

***`National University of Computer & Emerging
Sciences***



“Work Breakdown Structure (WBS) for Flighty”

“Flight Management System”

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1. Work Breakdown Structure (WBS)

Level 0: Project Title

Flight Management System (Flighty)

Level 1: Major Deliverables

1. Project Initiation
2. Requirements Analysis
3. System Design
4. Development
5. Testing
6. Deployment
7. Documentation

Level 2: Work Packages

ID	Work Package	Description
1.1	Stakeholder Identification	Identify roles (users, admins, developers).
1.2	Scope Definition	Define project boundaries and objectives.
2.1	Functional Requirements	User auth, flight booking, admin panel features.
3.1	Database Schema Design	Design tables for users, flights, tickets.
4.1	Frontend Development	Build UI for homepage, login, and booking.

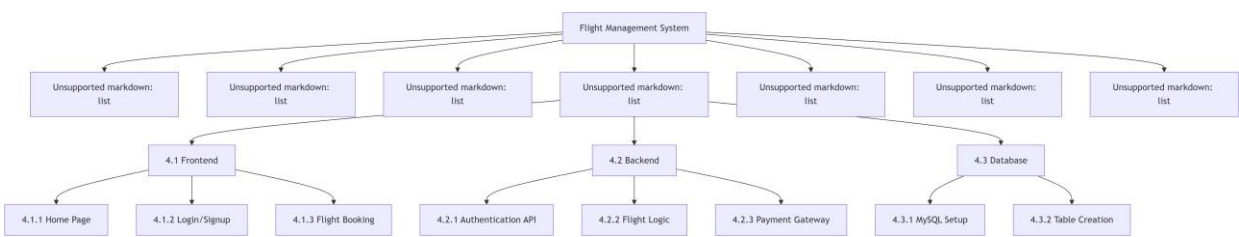
5.1	Unit Testing	Test individual modules (e.g., payment API).
6.1	Local Server Setup	Deploy Flask app on localhost.
7.1	SRS Document	Draft Software Requirements Specification.

Level 3: Tasks/Activities

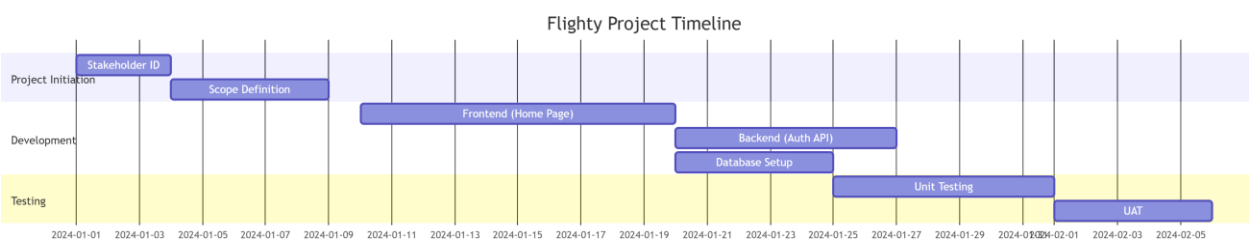
Example for 4.1.1 (Home Page Development):

- Design homepage layout (HTML/CSS).
- Integrate flight search form (JavaScript).
- Connect to backend API for real-time data.

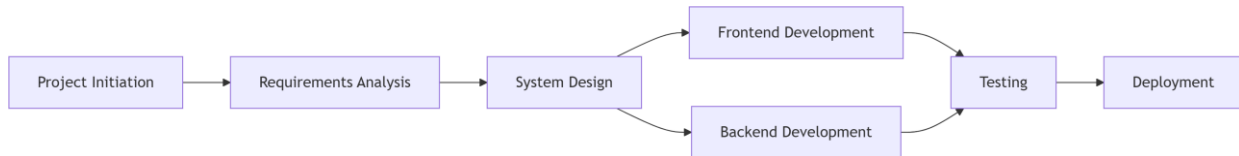
2. Hierarchical WBS Tree



Gantt Chart



Network Diagram (Task Dependencies)



3. WBS Dictionary

WBS ID	Description	Deliverables	Responsible Team	Duration
4.1.1	Home Page Development	Functional UI with search form	Frontend Team	10 days
4.2.1	Authentication API	Secure login/signup endpoints	Backend Team	7 days
5.1	Unit Testing	Test reports for modules	QA Team	5 days

4. Tools & Instructions

How to Generate Diagrams:

1. Copy the Mermaid code above.
2. Visit [Mermaid Live Editor](#).
3. Paste the code → Click **Render** → Download as PNG/SVG.

How to Create a PDF:

1. **Google Docs/Microsoft Word:**
 - a. Paste the WBS tables and diagrams (as images).
 - b. Export as PDF (File → Download → PDF).
2. **Canva:**
 - a. Use a professional template → Drag-and-drop tables/diagrams → Export as PDF.

5. Final PDF Structure

1. **Cover Page:** Project title, team name, date.
2. **WBS Hierarchy:** Mermaid tree diagram + tables.
3. **Timeline:** Gantt chart.
4. **Dependencies:** Network diagram.
5. **WBS Dictionary:** Ownership and deliverables.

6. Pro Tips for Professional Output

- Use **consistent fonts** (e.g., Arial, Calibri).
- Add **page numbers** and a **table of contents**.
- Include **references** (e.g., tools used: Flask, MySQL).