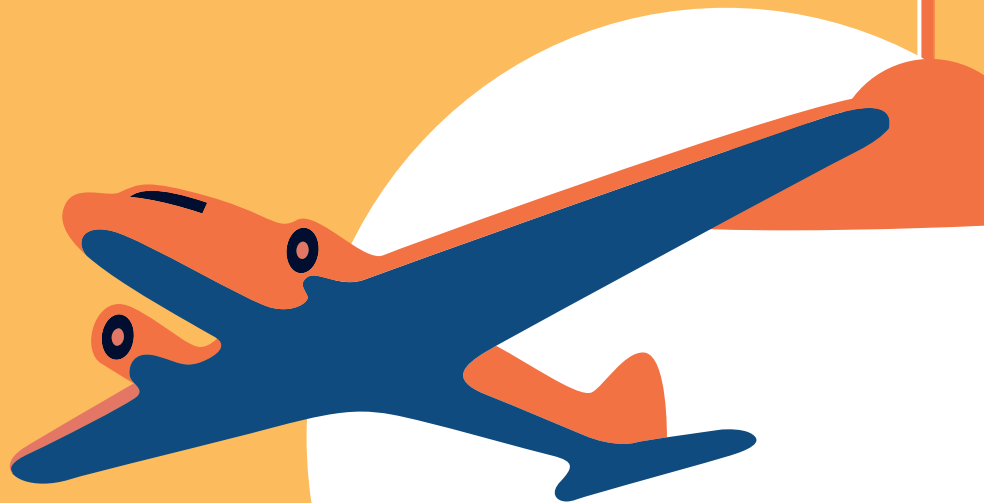
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# Project Overview & Objectives

FlyDreamAir is a web-based prototype that covers the core airline journey, flight search and booking, seat selection, and in-flight add-ons, aimed at improving customer experience and operational efficiency. It showcases a practical, scalable approach to airline self-service while aligning with the project's focus on the main booking flow

## Objectives:

- Build a functional booking platform customers can use end-to-end.
- Enable seat selection and in-flight service ordering within the same flow.
- Enhance usability and satisfaction through a clear, intuitive interface.
- Deliver a prototype that's scalable for future airline expansion.



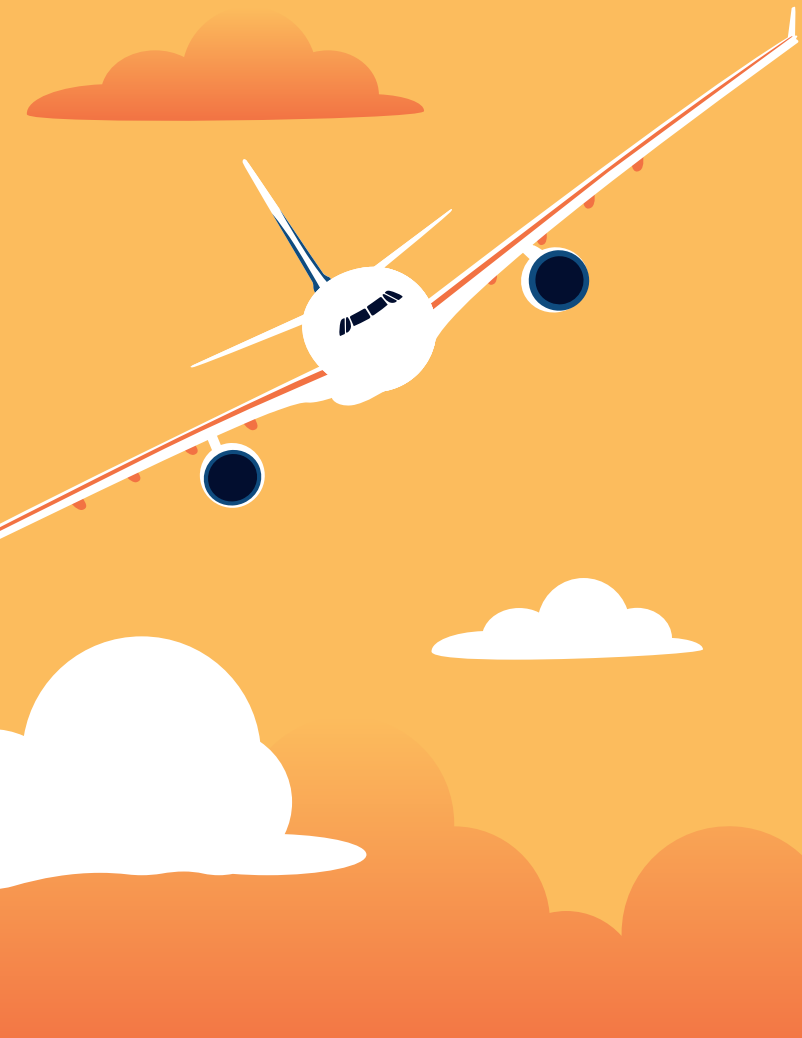
# Justification

We chose to go with Booking & in-Flight Add-Ons Prototype because it targets the airline's main user journey, like:

