**CASE STUDY**

**ONLINE RAILWAY RESERVATION SYSTEM**

**Introduction**

This system is designed for the online reservation of railway tickets for travel between any destinations which is a part of Pakistan Railway network. This system enables the Advance booking in any class, against general and ladies quota, on payment of fare in full for adults and children, a maximum of six berths/seats at a time, for journey between any two stations by a train served.

**Web Pages**

1. Login Page

* UserName
* Password

1. Signup Page

* Name
* Gmail
* Date of Birth
* Phone
* UserName

1. Home Page

* Railway details
* View Bookings(After login)
* Cancel Booking(After login)
* Search Trains

1. Admin Page

* Add trains details
* Update train details
* Delete train details

**Database**

We can use MongoDB/SQL/JSON formate for the data storing

1. Train Database

In this we store the various details of the train like

* Number
* Name
* Departure time
* Arrival time
* Station Stops

1. Booking Database

In this we have the details of the booking

* Train number
* Passengers PNR
* Arrival Time
* Boarding Location
* Train fare

1. Login Database

In this database we store details of the credentials

* Username
* Password

1. Passengers Database

In this database we store details of the credentials

* Username
* Name
* Date of birth
* Gmail
* Phone

BackEnd

Microservice: Train Search

* user can enter the source, the destination and the date of booking and then search the trains
* After selecting the train user will be asked to sign up/login

Microservice: Admin

* This will give the admin the functionality after login to add/edit/delete any train and its related data which will be later displayed to the user.
* Admin can also get access to the train bookings data

Microservice: User

* Providing the functionality to login/logout and also credentials validation using data from the Database.
* user can get access to searching / booking / view booked flights
* can also cancel the booking
* can generate one’s own train tickets