



## Project and developer details

**Company name :** FlyAway Pvt. Ltd.

**Business goal :** FlyAway is a ticket-booking portal that lets people book flights on their website.

### Developer details:

<b>Name</b>	Nirosh Prakash
<b>Designation</b>	Full stack developer
<b>Company</b>	FlyAway Pvt. Ltd.

## Sprint planning

### Sprint 0:

- Requirements gathering.
- Requirements analysis.
- Project estimation.
- Development sprints planning.

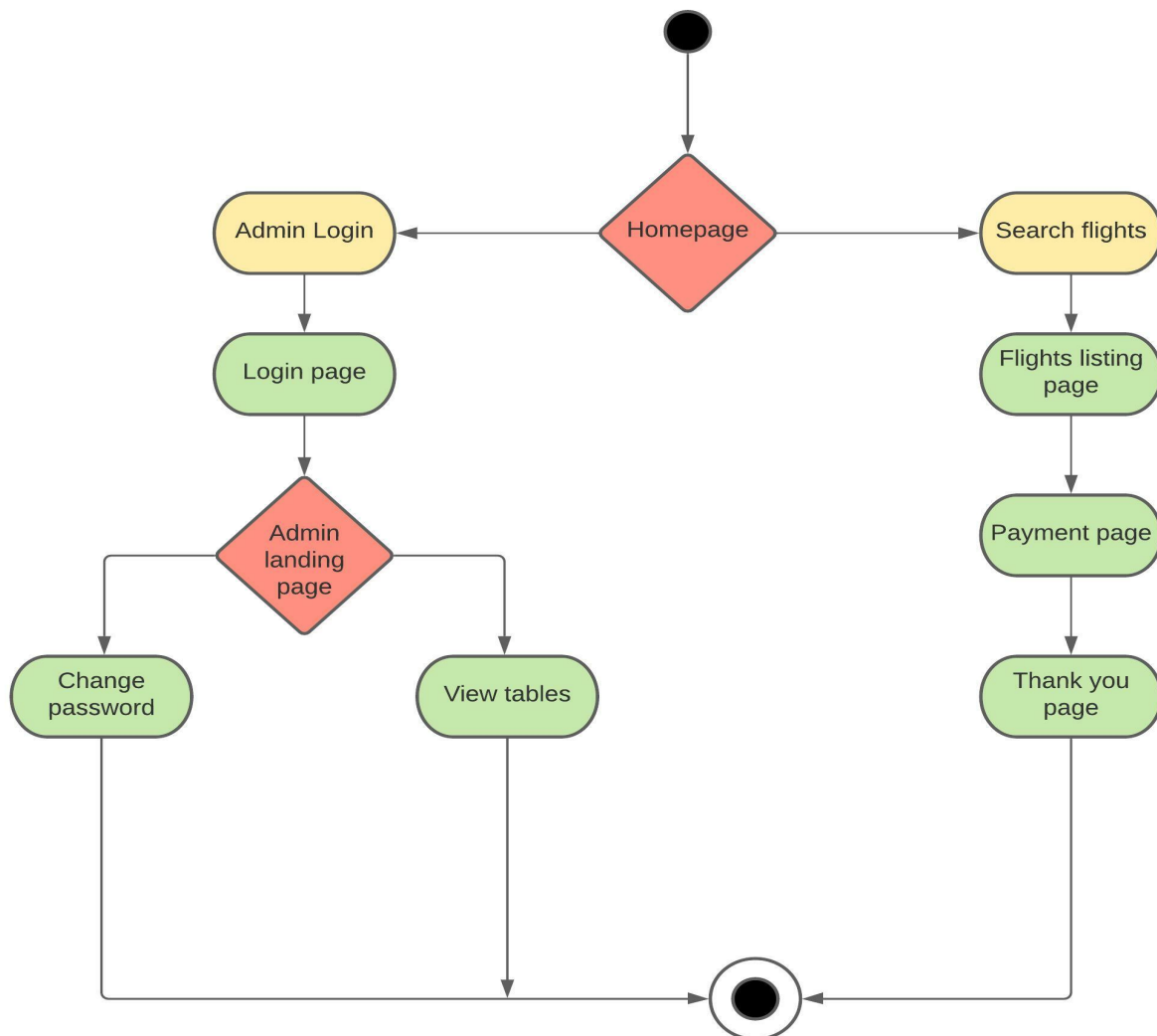
### Sprint 1:

- Setting up of codebase.
- Creating a github repository and push the code base.
- Development activities.

