

FlyAway

Flight Booking App in JAVA - Servlet & JSP

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This document contains sections for:

- ✓ Project overview
- ✓ Project's core concepts
- ✓ Flow of the Application
- ✓ Agile and Scrum: User Stories from the Project
- ✓ Demonstrating product capabilities, its presentation and user interactions.
- ✓ Pushing code on Github
- ✓ Conclusions

The code for this project is hosted at: <https://github.com/shruti-bhrdwj/FlyAway>

Project Overview:

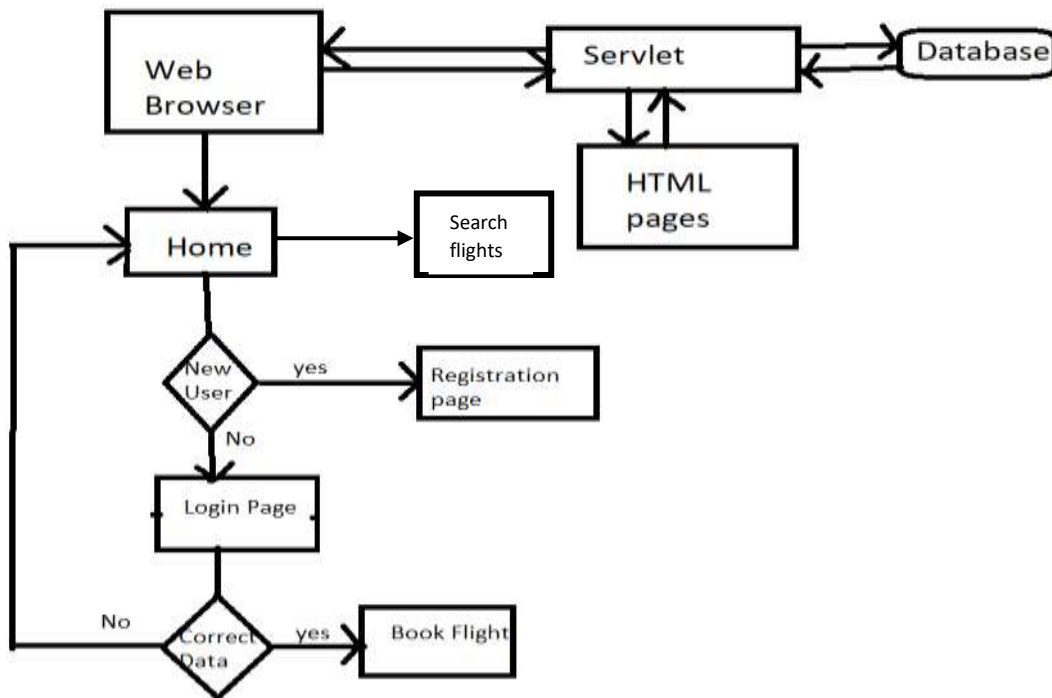
1. Technologies used
 - ✓ Frontend - JSP, HTML, CSS Backend - JAVA Servlets Database - MySQL Application Server - Tomcat 8.5
2. Features
 - ✓ Book Flights - The user fills out flight information (date, source, destination, number of travelers). A query is made to a remote database in order to retrieve associated flights, which are then displayed to the user. User can proceed to book the flight.
 - ✓ Admin - A username and password are required to access the admin dashboard. After logging in, the administrator can change his password or can insert the new flights.

Project's Core concepts:

