

Railway Schedule & Ticket Management System

A. K. M. Fahim Rahman (160215)

Ferdousi Haque (160228)

Abstract:

Railway plays an important role in the people of Bangladesh. 6 out of 10 people have use railway as their transport. Although Bangladesh Railway now using a digital system to maintain their Tickets but Ticket digitalization is still limited for the mango people of Bangladesh. In our project we have tried to make a project which can serve a digital platform to serve people about train time schedule and they can book tickets from it. We have used HTML, CSS and PHP as for serving the front-end and MySQL for back-end functionality.

Introduction:

The customers of Bangladesh Railway are fully dependent on mobile operator for knowing the time schedule. They (Mobile operators) serves this by sms (short messing system). So if we build a system by which customers can buy tickets and can know where the train at that time then the system will become more user friendly. In our project we are trying to build such project. At first we make E-R Diagram then we build Schema then we make our final Database. At section 3 we have discussed about our E-R Diagram then in section 4 we have discussed about our Schema and Section 5 we have describe our Database. Then in section 6 and 7 we discussed our webpages and Interesting Queries. Finally in Section 8 we made conclusion of our project.

Project Objectives:

- 1. user will able see the schedule of all trains**
- 2. user will able see the route of all trains**
- 3. admin can add train and update train**
- 4. user can buy tickets**

Security:

The password of all the user accounts is protected by using cryptographic hash function. The cryptographic hash function is a hash function that takes any arbitrary size of message as input and gives a message digest having alphanumeric strings as output. The passwords are stored in the database in the format of a hash value.

Required Software and Tools:

1. Front end: PHP, HTML
2. JavaScript Framework
3. Design: CSS
4. Sublime Text 3
5. Web server: XAMPP
6. Database: MySQL

Project Description:

In this Railway Schedule System we will try to build a web application from where anyone can access the current location of a train. Although it is not fully possible to give the exact location because the GPS access of the train in Bangladesh are restricted to the authority only thus we will make this by the time. If a train runs in delay schedule then the admin will notify and make change in time. Thus users can also see the delay schedule of the train.

Interesting Queries:

User can find:

1. The train details (route etc.)
2. Total number of seats available in train
3. The seat price
4. The time schedule
5. User can buy ticket

Schema Diagram:

The Schema is given bellow:

train_details (TRAINNO, TRRAINTYPE, ORIGIN, DESTINATION, DEPARTURETIME, ARRIVALTIME, SEATPRICE, TOTALSEATS)

customer (C_ID, PHONENO, C_NAME, AGE, GENDER, ADDRESS, PASS, ROLE)

reservation(T_NO, CID, RECEIPTNO, SEATRESERVED, R_DATE, STATUS)

admin (PHONE, STATUS)

Functional Dependency:

