

FlyAway (An Airline Booking Portal)

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COMPANY NAME: FlyAway

This code is developed by :- **Anil Ganguly Sahoo**

_The code for this project is hosted at:-

https://github.com/AnilSahoo98/Flyaway

Overview

As a Full Stack Developer, designing and developing an airline booking portal named as FlyAway. Use the GitHub repository to manage the project artifacts.

Goals

- 1. FlyAway is a ticket-booking portal that lets people book flights on their website.
- 2. A search form in the homepage to allow entry of travel details, like the date of travel, source, destination, and the number of persons
- 3. Based on the travel details entered, it will show the available flights with their ticket prices.
- 4. Once a person selects a flight to book, they will be taken to a register page where they must fill in their personal details. In the next page, they are shown the flight details of the flight that they are booking, and the payment is done via a dummy payment gateway. On completion of the payment, they are shown a confirmation page with the details of the booking.
- 5. there will be an admin backend with the following features:
- 6. An admin login page where the admin can change the password after login, if he wishes
- 7. A master list of places for source and destination
- 8. A master list of airlines
- 9. A list of flights where each flight has a source, destination, airline, and ticket price

Specifications

- Eclipse/IntelliJ: An IDE to code for the application
- Java: A programming language to develop the web pages, databases, and others
- SQL: To create tables for admin, airlines, and other specifics
- Maven: To create a web-enabled Maven project
- 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

- Search and Sort techniques: Data structures used for the project
- Specification document: Any open-source document or Google Docs

Sprints planned and the tasks achieved in them Flyaway was divided in 3 sprints of 1 week each.

Sprint 1: -

Initialized the project, made it Hibernate project and added dependencies

MySql connector, Hibernate libraries, Servlet API. Setting MySQL database environment and tomcat server Made E.R. diagram for database and entities relationship.

Made classes for entities and established relationships between them. Configured hibernate and mapped classes as entities. Populated the data by hibernate

Sprint 2: -

Planned the structure of the website and navigation across it. Made a Hibernate util. class to use it across the servlets.

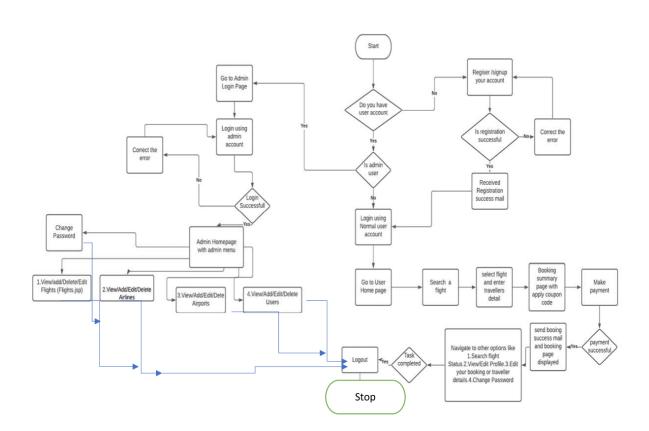
Made servlets for each class list and set up navigation links for them. Made a common View page for each class's view rendering.

Made the header and footer jsp pages to include it across every page. Made an error page errorpage.jsp and set it as the error page for the whole website by including it in the header tag of header.jsp file.

Sprint 3: -

Made the master list JSP for master list of places for source and destination, master list of airlines. Also Made A list of flights where each flight has a source, destination, airline, and ticket price Set up Servlets for each of the master list to send data as a list.

Flow chart



Front html (view):-

- v 🔑 webapp
 - > > WEB-INF
 - changepassword.html
 - dashboard.html
 - index.html
 - 剧 login.html
 - passwordverified.html
 - payment.html
 - registeration.html
- r 🎘 test

Servlets(Controller): -

- servlets
 - v 🍃 admin
 - changedpassword.java
 - Login.java
 - Webservlet.java
 - users
 - ConfirmationPage.java
 - PayOnline.java
 - Registeration.java
 - SearchFlights.java
 - SeeAllFlights.java

Hibernate:-

```
1 k?xml version="1.0" encoding="UTF-8"?>
 2 <!DOCTYPE hibernate-configuration PUBLIC
3
        "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
4
        "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
5
6⊖<hibernate-configuration>
   <session-factory>
        9
        10
        cproperty name="hibernate.connection.username">root
11
        cproperty name="hibernate.connection.password">1598
12
        property name="hibernate.connection.pool_size">1
13
        property name="hibernate.current_session_context_class">thread
14
        cproperty name="hibernate.show sql">true</property>
15
        16
        property name="hibernate.id.new_generator_mappings">false/property>
17
18
        <mapping class="com.simplilearn.tables.Admin" />
19
        <mapping class="com.simplilearn.tables.Airline" />
20
        <mapping class="com.simplilearn.tables.Flight" />
21
        <mapping class="com.simplilearn.tables.Payment" />
22
        <mapping class="com.simplilearn.tables.Person" />
     </session-factory>
24 </hibernate-configuration>
```

Tools used

Apache Tomcat server 9.0.52

Mysql 8.0.26

Java 1.8

Maven dependency

<u>output</u>

Admin Page of Flyaway project

<u>Home</u>

Admin Login Page

Username:	
Password:	
Login	

Search for Fights

Admin Login
Search For Flights
Flying From :
Flying To:
Your Max Price :
Flights On or After Date :
Search for flights! See All Flights

View the Master List of Airlines

<u>Home</u>

List of all Flights:

Flight ID	Airline	Number Of Seats	Source	Desintation	Departure Date	Arrival Date	Price
1	Emirates	180	DEL	VTZ	2020-10-20	2020-10-22	1500.0
2	Vistara	9	SCC	GOI	2020-10-23	2020-10-24	4200.0
3	IndiGo	150	ВОМ	СОК	2020-10-21	2020-10-21	2250.0
4	Air India	20	SXR	MAA	2020-10-20	2020-10-21	1500.0
5	Spice Jet	120	COK	DEL	2020-10-24	2020-10-25	2700.0
6	Emirates	123	BOM	DEL	2020-10-22	2020-10-22	2500.0

Flight Registration Page

Flight Registration Page

Flight ID: 12					
First Name : John					
Last Name : Doe					
Email: johndoe@gmail.com					
Birthday (yyyy-MM-dd): 1990-04-02					
Submit Flight Registration					

Conformation Registration page

Home

Confirm Flight Details:

Flight ID: 3 Airline: IndiGo

Number Of Seats: 150

Source BOM

Desintation:COK

Departure Date: 2020-10-21 Arrival Date: 2020-10-21

Your Total is: \$2250.0

Payment Details After Confirmation

Enter Payment Details

First Name On	Card:	John	
Last Name On	Card:	Smith	
Card Number:	1234 12	234 4321 9123	

Expiration (yyyy-MM-dd): 2027-10-31

Security Code : 987

Pay Ticket

Registration confirmation page

Congratulations! You're all set, Anil!

List of Confirmed Flights for Anil

Flight ID	Airline	Number Of Seats	Source	Desintation	Departure Date	Arrival Date	Price
3	IndiGo	149	ВОМ	COK	2020-10-21	2020-10-21	2250.0

Conclusion

The purpose of this Application was to identify effective strategies for dealing with flight booking applications by making the process of the application to benefit the users. It conserves resources and time and is one of those which helps users to ease the process and have best and easy flight booking. Providing users, the options to retrieve flights, options of flights of their choice into their bookings, more options like payment details and booking confirmation details. This Application also manages the exception and error for users to guide them in a better way and give the best solution while working. Future exploration into behavior modification techniques could be useful to finding further techniques to work with the payment module.