Flyaway

Project & Developer Details

Flyaway is an airline ticket booking portal that lets people book flights on their website.

This portal has been developed by Clovis Tikum

Sprints Planned & Tasks achieved

Number

3 Sprints will be required.

Duration

Each sprint will be 1 week long

Tasks Planned

Sprint 1

- Creation of Flowchart and gathering all user requirements.
- Creation of mockups for all the screens.
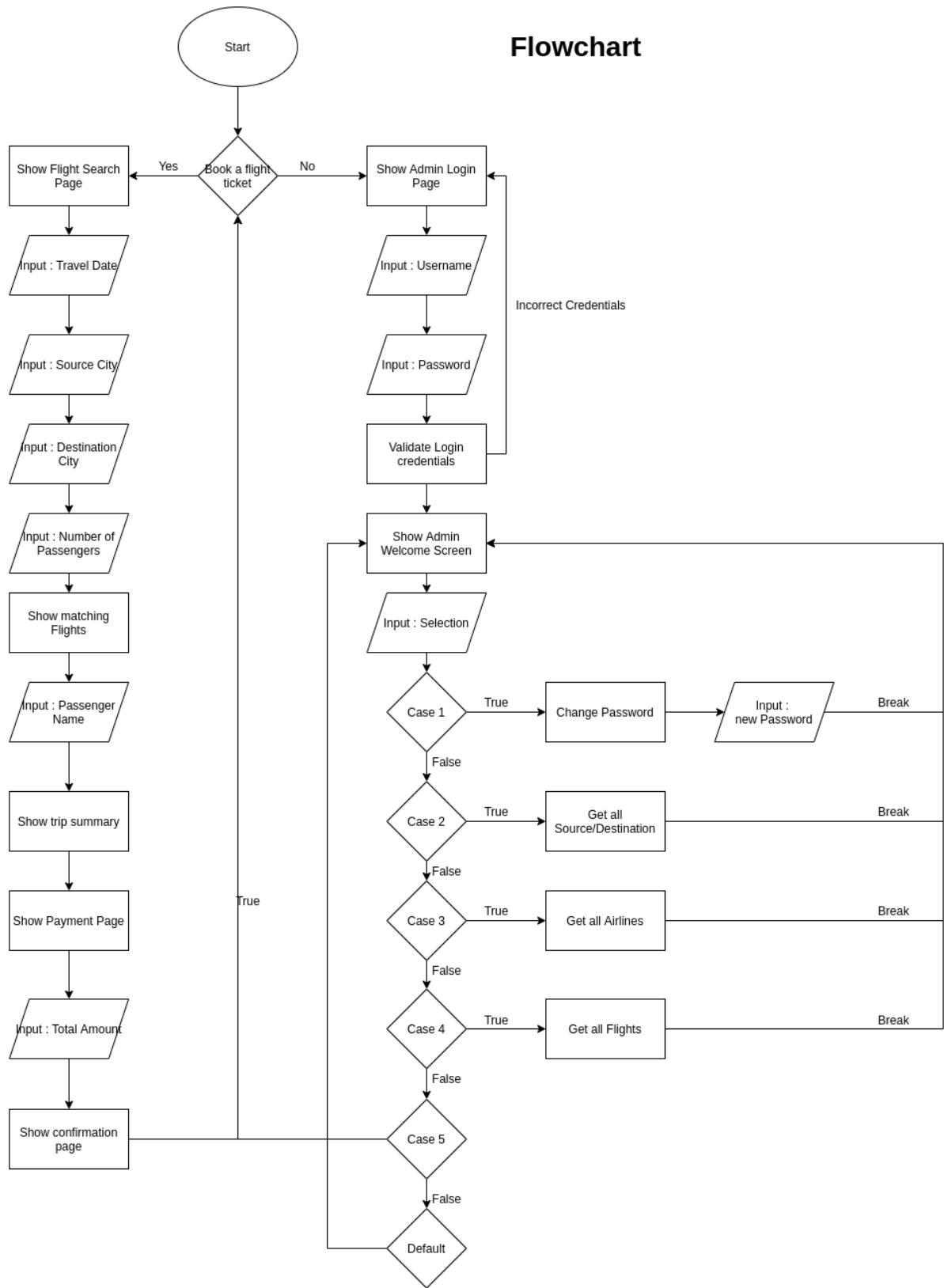- Creation of model classes for hibernate.