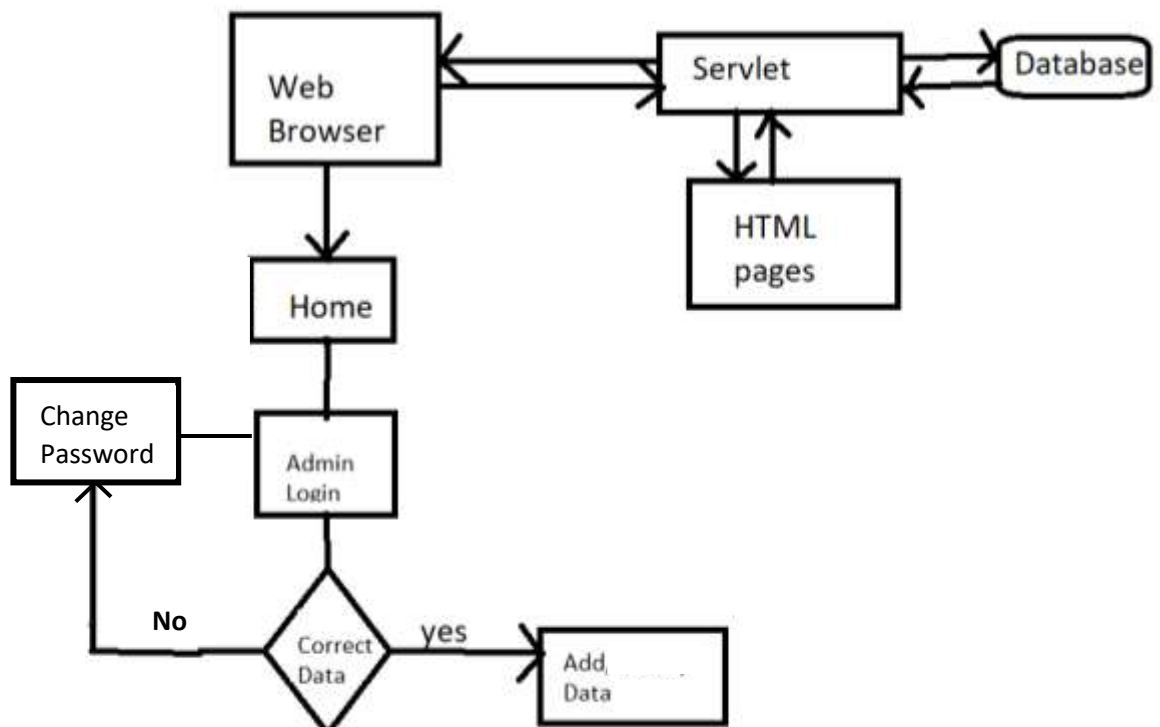
- ✓ Language: Java (Eclipse IDE)
- ✓ Concepts:
 - File Handling,
 - Collections framework,
 - Exception Handling,
 - MYSQL-workbench,
 - Recursion,
 - Sorting,
 - Flow Control.

Flow chart of Application

User Login



Admin Login



Agile and Scrum: Users Stories

The project will be finished in three sprints. The following tasks are expected to be performed throughout the sprint:

- ⇒ Creating the application's flow
- ⇒ Setting up a git repository to track changes as the project develops.
- ⇒ Writing a Java programme to meet the project's requirements.
- ⇒ Putting the Java software through its paces with various types of user input
- ⇒ Using GitHub to push code.

Users Stories to be covered per sprint:

Sprint 1

1. As a user, I want to create account on website.
2. As a user, I can login and logout.

Sprint 2

3. As a user, I want to search flight options available to me based on date, source and destination.
4. As an administrator, I can login to website.