### Sprint 2:

- Create specification document with flow of application and flow chart.
- List core concepts and algorithms beings used in the application.
- Bug fixes.

## Application flowchart



## Core concepts used in the project

Language used for development : Java

### Key core concepts:

- Object oriented programming in Java.
- Servlets.
- Control statements.
- Exception handling.
- Maven.
- Hibernate.
- SQL.

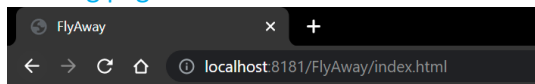
## Product capabilities

FlyAway is a ticket-booking portal that lets people book flights on their website and is capable of performing the following operations:

1. Allow admin user login.
2. Search flights for users.
3. Business level operations:
  - Change admin user password.
  - Allow logged in admin users to view the tables(airline, sourcedestination, flights).
  - Search for flights between source and destination cities.
  - Make flight bookings.
3. Close the application.

## Application snapshots

Landing page:



Welcome to FlyAway

Search flights

Admin login

### 1. Admin login page:



### Login

User name

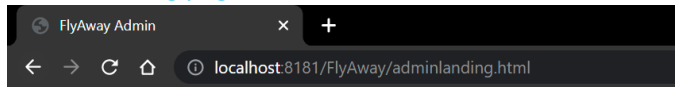
admin1@flyaway.com

Password

\*\*\*\*\*

Login

### Admin landing page:



Welcome to FlyAway admin console

Change password

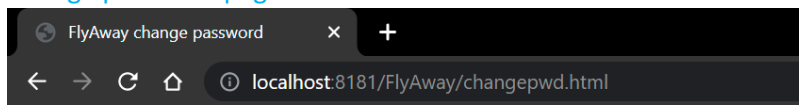
Choose from below options:

View Airline Table

View Source-Destination Table

View Flights table

### Change password page:



Change password

Old Password

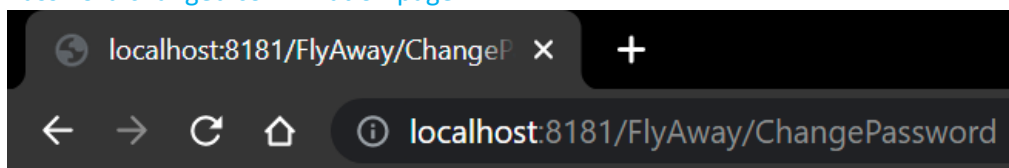
.....

New Password

.....

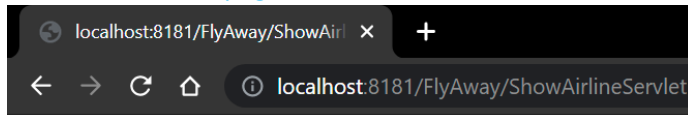
Submit

### Password changed confirmation page:



Password changed successfully!!

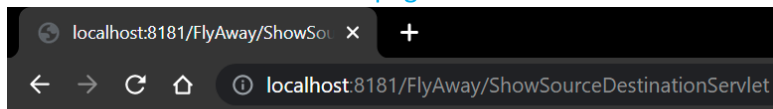
[View Airline table page:](#)



## Airline Table

Airline Id	Airline name
1	IndiGo
2	SpiceJet
3	AirAsia
4	Vistara
5	Go First

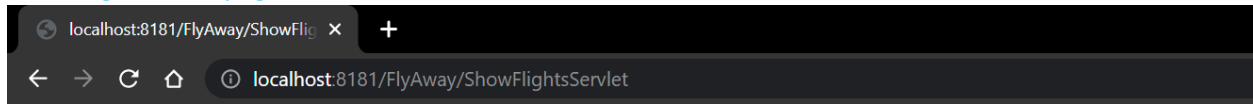
[View Source-Destination table page:](#)



## Source-Destination Table

Source-Destination Id	Source City	Destination City
1	Bangalore	Delhi
2	Delhi	Bangalore
3	Bangalore	Hyderabad
4	Hyderabad	Bangalore
5	Bangalore	Mumbai
6	Mumbai	Bangalore
7	Bangalore	Mysore
8	Mysore	Bangalore

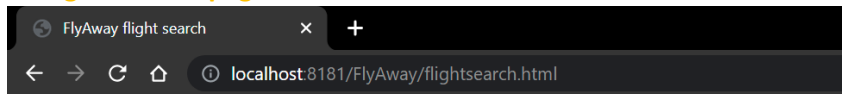
[View Flights table page:](#)



