FlyAway – Airline Booking Portal

Developer: Mohit Gangwar
Language: Java
IDE: Eclipse
Repository Link: https://github.com/MohitG070/JavaTrainingProject2.2-FlyAway.git

Project Overview

To design and implement an airline booking portal called “FlyAway” that supports user-side flight search and booking, and admin-side management of cities, airlines, and flights. It includes a dummy payment gateway and structured multi-layered architecture.

Technologies Used

- Backend – Java
- Frontend – HTML + Thymeleaf
- Database – MySQL
- Other Tools – Maven, Git

System Architecture

- com.main – Entry point of the application
- com.bean – Entity classes (Admin, Airline, City, Flight)
- com.repository – JPA Repositories (DAO layer)
- com.service – Business logic
- com.controller – Web controllers handling routes and views

JAVA Concepts Used

- @Controller, @Service, @Repository annotations
- Dependency injection using @Autowired
- Model-View-Controller (MVC) pattern
- Spring Boot Application Lifecycle
- Form data binding with Thymeleaf
- REST-style URL mappings
- Multi-layered modular architecture

Features

Admin:

- Login/Logout
- Change password
- Add/Update/Delete/View cities, airlines and flights

Customer:

- Search Flights
- Register and Book
- Payment Simulation
- Booking Confirmation

Sprint Plan

Sprint 1: Initial Project and Entity Class Setup
- Created Maven project structure
- Designed and implemented database schema
- Developed JavaBean classes for Admin, City, Airline, and Flight.

Sprint 2: Admin Admin Methods and Webpages
- Developed AdminController and AdminService classes
- Created admin dashboard and related HTML pages

Sprint 3: Admin User Methods and Webpages
- Implemented UserController and UserService
- Created user-facing pages: search, booking, register, confirm
- Added dummy payment gateway simulation
- Final testing, debugging, and pushing to GitHub

Conclusion

The FlyAway platform delivers a functional flight booking prototype with both user and admin flows. Future improvements could include real authentication, OTP-based payment, and live flight data integration.