- Searching for flights
- selecting seats
- ordering in-flight services
- Managing bookings online

This supports FlyDreamAir's goal of improving efficiency and providing customers with a comfortable online experience





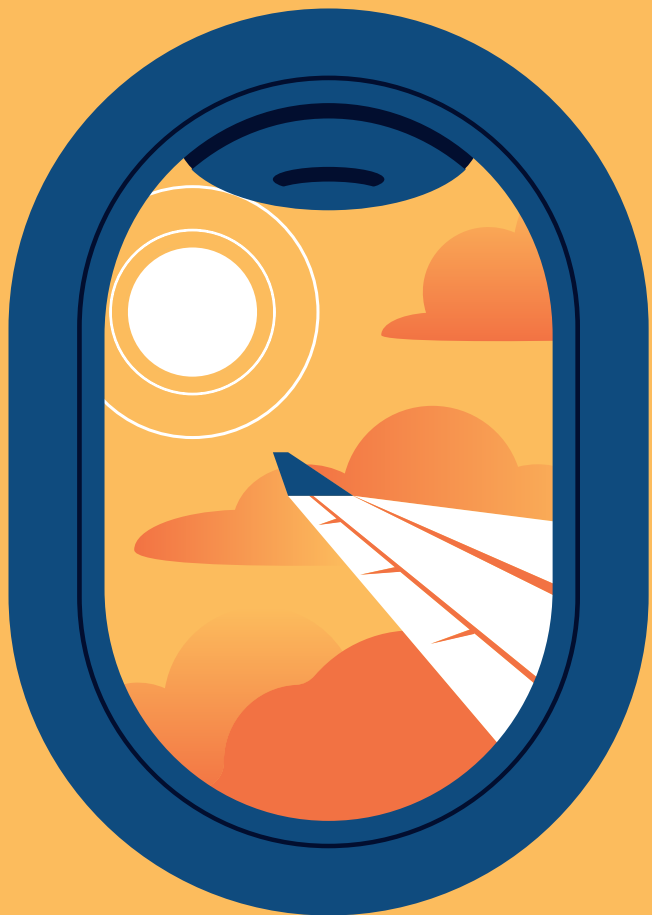
# Business Case

## Problem:

FlyDreamAir currently relies on manual and third-party systems for flight booking and customer service, which causes delays, data inconsistencies, and limited scalability.

## Solution:

Develop a centralized digital platform that streamlines bookings and management, reduces staff workload, and enables accurate data handling. The platform supports future expansions such as loyalty programs and real-time flight updates.



# Project Charter & Scope

## Project Charter Highlights

- Web-based system for booking & managing flights
- Includes seat selection & in-flight orders
- 12-week project timeline
- Success = working prototype, on time & within budget
- Inclusions: booking, seat, service
- Exclusions: payment gateway, mobile app
- Assumptions: demo only, simulated data, team of 5

# WBS & Project Schedule



## WBS:

- divides project into 4 major phases
- Helps assign tasks and track progress
- Improves team coordination and time control
- Each task linked to a deliverable

## Schedule Summary:

- Week 1–3: Planning (Charter, Scope, WBS)
- Week 4–8: Design & Development (UI, Implementation)
- Week 9–11: Testing & Execution (Reports, Feedback)
- Week 12: Closing & Lessons Learned



# Timeline

## Project Timeline Overview

### Planning

- Charter & Scope
- WBS setup
- Team coordination

Completed



3 weeks

Period: 03-24 Aug, 2025

- Amje
- Vatsal

Base documentation

### Design & Development

- UI prototype
- Web system implementation

Completed



5 weeks

Period: 25 Aug-28 Sep, 2025

- Vatsal
- haider

Pages built and reviewed.

### Testing & Execution

- Functional & usability testing
- Debugging and feedback reports

In Progress



3 weeks

Period: 29 Sep - 19 Oct, 2025

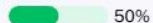
- Tajwar
- Latif

Final testing ongoing  
fix minor UI bugs.

