

# FlyAway

## (Sprint work and Project Specification)

### Version History:

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Purpose	Scrum details and specifications of the application
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## 1. Modules in the project

1. A Book Flight button in the homepage, which opens a search form to enter travel details that is the date of travel, source, destination, and the number of travellers.
2. Based on the travel details entered, it will show the available flights with their ticket prices fetching data from the MySQL database, connected to JSP and Servlets via Hibernate, and is hosted on AWS RDS for MySQL.
3. Once a user selects a book this flight button, they will be taken to a register page to fill in their personal details.
4. In the next page, they are shown the flight details of the flight that they are booking and form to enter payment details along with checkout button.
5. After clicking the checkout button, they are shown a confirmation page with the details of the booking.
6. For the above features to work, there is an admin backend with the following features:
  - An admin login page, where anyone can register as an admin and the admin can change password after login, if they wishes.
  - A list of flights where each flight has a source, destination, airline, and ticket price is shown on the admin dashboard.

## 2. Sprint wise work

Sprint number	Modules
1	Design homepage and travel details page.
2	Fetch available flights from database and redirect to user details page.
3	Checkout page with details of flight and form for payment details. Confirmation page with summary of all the provided details.
4	Admin Login page and Admin Dashboard page with all the flights data fetched from the database along with change password and add flight button. Testing. Deployed on <i>AWS Elastic Beanstalk</i> after creating a war file using Maven build.

## 3. Project Link

Repository Name	FlyAway
GitHub Link	<a href="https://github.com/Jaydeep-K-Mandal/Fly-Away">https://github.com/Jaydeep-K-Mandal/Fly-Away</a>

## 4. Core Java Concepts Used

- Working with database (MySQL)
- Naming Standards
- Exceptions
- Modularity
- Object Oriented Programming
- Collections
- Control structures
- Data Structures
- Hibernate
- JSP (Java Server Pages)
- Servlet
- DAO and DTO Design Pattern

## 5. Tools and Technologies Used

- JSP, HTML, CSS, Bootstrap for **View**.
- JAVA Servlets as **Controller**
- MySQL database using Hibernate for **Model** to create tables for admin and flight details. Hosted on a remote server at AWS RDS.
- Tomcat 8.5 as an Application Server.
- Eclipse: As an IDE to code for the application.
- Java: A programming language to develop the web pages, databases.
- Maven: To create a web-enabled Maven project and build deployable war file.
- Git: To connect and push files from the local system to GitHub
- GitHub: To store the application code and track its versions
- Scrum: An efficient agile framework to deliver the product incrementally

## 6. Flow Chart