Sprint 2

- Setting up Hibernate connection to MySQL database.
- Writing servlet and jsp logic for :
    - Change Admin password
    - Retrieve a listing of all sources and destinations
    - Retrieve a listing of all airlines registered in the portal
    - Retrieve a listing of all the flights with their details

Sprint 3

- Creation of ticket booking flow for the customer that includes :
    - Search form allowing the customer to enter journey details
    - Ability to view & select the flights matching the journey plan.
    - Summary page listing all the passenger details & the flight details
    - Payment page
    - Confirmation page

Flowchart

```
                    ( Start )
                        |
                        v
[Show Flight Search] <--Yes-- < Book a flight >  --No-->  [Show Admin Login
      Page                        ticket                        Page ]
        |                                                          |
        v                                                          v
 / Input : Travel Date /                                   / Input : Username /
        |                                                          |
        v                                                          v
 / Input : Source City /                                   / Input : Password /
        |                                                          |
        v                                                          v
 / Input : Destination /                                   [ Validate Login   ]  --Incorrect Credentials-->
        City                                                  credentials
        |                                                          |
        v                                                          v
 / Input : Number of /                                     [ Show Admin
      Passengers                                             Welcome Screen ]
        |                                                          |
        v                                                          v
 [ Show matching ]                                         / Input : Selection /
      Flights                                                      |
        |                                                          v
        v                                                    < Case 1 >  --True-->  [ Change Password ]  -->  / Input :        /  Break
 / Input : Passenger /                                             |                                          new Password
      Name                                                       False
        |                                                          v
        v                                                    < Case 2 >  --True-->  [ Get all            ]   Break
 [ Show trip summary ]                                             |                  Source/Destination
        |                                                        False
        v                                                          v
 [ Show Payment Page ]                                       < Case 3 >  --True-->  [ Get all Airlines ]   Break
        |                                                          |
        v                                                        False
 / Input : Total Amount /                                          v
        |                                                    < Case 4 >  --True-->  [ Get all Flights ]   Break
        v                                                          |
 [ Show confirmation ] ----------------> < Case 5 >              False
      page                                                         v
                                                             < Default >
                                    True                         False
```

(Flow arrow labeled "True" returns from Show confirmation page / Case 5 area up to "Book a flight ticket")