## Flights Table

Flight Id	Source-Destination Id	Airline Id	Price	Departure	Arrival	Tickets available	Date
1	1	1	4000	03:30:00	11:30:00	300	2021-09-01
2	1	1	4000	03:30:00	11:30:00	300	2021-09-01
3	1	1	4000	03:30:00	11:30:00	300	2021-09-01
4	3	2	3575	09:00:00	11:30:00	220	2021-08-29
5	3	5	4220	08:30:00	11:30:00	270	2021-08-29
6	5	3	5000	13:30:00	15:30:00	110	2021-09-02
7	5	4	4999	14:30:00	15:30:00	200	2021-09-02

[2. Flights search page:](#)



## Flight search

Please fill in the below details to search flights:

**From**

Bangalore

**Destination**

Delhi

**Start date:**

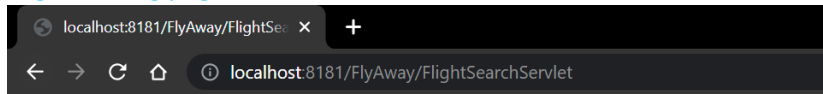
09/01/2021

**Number of persons**

1

Search

### Flights listing page:



#### Flights available from BANGALORE to DELHI:

Flight Id	Price	Departure time	Arrival time	
1	4000	03:30:00	11:30:00	Select
2	4000	03:30:00	11:30:00	Select
3	4000	03:30:00	11:30:00	Select

#### Enter the details below to book:

First Name

Adam

Last Name

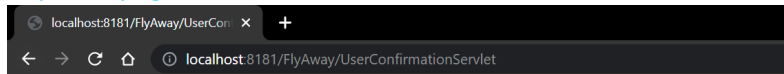
Tyler

Flight ID

2

Proceed to Payment

### Payment page:



**Billing Address**

Full Name

Adam Tyler

Email

adamtyler@gmail.com

Address

542 W. West Street

City

Bangalore

State


KA

Zip

560034

**Payment**

Accepted Cards



Name on Card

AdamTyler

Credit card number

1111-2222-3333-4444

Exp Month

September

Exp Year

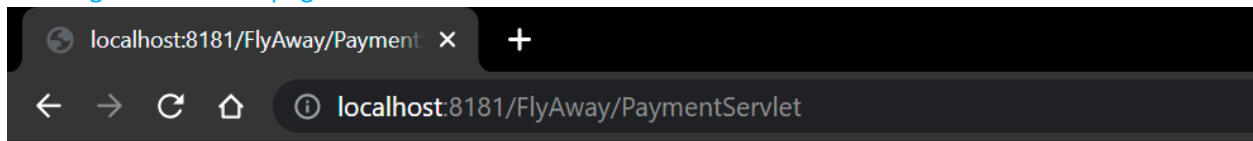
2022

CVV

352

Continue to checkout

Booking confirmation page:



**Thank you ADAM TYLER!**

**You have successfully booked flight with id 3 at Wed Aug 25 18:21:33 IST 2021.**

**You are successfully logged out.**

Bookings table update in database:

Query 1

```
select * from bookings;
```

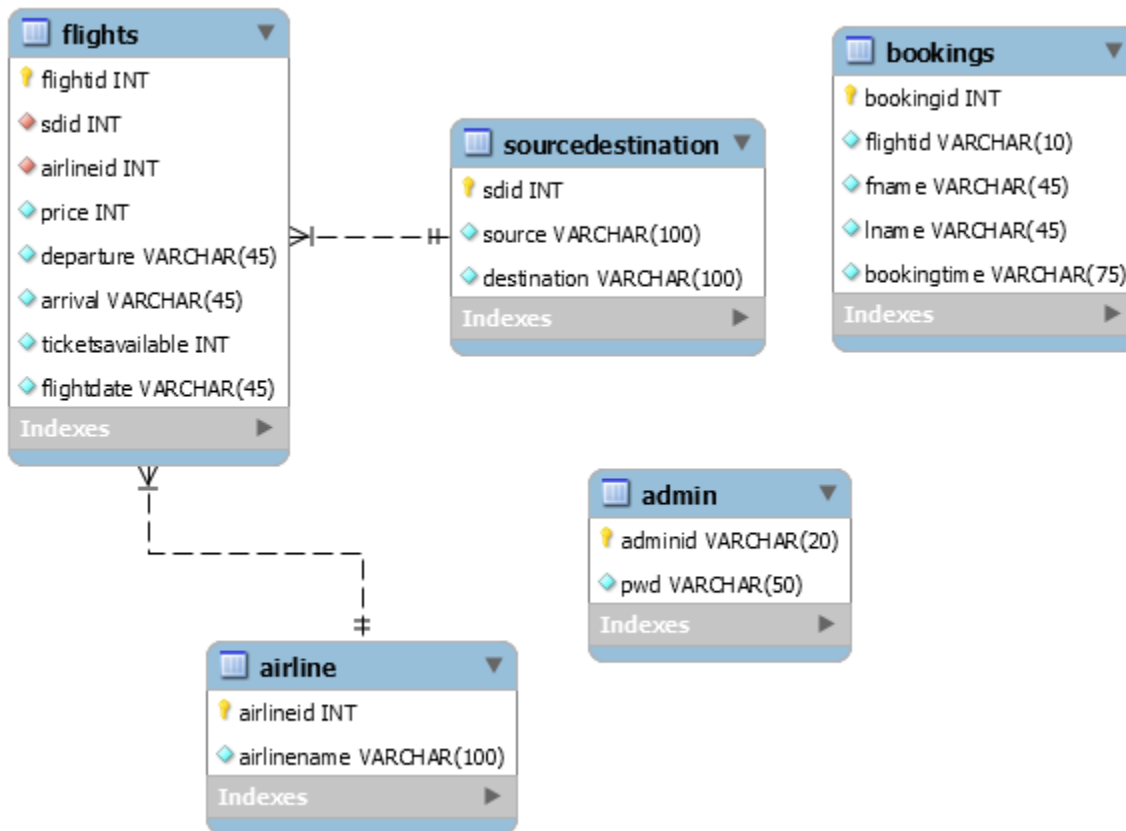
Result Grid

	bookingid	flightid	fname	lname	bookingtime
1	1	6	Same	Henderson	Wed Aug 25 18:20:42 IST 2021
2	2	3	Adam	Tyler	Wed Aug 25 18:21:33 IST 2021
*	NULL	NULL	NULL	NULL	NULL

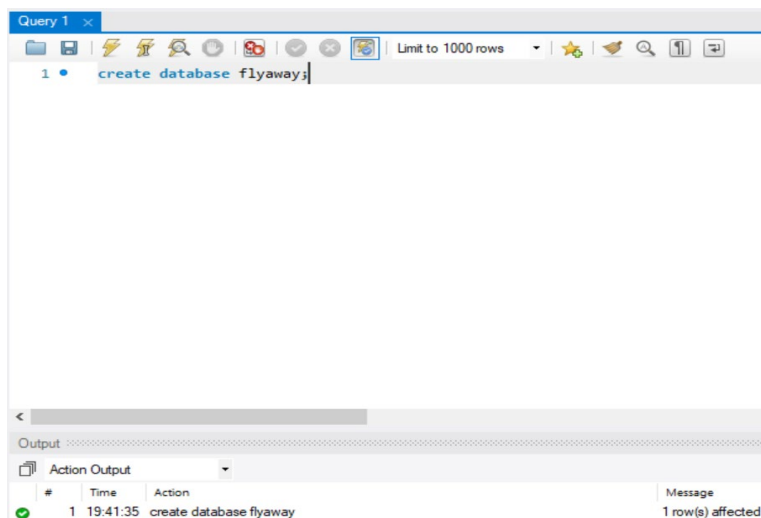


# Database snapshots

ER diagram:



Database creation:



Creation of **sourcedestination** table:

```
Query 1 x
Limit to 1000 rows
1 • create table sourcedestination(
2   sdid INT NOT NULL AUTO_INCREMENT,
3   source VARCHAR(100) NOT NULL,
4   destination VARCHAR(100) NOT NULL,
5   PRIMARY KEY ( sdid )
6 );
```

```
Query 1 x
Limit to 1000 rows
1 • select * from sourcedestination;
```

<

	sdid	source	destination
▶	1	Bangalore	Delhi
	2	Delhi	Bangalore
	3	Bangalore	Hyderabad
	4	Hyderabad	Bangalore
	5	Bangalore	Mumbai
	6	Mumbai	Bangalore
	7	Bangalore	Mysore
	8	Mysore	Bangalore
•	NULL	NULL	NULL

Creation of **airline** table:

```
Query 1 x
1 • create table airline(
2   airlineid INT NOT NULL AUTO_INCREMENT,
3   airlinename VARCHAR(100) NOT NULL,
4   PRIMARY KEY ( airlineid )
5 );
```

```
Query 1 x
1 • select * from airline;
```

Result Grid

	airlineid	airlinename
▶	1	IndiGo
	2	SpiceJet
	3	AirAsia
	4	Vistara
	5	Go First
*	NULL	NULL

### Creation of **flights** table:

```
1 create table flights(  
2 flightid int not null auto_increment,  
3 sdid int not null,  
4 airlineid int not null,  
5 price int not null,  
6 departure varchar(45) not null,  
7 arrival varchar(45) not null,  
8 ticketsavailable int not null,  
9 flightdate varchar(45) not null,  
10 primary key (flightid),  
11 foreign key (sdid) references sourcedestination(sdid),  
12 foreign key (airlineid) references airline(airlineid)  
13 );
```

[illegible]

Creation of **admin** table:

```
Query 1 x
1 • create table bookings(
2     bookingid int not null auto_increment,
3     flightid varchar(10) not null,
4     fname varchar(45) not null,
5     lname varchar(45) not null,
6     bookingtime varchar(75) not null,
7     PRIMARY KEY (bookingid)
8 );
```

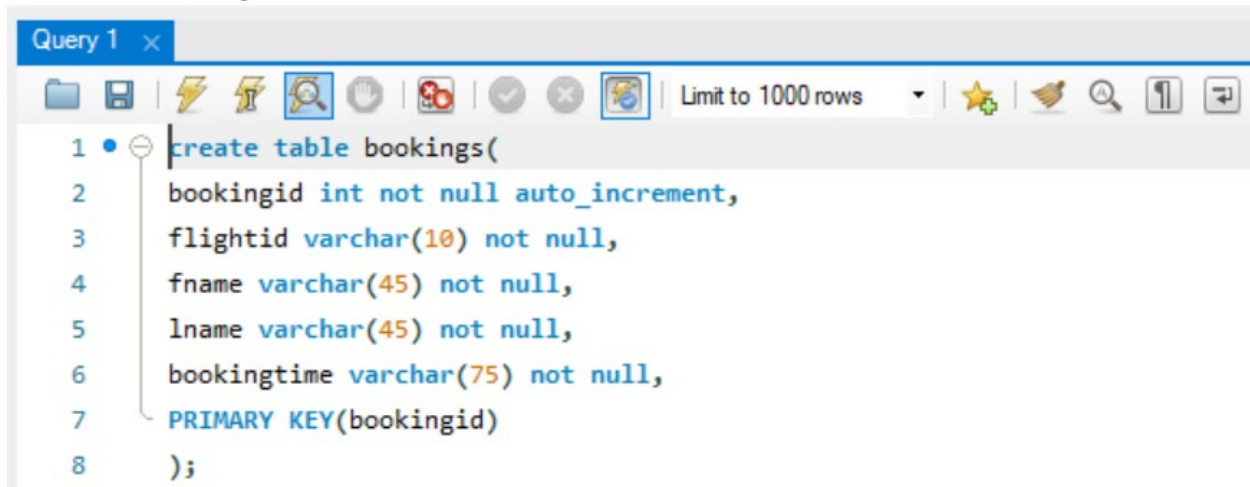
```
Query 1 x
1 • select * from admin;
2
```

<

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: I A

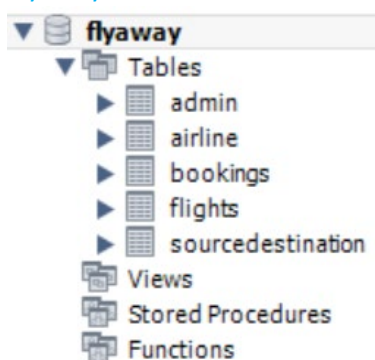
adminid	pwd
admin1@flyaway.com	hello@123
admin2@flyaway.com	abc123\$
admin3@flyaway.com	1234@abc
admin4@flyaway.com	\$abc#Z
NULL	NULL

Creation of **bookings** table:



```
Query 1 x
1 create table bookings(
2     bookingid int not null auto_increment,
3     flightid varchar(10) not null,
4     fname varchar(45) not null,
5     lname varchar(45) not null,
6     bookingtime varchar(75) not null,
7     PRIMARY KEY(bookingid)
8 );
```

Flyaway database tables:



Git repository : <https://github.com/niroshprakash1995/FlyAway>

## Conclusion

The flight booking portal development for FlyAway Pvt. Ltd. has laid the necessary foundation to enhance the product in the future. Some of the key enhancements to the application that can be added include:

1. Functionality to allow modification of flight bookings.
2. Provide a rich user experience through enhanced front end development.
3. Additional functionalities such as cab booking, hotel booking etc., can be added.

The relevant stakeholders can review the current functionality and implementation, and plan a full-fledged enhanced development and release in the future.