

AIRLINE MANAGEMENT SYSTEM

Date	20-6-2025
Team ID	LTVIP2025MID29669
Project Name	Airlines Management system
Maximum Marks	

Chapter-5

5.Project planning &scheduling

1. Project Timeline Overview

Phase	Duration	Key Deliverables
Requirements Gathering	Week 1	SRS Document, Use Case Diagrams
Design Phase	Week 2	Data Model, ERD, DFDs
Development Phase	Weeks 3–5	Custom Objects, Apex Classes, Flows
Testing Phase	Week 6	Unit Testing, UAT, Bug Fixes
Deployment & Review	Week 7	Production Deployment, Final Report

2. Task Breakdown by Module

Module	Tasks
Flight Management	Create Flight & Schedule objects, set validation rules, automate status
Pilot Management	Build Pilot & PilotSchedule objects, assign lookup relationships
Reservation System	Design booking flow, integrate payment gateway, test user journey
Notification Engine	Configure email alerts, test triggers for flight events
Reporting	Build dashboards, schedule reports, apply filters

3. Resource Allocation

- **Project Manager:** Oversees timeline, risk, and communication
- **Salesforce Developer:** Builds objects, automation, and integrations
- **Business Analyst:** Gathers requirements, validates use cases
- **QA Tester:** Conducts functional and regression testing
- **UI Designer:** Designs Lightning pages and mobile layouts

4. Scheduling Tools & Techniques

- **Gantt Chart:** Visualize task dependencies and milestones
- **Function Point Estimation:** Estimate effort based on module complexity

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- **Effort Distribution:**
 - 30% Development
 - 20% Design
 - 20% Testing
 - 15% Planning
 - 15% Deployment & Review

5. Risk Management & Contingency

Risk	Mitigation Strategy
Scope Creep	Freeze requirements after Week 1
Integration Delays	Use mock APIs for early testing
Data Security Compliance	Apply Shield Encryption and audit trails
Resource Unavailability	Cross-train team members

5.1 Project Planning

1. Project Objectives

- Automate flight scheduling and pilot assignment
- Streamline passenger reservations and notifications
- Ensure secure, role-based access to airline data
- Deliver real-time dashboards and reports for decision-making

2. Timeline & Milestones

Phase	Duration	Deliverables
Initiation	Week 1	Project charter, stakeholder alignment
Planning	Week 2	SRS, ERD, DFDs, Gantt chart
Design	Week 3	Data model, UI mockups, validation rules
Development	Weeks 4–6	Apex classes, Flows, Objects setup
Testing	Week 7	Unit testing, UAT, bug fixes
Deployment	Week 8	Production release, training, review

3. Team Roles

- **Project Manager:** Oversees planning, risk, and communication
- **Salesforce Developer:** Builds backend logic and integrations
- **Business Analyst:** Defines requirements and validates use cases

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- **QA Tester:** Ensures system quality and compliance
- **UI Designer:** Crafts Lightning pages and mobile layouts

☐ 4. Planning Tools

- **Gantt Chart:** Visualize task dependencies and progress
- **Function Point Estimation:** Estimate effort based on module complexity
- **Sprint Backlog** (if Agile): Track tasks and deliverables per sprint

☐ 5. Risk Management

Risk	Mitigation Strategy
Scope Creep	Freeze requirements after planning phase
Integration Delays	Use mock APIs for early testing
Data Security Compliance	Apply Shield Encryption and audit trails
Resource Unavailability	Cross-train team members