**1. Project Requirements**

Happytrip.com is one of the leading companies in the world which provide services in the e-commerce domain. Happytrip.com has decided to launch a portal for users to book flight tickets online for travel across India. Below mentioned are the requirements in detail for the portal that needs to be developed. This portal would have 2 modules 1. User – All user related operations and features to book tickets online 2. Admin – To manage data and users on the portal

**Portal for online ticket booking**

**User Module**

**a. Registration**

User can register on the portal by entering information like

1. Full Name
2. Email Id \* [Also the login id]
3. Password \*

**b. Book Ticket –**

First, user has to give travel information and get to know the flights available for his/her travel

Information to be given

1. From City
2. To City
3. Date Of Travel
4. No Of Seats

Checks should be done to ensure that the user don’t attempt to book tickets beyond 3 months from the current date.

Flights: Checks should also be done to ensure that there are seats available in the requested flight.

Checks should also be done to ensure that there are flights operating from and to destinations.

Once user enters the above mentioned information, details regarding all the flights available for the given travel information are listed

Information to be displayed would be

1. From City – Airport
2. To City – Airport
3. Date of Travel
4. Flight No
5. Airline Code/Name
6. Departure Time of Flight
7. Arrival Time of Flight
8. Duration of travel [ for Ex: 1hr : 30 mins]
9. Cost of the ticket /per person
10. Status of the ticket – Available or Full
11. If there are no direct flights from the given source to destination, connecting flight information should be displayed
    1. For Ex: Bangalore To Delhi might also have a listing like Bangalore to Hyderabad and Hyderabad to Delhi. Rest of the above mentioned information should be displayed as well

Results should be sorted in the order of price, Lowest on top m.

From here user would select an appropriate flight for his/her journey and click on book flight.

**Admin Module:**

Admin will be able to manage data and users through the admin module. We will have a separate interface to which he can login using his/her login id and password. Admin will maintain the master data in the database.

1. Airline information

* Name
* Code

Admin should be able to add a new airline, and update/delete existing airline.

1. Flight management

* Name of the flight
* Flight no
* Associated to Airline
* Capacity- No of Seats

Admin should be able to add a new flight to the existing airline. To add a flight, the application should pre fill the airlines available in the UI.

1. Airport Information
   1. Code
   2. Name
   3. City

Admin should be able to add and view a new Airport. Every Airport should have a unique Code and a name.

1. Schedule Management

* From Airport
* To Airport
* Departure Time of Flight
* Flight No
* Airline code
* Arrival Time of Flight Duration
* Cost Per Ticket

 Tickets can be priced depending on the distance travelled.  For Example: If distance less than 500 kms then the cost per km can be say Rs.10 per km and if the distance is between 501 and 1000 kms then the cost per km can be say Rs. 7 per km and if the distance is above 1000 kms then the cost per km can be Rs.5 per km.

* Total Duration of travel
* Total Number Of Seats

It is the responsibility of the Admin Mgr to schedule the flights also. Schedule need to be generated for a month time. For same arrival and departure time.