Core Concepts Used

- Servlet
- JSP
- Hibernate
- Exception Handling
- Abstraction
- Encapsulation
- Collections
- Lambdas
- Maven
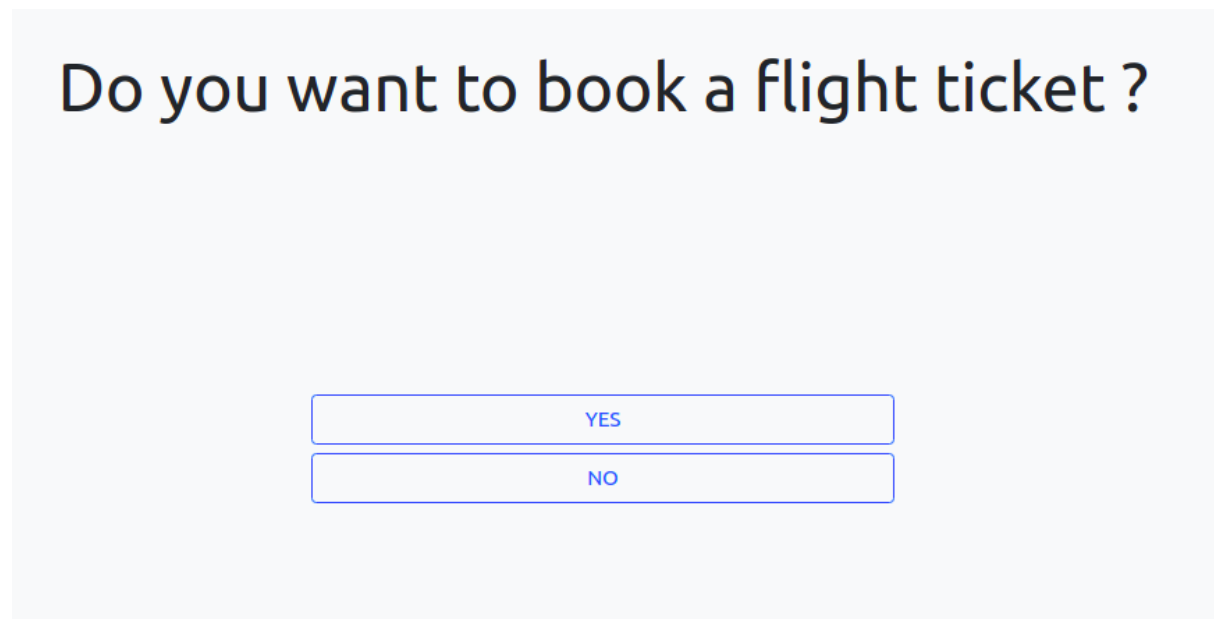- HTML, CSS, JS, Bootstrap

Data Structures Used

- HashMap
- ArrayList
- HashSet

Github Repository Link

https://github.com/tikumclovis/FlyAway.git

Screenshots

Welcome Screen

Do you want to book a flight ticket ?

YES

NO

Flight Search Page

Enter your travel details

Travel Date:

09/04/2021

From:

New York City ⌄

To:

Los Angeles ⌄

Seats

1

Submit

Available Flights

Choose the flight that you would like to book

	Name	Airline	Price
●	F1	Delta Air Lines	500
○	F4	JetBlue	650

Enter passenger details

Passenger 1 Name

Joey

Submit

Summary Page

Here are the details of your booking :

Passenger Name	Source	Destination	TravelDate	Price	Airline
Joey	New York City	Los Angeles	2021-04-09	500	Delta Air Lines

Your total amount is **500**

Congratulations!!
Your tickets have been booked

Admin Login Page

Welcome Admin

Name:

admin

Password:

••••••••••

Login

Admin Welcome Screen

Select an option from below

○ Change Password

○ Get List of all Sources / Destinations

○ Get List of all Airlines

○ Get List of all Flights

Submit

Admin - Change Password

Select an option from below

○ Change Password

○ Get List of all Sources / Destinations

○ Get List of all Airlines

○ Get List of all Flights

Submit

Enter new password

Password:

●●●●●●●●●●

Submit

Admin - Get All Sources / Destinations

Select an option from below

○ Change Password

○ Get List of all Sources / Destinations

○ Get List of all Airlines

○ Get List of all Flights

Submit

#	City
1	New York City
2	Los Angeles
3	Indianopolis

Admin - Get All Airlines

Select an option from below

○ Change Password

○ Get List of all Sources / Destinations

○ Get List of all Airlines

○ Get List of all Flights

[Submit]

#	Airline
1	Delta Air Lines
2	American Airlines
3	JetBlue

Admin - Get All Flights

Select an option from below

○ Change Password

○ Get List of all Sources / Destinations

○ Get List of all Airlines

○ Get List of all Flights

Submit

#	Name	Source	Destination	Airline	Price
1	F1	New York City	Los Angeles	Delta Air Lines	500
2	F4	New York City	Los Angeles	JetBlue	650
3	F2	Los Angeles	New York City	JetBlue	650