IN train_details TABLE,

TRAINNO -> TRAINTYPE, ORIGIN, DESTINATION, DEPARTURETIME, ARRIVALTIME, SEATPRICE, TOTALSEATS

IN customer TABLE,

CID, PHONENO -> C_NAME, AGE, GENDER, PHONENO, ADDRESS, PASS, ROLE

IN reservation TABLE,

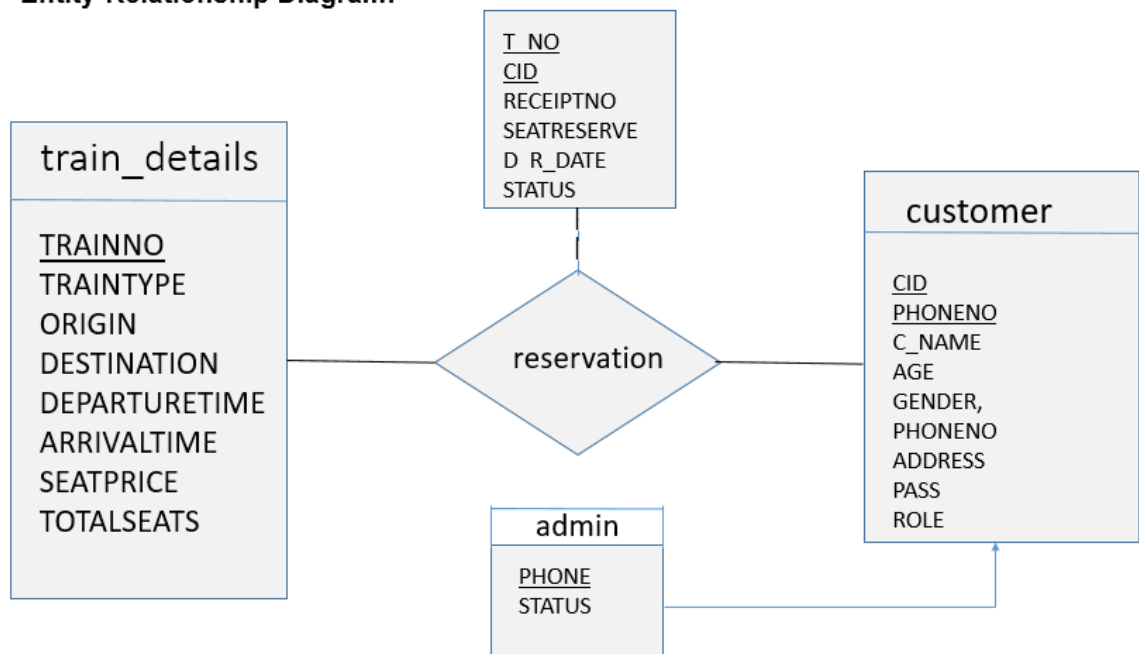
T_NO, CID, RECEIPTNO -> SEATRESERVED, R_DATE, STATUS

IN admin TABLE,

PHONE -> STATUS

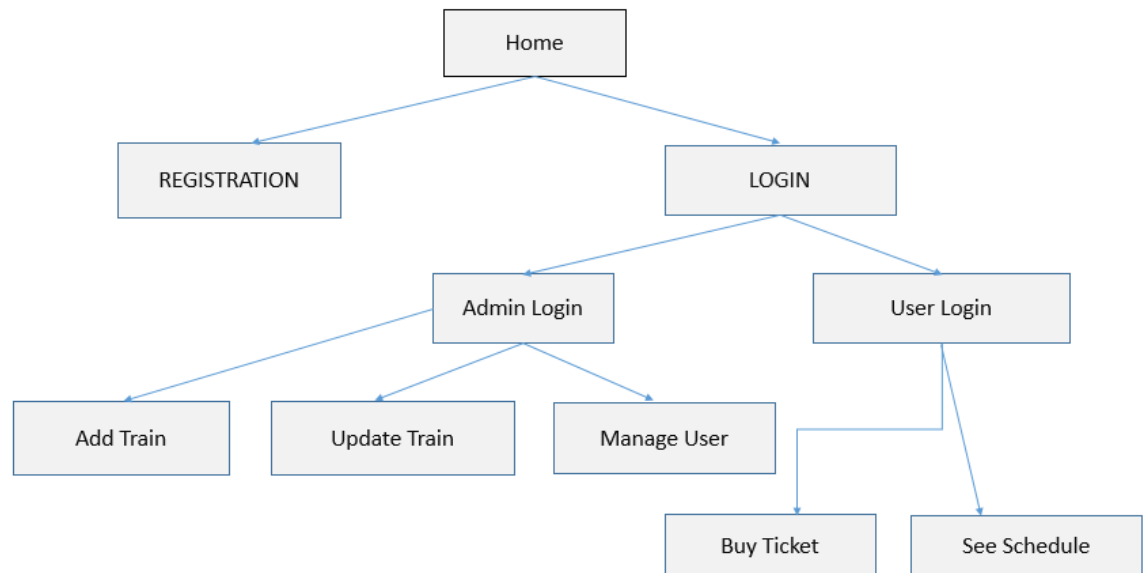
E-R Diagram:

Entity-Relationship Diagram:

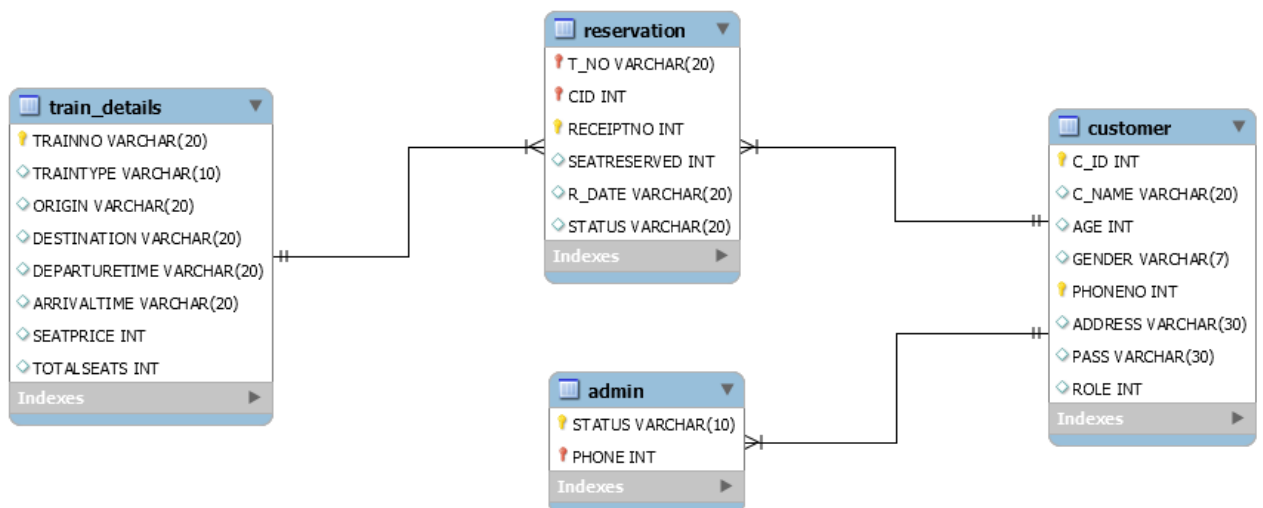


Graphical Representation of User Interface:

Graphical Representation of User Interface:

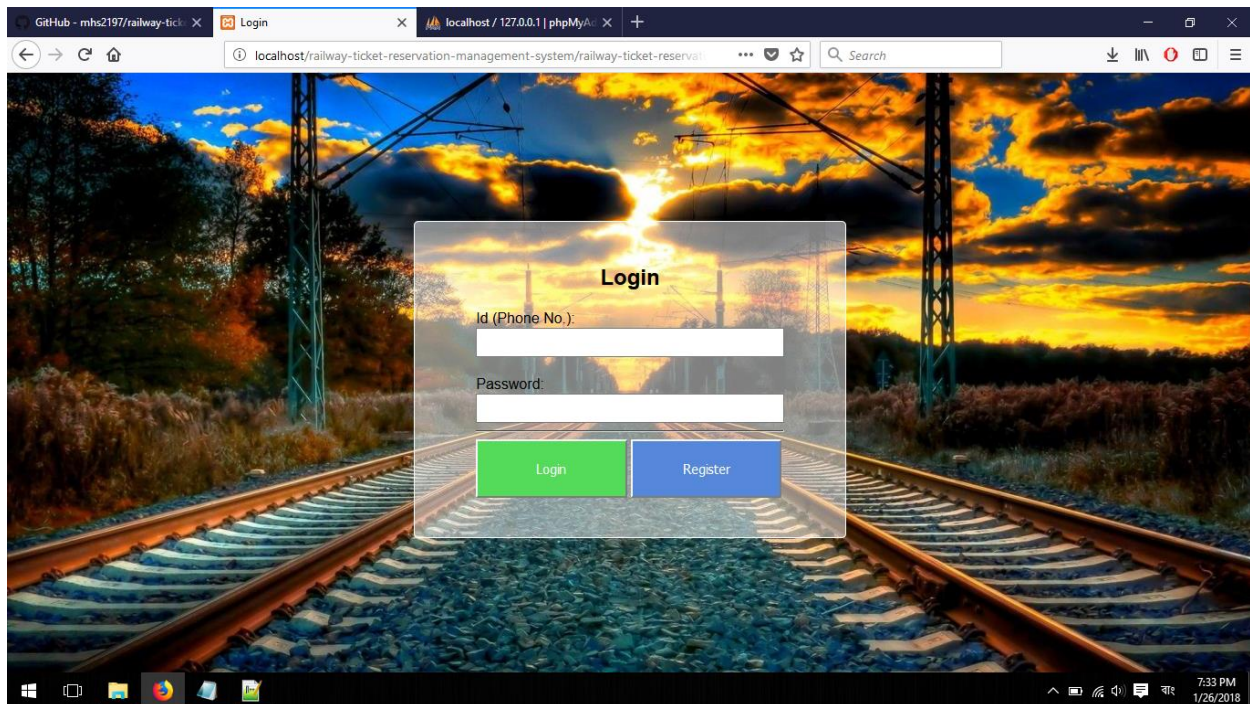


Database Design:

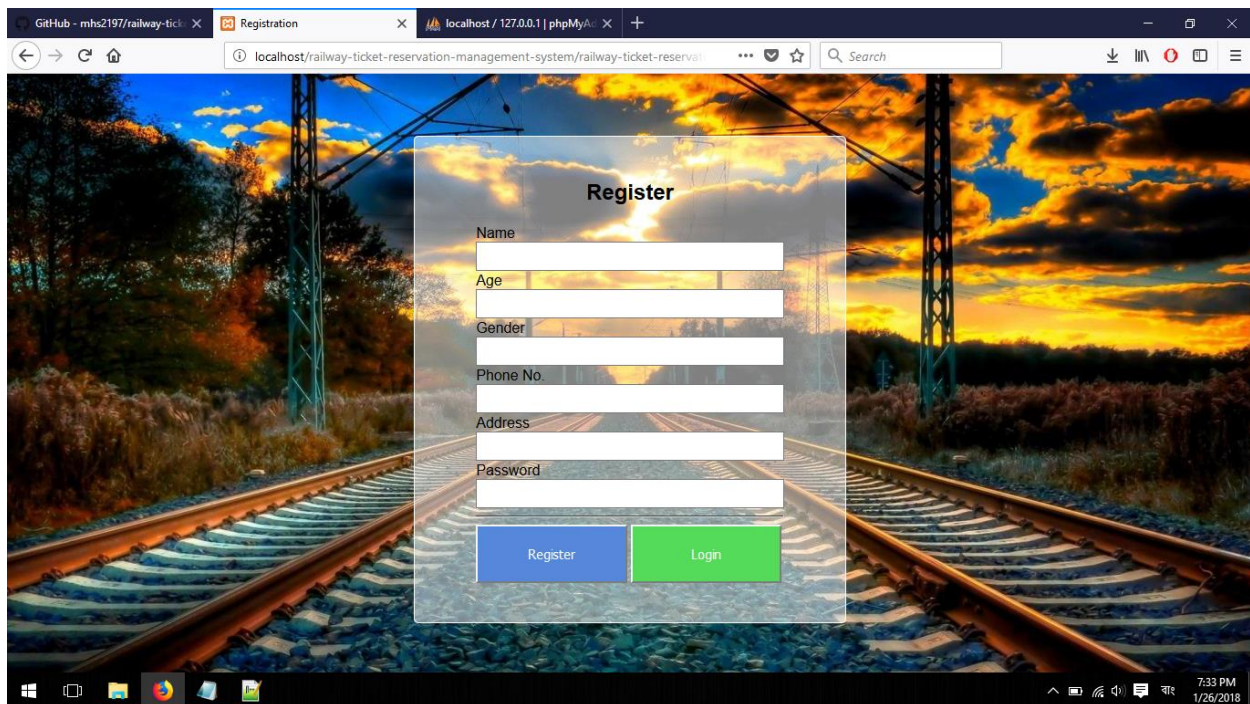


Website Layout:

1. Home



2. Registration:



3. User Home

The screenshot shows a web browser window with the address bar displaying 'localhost/RSS/profile.php'. The page has a dark background with a sunset image and train tracks. At the top right, there are links for 'Ticket', 'Cart', and 'