A MINI PROJECT REPORT
On
Ticket Verification Using QR-Code

Submitted by

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December, 2018

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Declaration

*We hereby declare that the work which is being presented in the Mini Project "***Ticket Verification Using QR-Code***", in partial fulfillment of the requirements for Mini-Project LAB, is an authentic record of our own work carried under the supervision of* ***Mr. Vivek Sharma,*** *Asst. Professor, Dept. of CEA, GLA University, Mathura.*

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CERTIFICATE

This is to certify that the project entitled ***"Ticket Verification Using QR-Code"*** *carried out in Mini Project – I Lab is a bonafide work done by* ***Vivek Goyal (161500631), Prakhar Saxena (161500390), Nikhil Shrivastava (161500357) and Ashish Upadhyay (161500142)*** *and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).*

Signature of Supervisor:

Name of Supervisor: Mr. Vivek Sharma

Date:

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech Mini Project undertaken during B. Tech. Third Year. This project in itself is an acknowledgement to the inspiration, drive and technical assistance contributed to it by many individuals. This project would never have seen the light of the day without the help and guidance that we have received.

Our heartiest thanks to ***Dr. (Prof). Anand Singh Jalal,*** *Head of Dept., Department of CEA for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal.*

We owe special debt of gratitude to ***Mr. Vivek Sharma,*** *Assistant Professor Department of CEA, for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. He has showered us with all his extensively experienced ideas and insightful comments at virtually all stages of the project & has also taught us about the latest industry-oriented technologies.*

We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

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Abstract

This project focuses on the creation and the readability of the Quick Response Code. It is the trademark for a type of matrix barcode (or two-dimensional barcode) first designed in 1994 for the automotive industry in Japan. QR-codes have become common in consumer advertising. The data is encoded into a Bit Matrix and from that to an Image. The reverse process occurs when we decode the quick-response code. Also, one can create a QR-code for his address, name, details, and his favorite shopping malls etc.

Since childhood we see advertisements of various products on the television and website. But, sometimes when we search for any website and found a lot of links with a same key words. So, user get confused which link he has to follow. So in order to redirect user to the exact desired information over the internet we can use QR-Code Application.

The aim of the project is to generate quick response code of a ticket and give it to the costumer so that there will be no black ticket issued by the conductor in the bus. It will reduce the human efforts and it will increase the accuracy which will help the costumers and there will be no chance of overloading in the bus. Always number of the passengers will be equal to the number of seats available in the bus.

The main advantage of a QR code is its versatility. It can be scanned using any device having scanning capability. It redirects the user to the link for which the QR-Code is made.

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Chapter 1

1. Introduction

This paper presents a low Cost And flexible “TICKET VERIFICATION USING QR-CODE”. It consist of a QR-Code Generator which will raise a ticket that could be directly verified by the bus conductor through QR-Code Scanner. It will reduce the human efforts and it will increase the accuracy.

1.1 Motivation and Overview

Since childhood we see advertisements of various products on the television and website. But, sometimes when we search for any website and found a lot of links with a same key words. So, user get confused which link he has to follow. So in order to redirect user to the exact desired information over the internet we can use QR-Code application.

The remaining sections of this document provide a general description about the project including Software Requirement Analysis, Software Design, Testing, Implementation and User Interface.

.1.2 Objective

The aim of the project is to generate quick response code of a ticket and give it to the costumer so that there will be no black ticket issued by the conductor in the bus. It will reduce the human efforts and it will increase the accuracy which will help the costumers and there will be no chance of overloading in the bus. Always number of the passengers will be equal to the number of seats available in the bus.

Chapter 2

2. Software Requirement Analysis

2.1 Problem Solved

Problem solved with this project is to reduce the human effort and the corruption done by the bus conductors by giving fake tickets to the costumers in black. So, we are focusing on the valid ticket verification of the ticket which will be produced through online portal and every ticket will be having quick response code embedded over it. So, that conductor has to scan the ticket with the QR-Scanner and the seat number and the passenger name will be displayed to the bus conductor and give that particular seat to the costumer so that number of passengers will be equal to the number of seat available in bus and there will be no over loading in bus.

2.2 Modules and Their Functionalities

2.2.1 Website

Where user can see our information and join us by registration in our services and old user can directly sing in into our services and new user has to sing up firstly then then can only use our bus service.

2.2.2 Sing up/Sing in

Here new user has to sing up by giving there information like full name, email address, password, username and old user can directly sing in by providing there username and password.

2.2.3 Bus Services Portal

Here user can see our bus images, our facilities, our price chart, agents, drivers, and select any type of class of bus they can afford like premium class, vip class etc.

2.2.4 Bus Registration Form

Here user has to fill the form with some entries like full name, number of passengers, destination place, journey date etc.

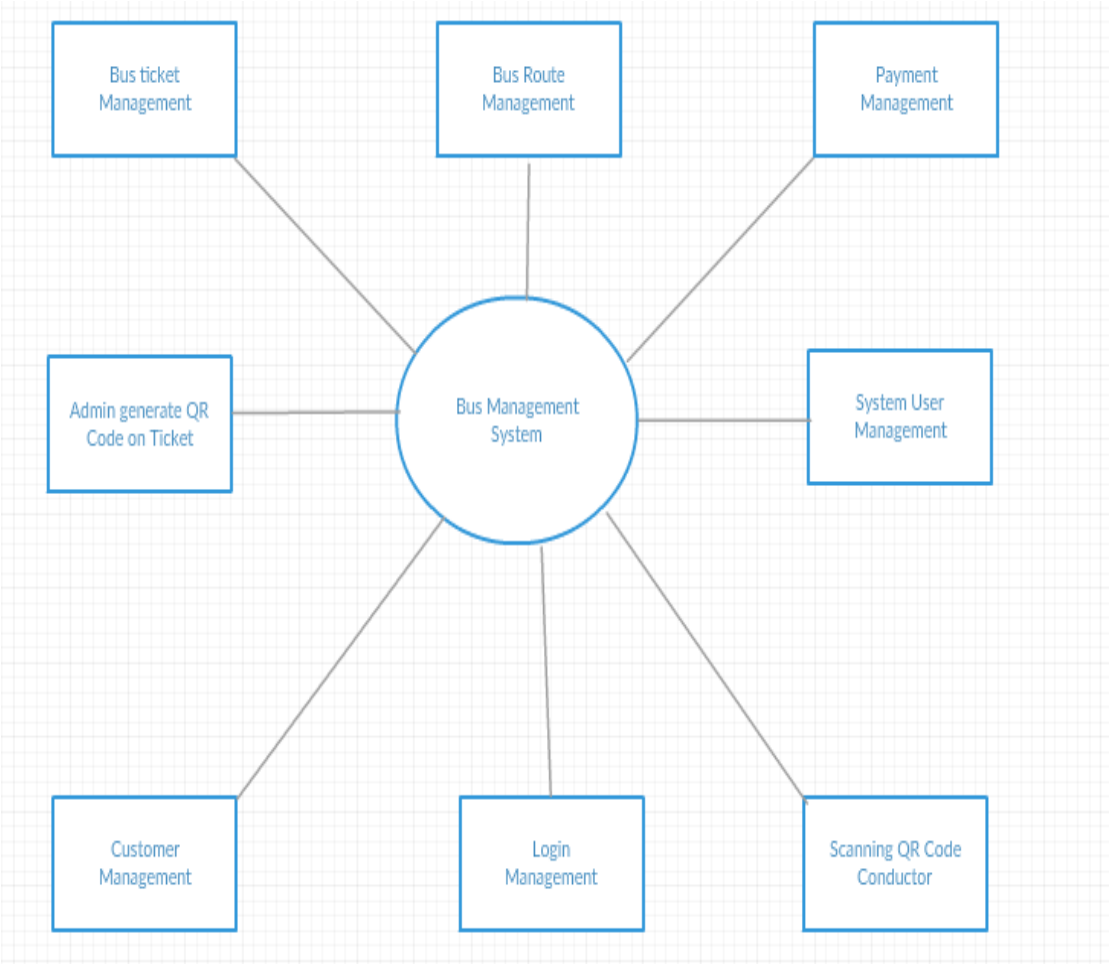
2.2.5 Payment Form

Here user has to give the card detail like card number, valid date, cvv number and verify the payment through mobile using the number assigned by the card user is using.

