North South University

Department of Electrical and Computer Engineering

project proposal
"RAILWAY MANAGEMENT SYSTEM"

Database System Lab
CSE311
Section : 09
Semester: Spring 2022

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github ink -(https://github.com/Hamzha786/cse-311-project)

introduction

Buying a ticket physically can prove to be quite difficult. Sometimes you have to stand in long queue for hours to get a ticket sometimes your day is wasted because of the intense traffic. This is why, this application will be the one stop place to buy your tickets for wherever you want to go. You can purchase, manage, keep track of your tickets whenever you want with just one click. With this web application, not only the customers, even the authority can keep track, provide new information of the trains and their respective engine drivers. The authority can keep track of the conditions of their trains.

Objective

• Easy access of tickets from anywhere.
• Know about the train the passenger will travel in
. • Train conductors or authorities will get notified when their necessary papers are nearing their expiration.
• Easy access to online payment without any hassle.
• Reduce illegal selling of tickets.

Target Customers

• Bangladesh railway: Railway authority will be able to maintain, remove or add information about their trains as well as the staffs. They can easily keep logs about their daily revenues, maintenance costs, salary payments of staffs reducing man power which would cut costs to maintain a railway service.
• Passengers: Passengers or customers who use our service will be able to know all the details about their trains, conductors, time of train arrival, expected time to reach destination etc.

Value Proposition

This web application will significantly reduce the stress that customers face when they go to buy tickets at a railway station. They can easily purchase railway tickets for any place the customer wants to go. This will cut costs for the authority as this can reduce the cost in maintaining a railway database. With proper use of this service, the trains will be in better condition as the application will notify the authority of necessary updates or maintenance that needs to be done.

Web Application Feature and description

The webpage will open the customer view at first. There will be an option for the respective authorities to log in. The home page will contain few tabs for example timing, log in, sign up. Further in home we will also show schedule of few upcoming train arrival departure in box. Since this webpage is intended mainly for the customers, once opened, it will show the page that will be available to the customers. There will be multiple other tabs that will lead to train routes, train schedules, information, contact with the authority for any kind of queries
In order to purchase a ticket, the person has to provide necessary information needed for the purchase such as
• Name
• Contact number
• NID
• Address

Once the necessary information have been provided by the user, he/she can then proceed to
• Buy any ticket
• Access information about availability of seats, compartments, select type of compartment such as air conditioned, non-airconditioned, cabin etc.
• Get notification about the train's arrival, departure, time of reaching their respective destination
• Access payment using online banking, mobile banking or choose to pay cash directly at the station
• Review the service, the journey or write id there are any complaints
• Review journeys made in the past through this service.

Tools and Resources

Css, Javascript, MySQL, PHP, Web server, API for sms

Challenge

The main challenge the people face is the struggle of standing behind the long queue for hours only to get uncertain results. So, providing the certainty of confirming a purchase relative to the availability of seats will prove to be quite a challenge. Tracking the trains and using SMS for alert, can prove to be very expensive and this raises the problem of high maintenance costs. The next challenge will be the verification of the data provided by the users. Cross checking the provided data with the database will prove to be quite hectic. Providing security for online payment will be difficult as there are multiple options for payment. Implementing a UI that is user friendly and does not prove to be difficult to use will be third challenge.