Sprint 3

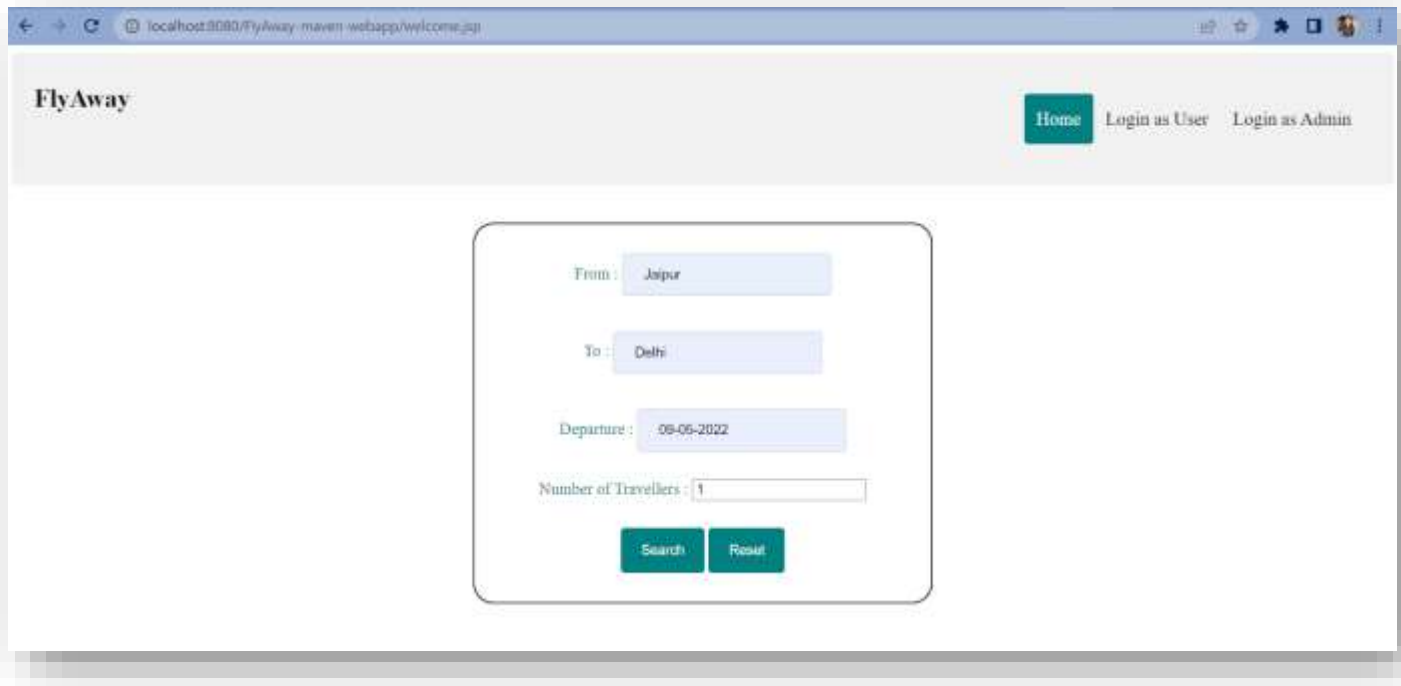
5. As an administrator, I can add more flights.
6. As an administrator, I can change my password.

Demonstrating product capabilities, its presentation and user interactions.

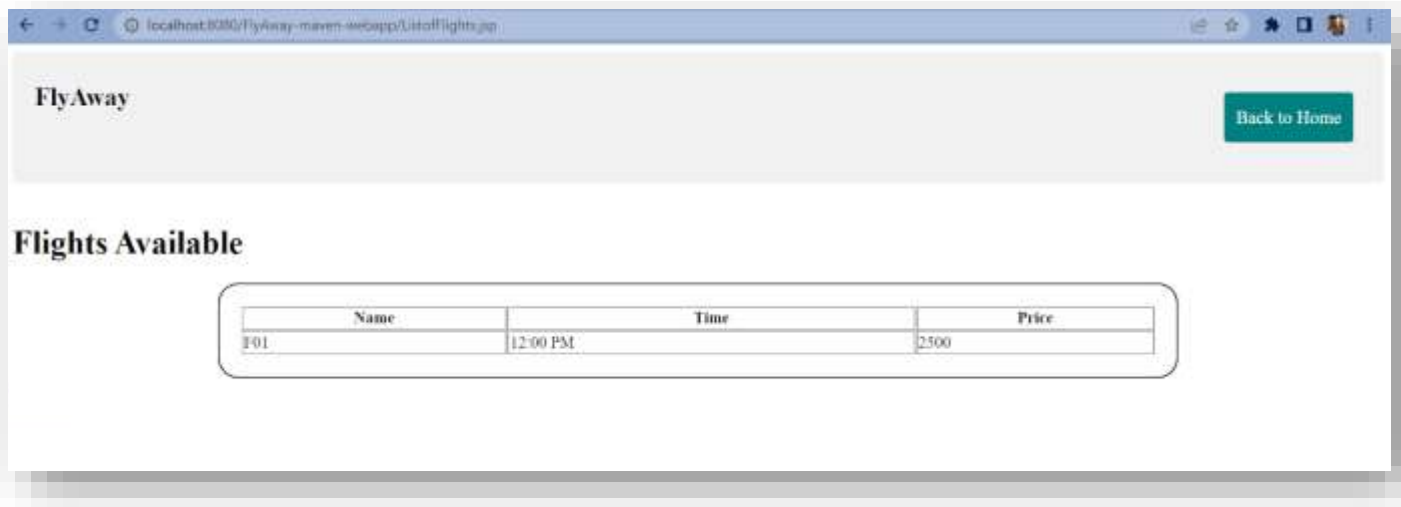
The following sub-sections have been adjusted to showcase the project's aesthetic and user interactions in order to demonstrate the product's capabilities:

Home page:

Search for available Flights at homepage.



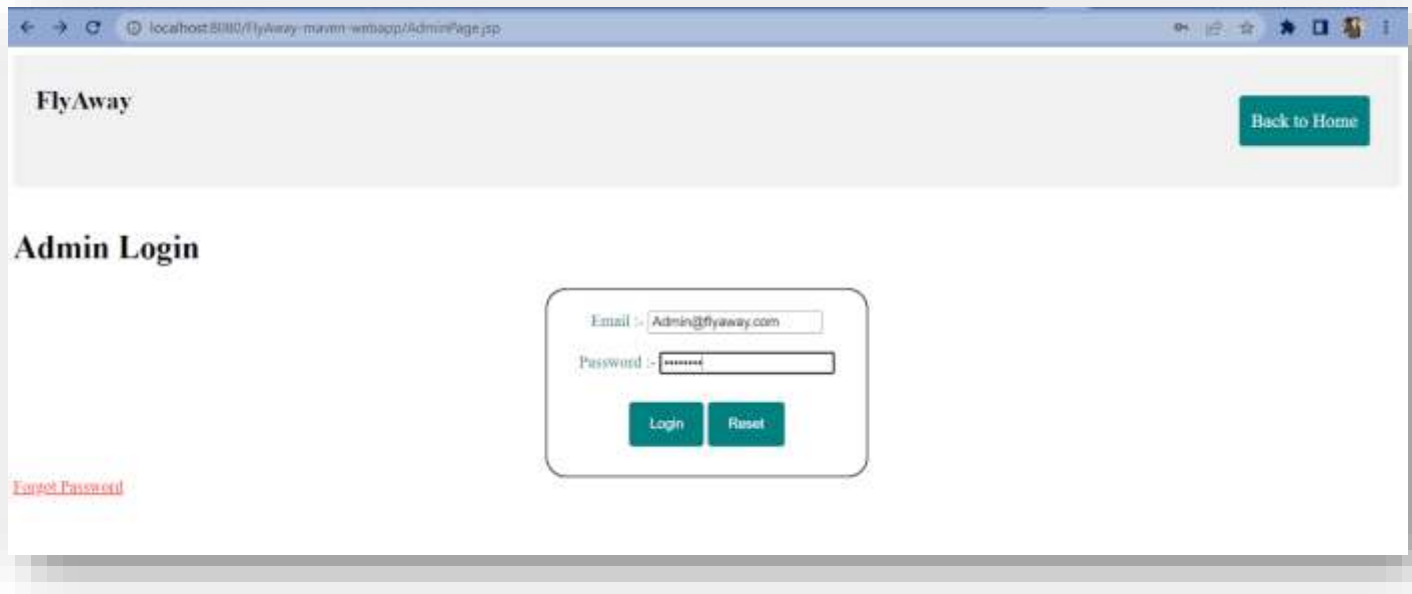
The screenshot shows the FlyAway homepage in a web browser. The browser's address bar displays 'localhost:8080/FlyAway-maven-webapp/welcome.jsp'. The page has a light gray header with the 'FlyAway' logo on the left and navigation links 'Home', 'Login as User', and 'Login as Admin' on the right. The 'Home' link is highlighted with a teal background. In the center of the page is a white rounded rectangle containing a flight search form. The form has four input fields: 'From' with the value 'Jaipur', 'To' with the value 'Delhi', 'Departure' with the value '09-05-2022', and 'Number of Travellers' with the value '1'. Below these fields are two teal buttons labeled 'Search' and 'Reset'.



The screenshot shows the 'Flights Available' page in the FlyAway web application. The browser's address bar displays 'localhost:8080/FlyAway-maven-webapp/ListOfFlights.jsp'. The page has a light gray header with the 'FlyAway' logo on the left and a 'Back to Home' button on the right. Below the header, the text 'Flights Available' is displayed. Underneath is a table with three columns: 'Name', 'Time', and 'Price'. The table contains one row of data.

Name	Time	Price
F01	12:00 PM	2500

Admin Login:



The screenshot shows a web browser window with the URL `localhost:8080/flyaway-maven/webapp/AdminPage.jsp`. The page has a header with the text "FlyAway" and a "Back to Home" button. The main content area is titled "Admin Login" and contains a login form with fields for "Email" (containing "Admin@flyaway.com") and "Password" (containing "password"). Below the fields are "Login" and "Reset" buttons. A link for "Forgot Password" is located at the bottom left of the form area.

FlyAway [Back to Home](#)

Admin Login

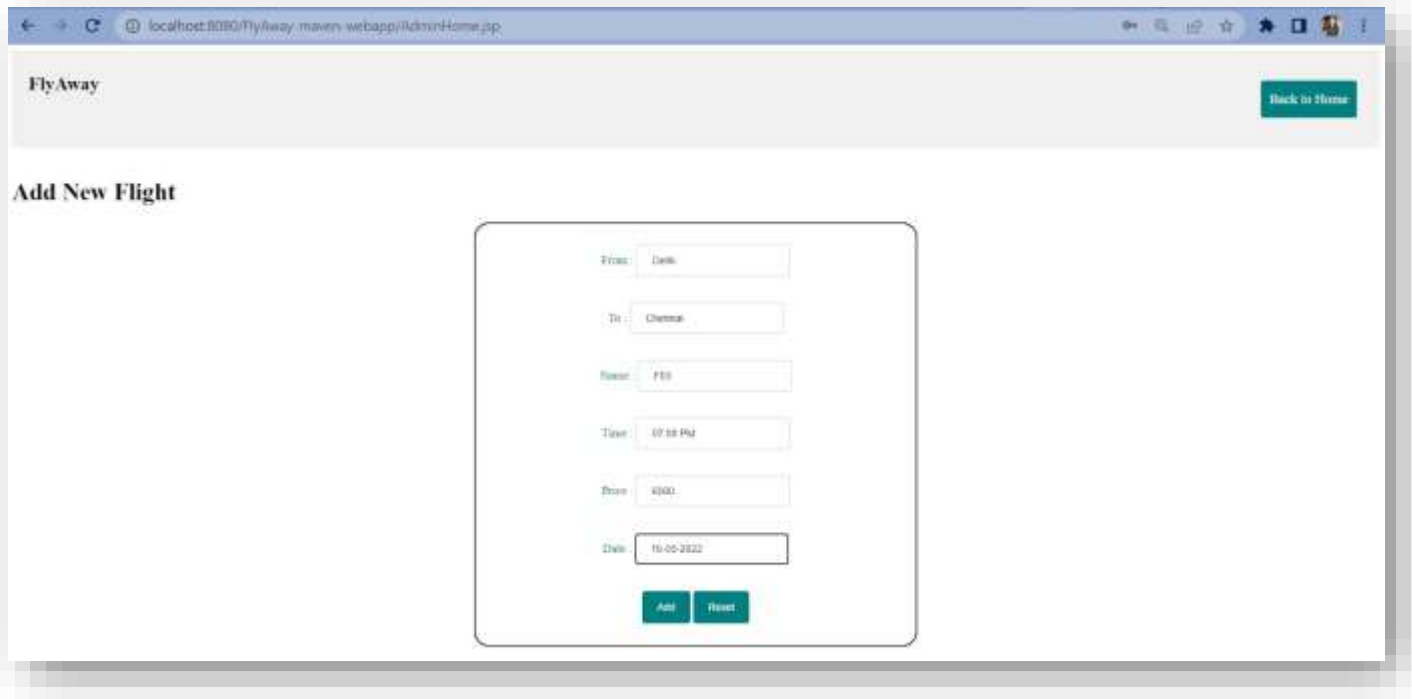
Email :- Admin@flyaway.com

Password :- password

[Forgot Password](#)

[Login](#) [Reset](#)

Insert New Flight as Admin



The screenshot shows a web browser window with the URL `localhost:8080/flyaway-maven/webapp/AdminHome.jsp`. The page has a header with the text "FlyAway" and a "Back to Home" button. The main content area is titled "Add New Flight" and contains a form with fields for "From" (containing "Dhaka"), "To" (containing "Chennai"), "Route" (containing "F10"), "Time" (containing "07:58 PM"), "Price" (containing "4500"), and "Date" (containing "16-05-2022"). Below the fields are "Add" and "Reset" buttons.

FlyAway [Back to Home](#)

Add New Flight

From: Dhaka

To: Chennai

Route: F10

Time: 07:58 PM

Price: 4500

Date: 16-05-2022

[Add](#) [Reset](#)

localhost:8080/flyaway-main-webapp/AdminForm.jsp

From :

To :

Name :

Time :

Price :

Date :

Add

Reset

Flight added successfully

Create new Password as Adm

localhost:8080/flyaway-main-webapp/ForgetPassword.jsp

FlyAway

Back to Home

Email :

New Password :

Change Password

Reset

localhost:8080/flyaway-main-webapp/AdminPage.jsp

FlyAway

Back to Home

Admin Login

Email :

Password :

Login

Reset

Forgot Password

Password Changed Successfully

Login or Create Account as User:

a) Login

The screenshot shows a web browser window with the URL `localhost:8080/flyaway-maven-webapp/UserPage.jsp`. The page has a header with the "FlyAway" logo on the left and a navigation bar on the right containing a "User" button, "Back to Home" link, and "Login as Admin" link. The main content area is titled "User Login" and features a login form. The form includes an "Email" field with the value `shukha@flyaway.com` and a "Password" field with masked characters. Below the fields are "Login" and "Reset" buttons. A link "New User>Create account" is positioned below the buttons, with a "CreateAccount" link in green text underneath it.

b) Create account

The screenshot shows a web browser window with the URL `localhost:8080/flyaway-maven-webapp/UserRegistration.jsp`. The page has a header with the "FlyAway" logo on the left and a navigation bar on the right containing a "Back to Home" button. The main content area features a registration form. The form includes five input fields: "Email :-", "Password :-", "Name :-", "Phone No. :-", and "Aadhaar No. :-". Below the fields are "Register" and "Reset" buttons.

Search and Book Flight as User:

localhost:8080/flyaway-maven-webapp/welcome.jsp

FlyAway

[Home](#) [Login as User](#) [Login as Admin](#)

Welcome to FlyAway, Shikha!

[Logout](#)

From :

To :

Departure :

Number of Travellers :

localhost:8080/flyaway-maven-webapp/listoflights.jsp

FlyAway

[Back to Home](#)

Flights Available

Name	Time	Price
F01	12:00 PM	2500

[Book Now](#)

localhost:8080/flyaway-maven-webapp/bookflight.jsp

FlyAway

[Back to Home](#)

Flight Booking

Flight Booked Successfully

Pushing the code to GitHub repository

- Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

- Initialize repository using the following command:

git init

- Add all the files to your git repository using the following command:

git add .

- Commit the changes using the following command:

git commit . -m <commit message>

- Push the files to the folder you initially created using the following command:

git push -u origin master

Conclusions

An application with a sprint duration of three sprints has been developed in the programme. This application manages the *FlyAway* data. The user can create account and search or book a flight. The administrator can manipulate the flights data by logging in with an email ID and password. This application will be improved further by adding following features:

- Form/Input Validation
- Better CSS/Frontend Styles
- Modify available flights data
- Show previous flight bookings
- Ticket Payment