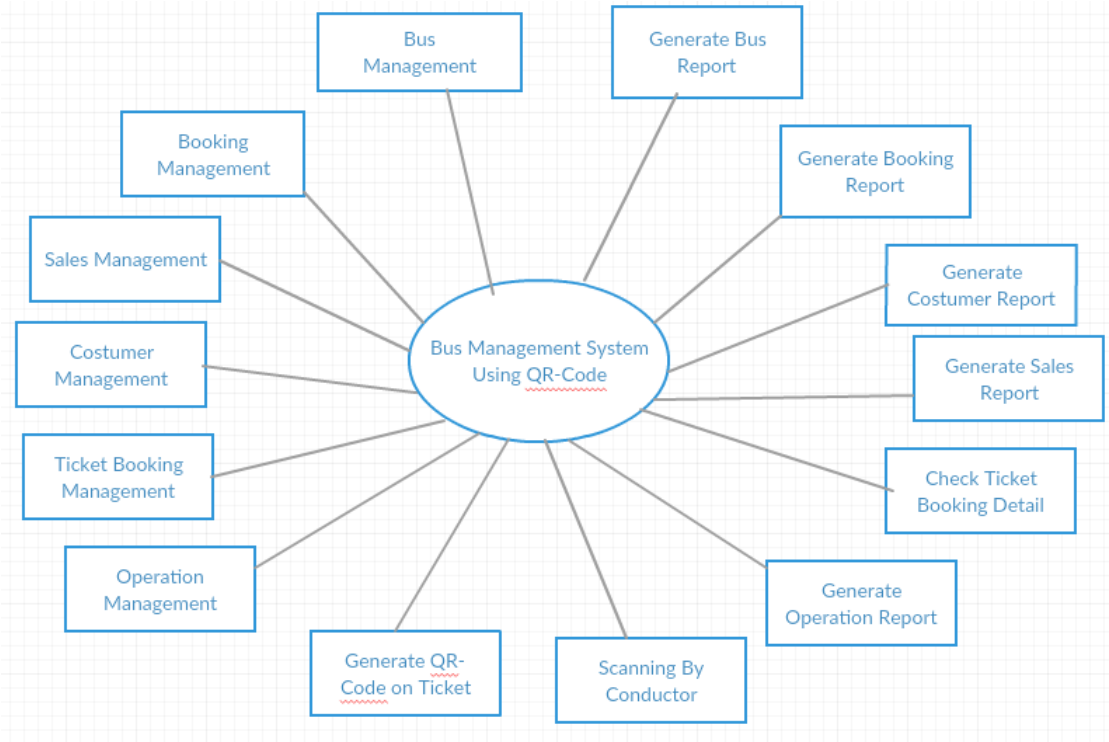
Chapter 3

3. Software Design

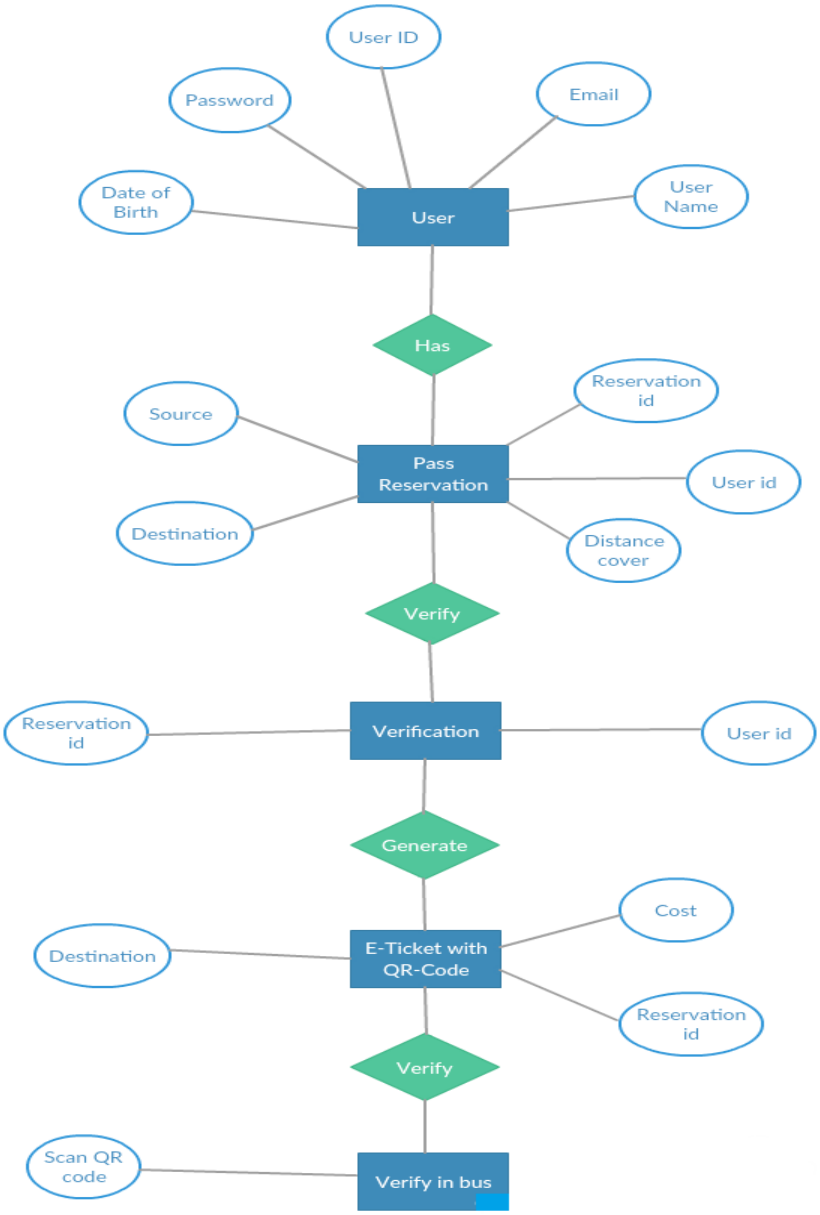
3.1 DFD(0-level)



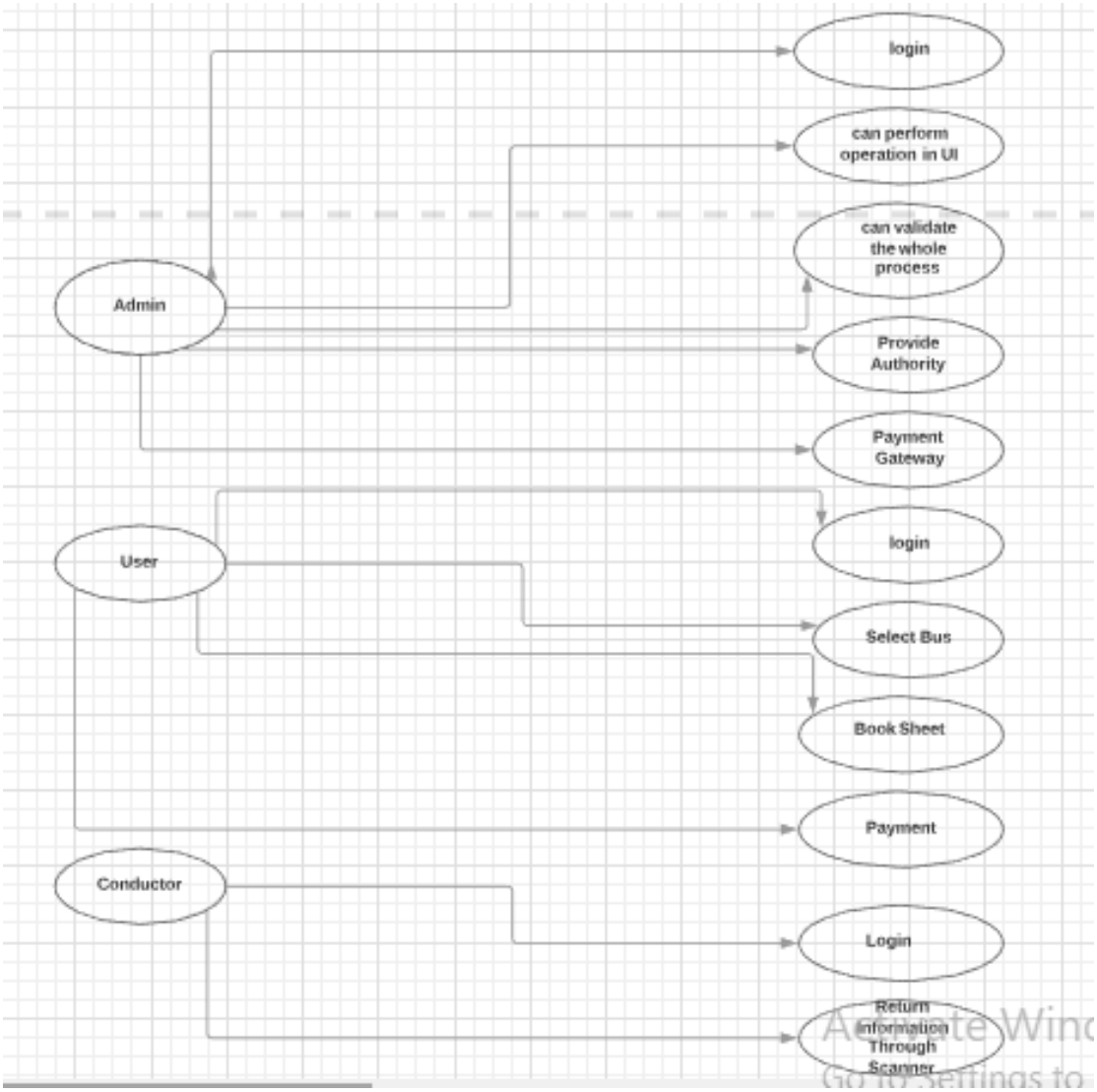
3.2 DFD(1-level)



3.3 ER-Daigram



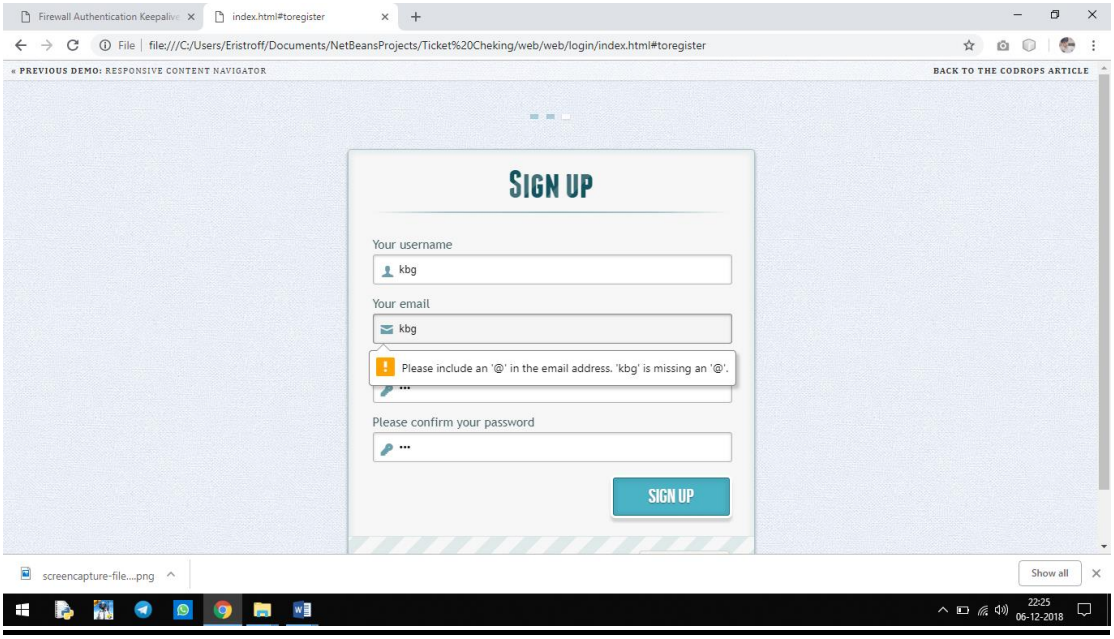
3.4 Use Case Daigram



Chapter 4

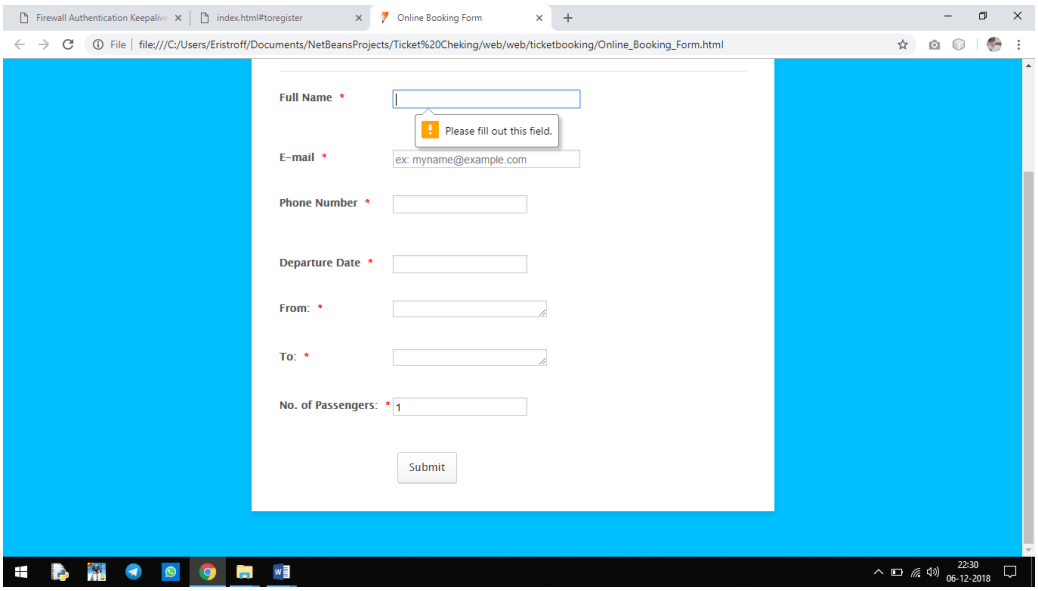
4.1 Wrong Format Of Email(Test Case 1)

When we enter wrong format of email then this test case comes out:



4.2 If Entries Not Filled Up (Test Case 2)

When we forget to fill the any entry of form this test case comes out:



Chapter 5

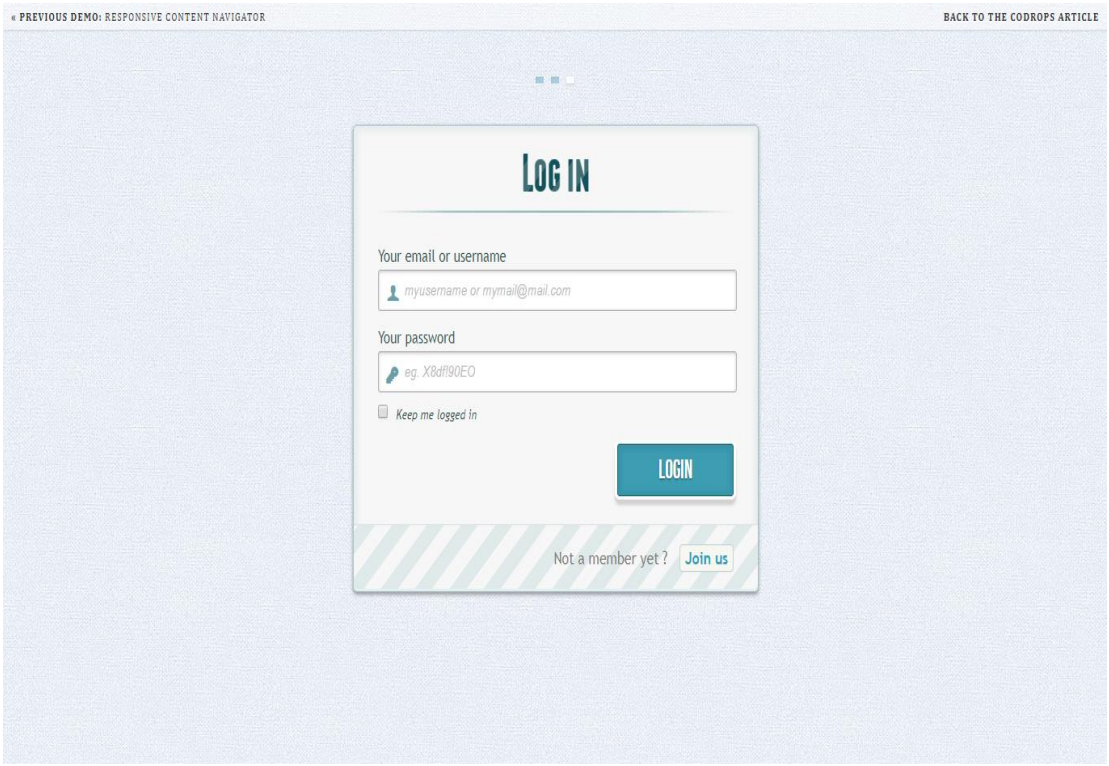
5. Implementation and User Interface

For software design we have used HTML and CSS to make our software attractive and there are five interfaces that user will see while booking or using our bus service.

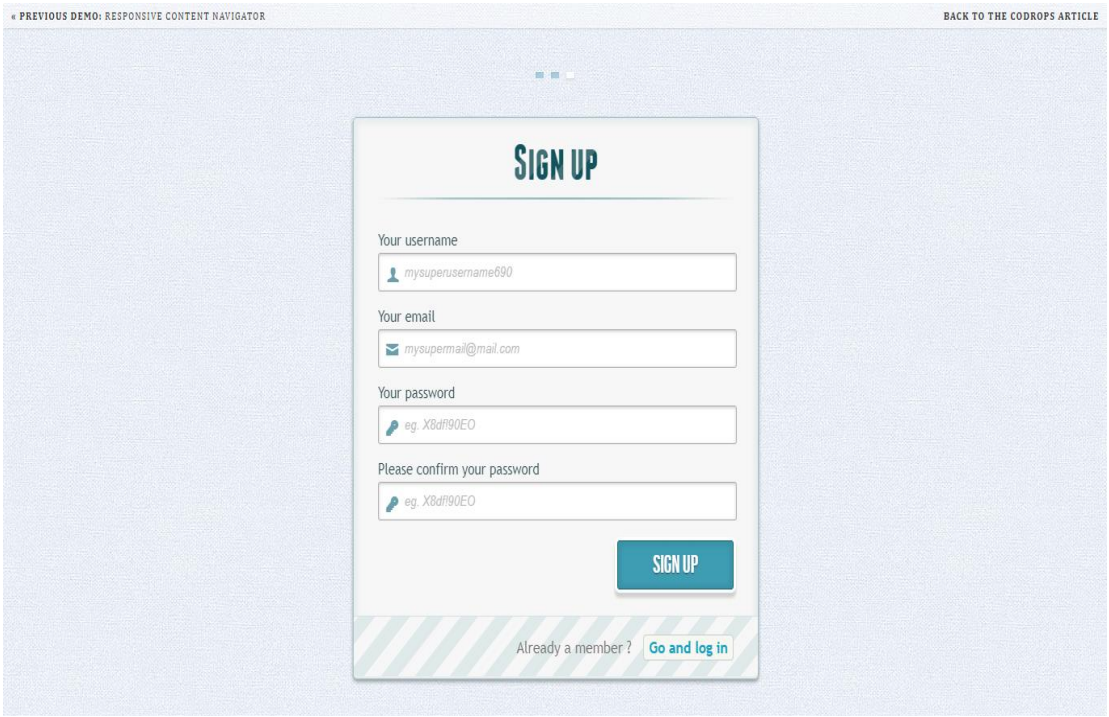
5.1 Website

5.2 Sing in/ Sing up

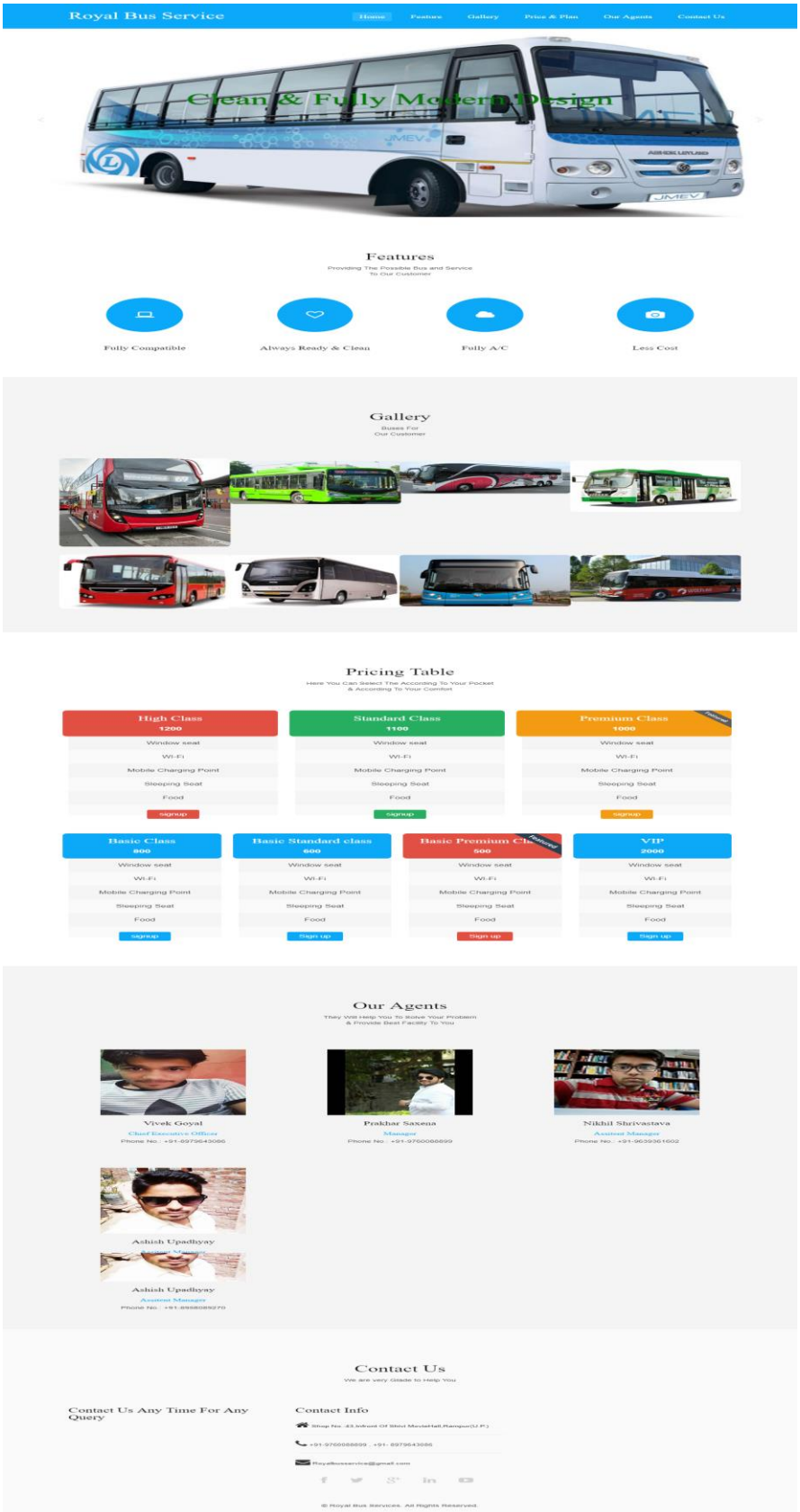
5.2.1 Sing In



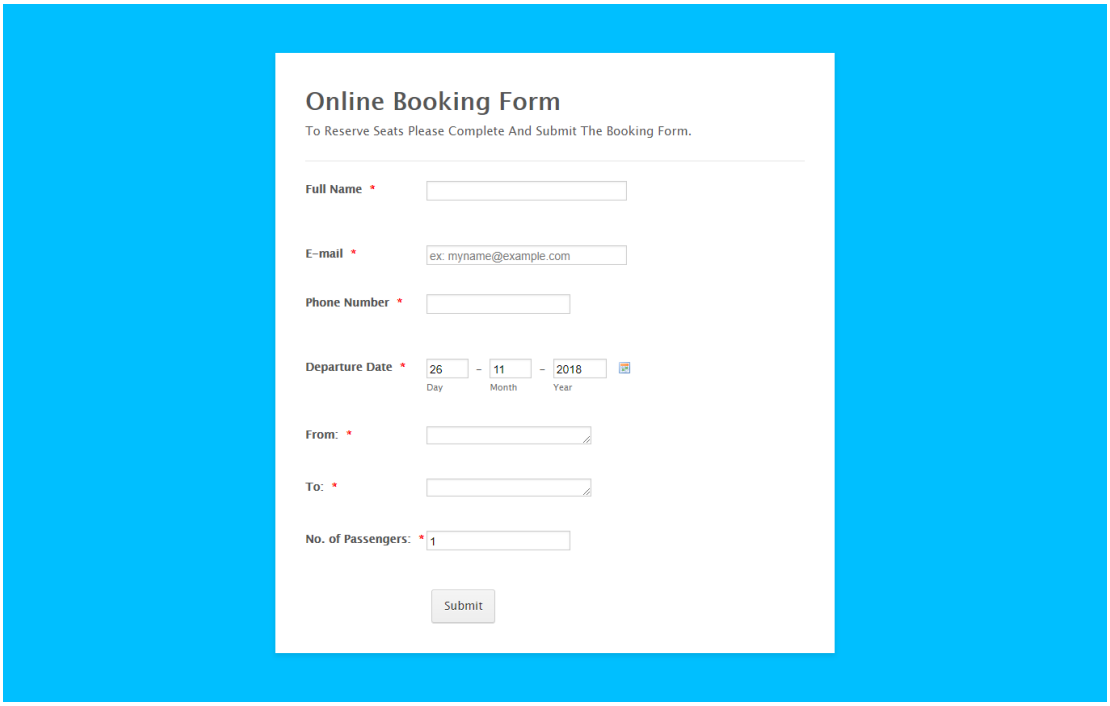
5.2.2 Sing Up



5.3 Bus Service Portal



5.4 Bus Registration Form



5.5 Ticket Generated

Chapter 6

6. References

1) Java Programmer's Reference
2) Java Tutorials: www.tutorialspoint.com
3) IEEE Recommended Practice for Software Requirements Specifications – IEEE Std 830-1998

4) IEEE Standard for Software Test Documentation – IEEE Std. 829-1998.