### Presentation

- Lessons learned
- Final report & presentation

Upcoming



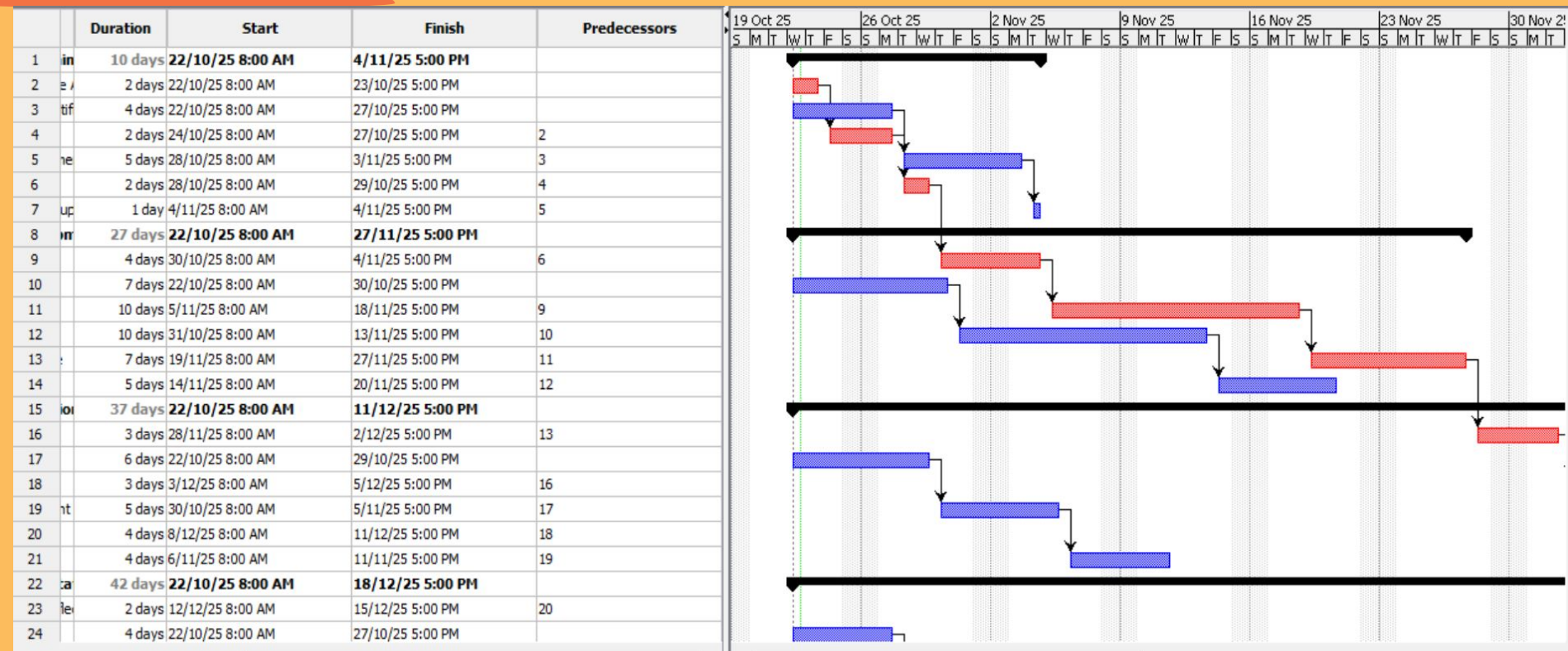
2 days

Period: 20-23 Oct, 2025

- Every Team mem

Finish PowerPoint

# Timeline



# Risk Management



# Risk Management



Risk	Impact	Mitigation Strategy
Scope Creep	Medium	Weekly reviews to maintain focus on agreed deliverables.
Technical Issues	High	Frequent GitHub commits and testing after each update to prevent major bugs.
Time Constraints	Medium	Clear task division via WBS and strict weekly milestones.
Team Communication Gaps	Low	Regular meetings and Trello updates to ensure coordination.
Testing Delays / Bugs	Medium	Early integration testing and shared debugging sessions.





# Cost & Effort Estimation

## Method Used

Effort and cost were estimated using the COCOMO (Constructive Cost Model) in organic mode, suitable for small-scale academic projects.

## Effort Calculation

$$E = 2.4 \times (\text{KLOC})^{1.05} = 2.4 \times (0.659)^{1.05} \approx 1.55$$

person-months

# Cost & Effort Estimation

Basis	Description	Amount (AUD)
Labour	5 student x 10h/week x 12 week x \$25/h	\$15,000
Miscellaneous	Design assets, backups, testing	\$500
Contingency (5%)	Allowance for errors or rework	\$750
Total Estimated Cost	-	\$16,250

# Cost & Effort Estimation

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Task	Effort (%)
Planning & Requirements	15%
Design & UI	25%
Development	35%
Testing & Debugging	15%
Documentation	10%



The estimated project effort equals 1.55 person-months, and the overall cost of \$16,250 fits the 12-week timeline for a five-member team.



# **Project Tracking & Version Control**



## Version Control via Github

- Platform: GitHub
- Repository: FlyDream-booking -system
- Practices: Centralised repo with protected main branch, used pull requests before merging

## Project Execution

- Methodology: Agile iterative approach
- Key activities: Weekly meeting reports

## Risk Management Plan

- To identify, assess, and mitigate potential risks
- Risks identified early and updated weekly
- Rated by likelihood x impact
- Mitigation plans documented

The slide features a bright orange background with a large white circle in the center. Inside the circle, the text 'FlyDreamAir Prototype' is written in a bold, dark blue font. Below the circle, there is a dark blue cloud-like shape at the bottom. Two smaller orange cloud-like shapes are positioned on either side of the central circle. A white rectangular box with an orange border is located at the bottom center, containing the text 'Version Prototype' in a dark blue font.

# FlyDreamAir Prototype

Version Prototype



Book. Check-in. Track status.  
All in one elegant workspace.

Book Check-in Flight Status

From

SYD

To

DXB

Depart

dd/mm/yyyy

Return

dd/mm/yyyy

Passengers

1

Cabin

Economy

☐ Direct flights only

Search Flights

Clear

Tip: SYD → DXB

### Available flights

Sort: Price

Sort: Duration

Sort: Depart time

SYD → DXB

1 stop

AP101 • 08:30 → 17:45 • 555m

B777-300ER

Economy

\$980

View  
DetailsSelect  
Flight

SYD → DXB

Non-stop

AP202 • 09:15 → 15:00 • 345m

A350-900

Economy

\$420

View  
DetailsSelect  
Flight

SYD → DXB

1 stop

AP204 • 21:10 → 06:20 • 790m


A380-800

Economy

\$920

View  
DetailsSelect  
Flight

# Manage Page

 FlyDreamAir

[Book](#)[Manage](#)[Your Flight](#)[Support](#)[Hello, Guest](#)

### Find your booking

PNR

ABC123

Last name

Guest

### Seat selection

1A	1B	1C	1D	1E	1F
2A	2B	2C	2D	2E	2F
3A	3B	3C	3D	3E	3F
4A	4B	4C	4D	4E	4F
5A	5B	5C	5D	5E	5F
6A	6B	6C	6D	6E	6F
7A	7B	7C	7D	7E	7F
8A	8B	8C	8D	8E	8F

Proceed to Payment

### Trip summary

PNR: ABC123

Selected Seat: —

Meals: —

Bags: —

Entertainment: —

Base fare: \$500

Fees: \$0

Entertainment: \$0

Total: \$500

### Meals & Add-ons

Extra Bag (10kg)

\$40

Add

# Manage Page 2

## Meals & Add-ons

### Extra Bag (10kg)

Add one extra checked bag

\$40 [Add](#)

### Vegan Meal

Plant-based inflight option

\$0 [Add](#)

### Vegetarian Meal

Vegetarian special

\$0 [Add](#)

### Gluten-free Meal

Allergen-friendly

\$0 [Add](#)

## Entertainment

### Blockbuster Movie

HD streaming

\$8 [Add](#)

### Jazz Playlist

Relaxing tunes

\$4 [Add](#)

### Kids Cartoons Pack

Fun shows

\$6 [Add](#)

# Flight Page

 FlyDreamAir

[Book](#)

[Manage](#)

[Your Flight](#)

[Support](#)

Hello, Guest ▼

## Your Flight



**Destination:** Dubai (DXB)

**Flight:** AP204

**Date:** 28 Nov 2025

**Depart:** 21:10

**Arrive:** 06:20

## Onboard Wi-Fi



Fast, reliable connection

[Learn More](#)

## Premium Meals



Special meals available

[Learn More](#)

## Upgrades



More space and comfort

[Learn More](#)

### Contact us

Email

you@example.com

Subject

Booking help

Message

How can we help?

Send Message

# Functionality Demo







Category	Tools/Frame works
Frontend	HTML, CSS, JavaScript
Backend	Node.js
Database	MySQL
Version Control	GitHub
Design Tools	Figma vs Code

# Core Functionalities

- Flight Search: Users can enter From, To, Date, Cabin, and Passengers to view flight options.
- Seat Selection: Interactive seat map allows choosing seats before checkout.
- Add-ons & Services: Option to select meals, upgrades, and entertainment packages.
- Booking Confirmation: Displays passenger, flight, and payment summary.
- Manage Bookings: Allows users to view or modify existing bookings.

# CONCLUSIONS

The FlyDreamAir project successfully delivered a working prototype that demonstrates a smooth and user-friendly booking journey. Our team applied structured project management, regular collaboration, and version control to stay on track and meet all deadlines. Through this project, we learned the value of clear scope planning, consistent communication, and iterative testing. Overall, it was a practical and rewarding experience that strengthened both our technical and teamwork skills.



# Q&A

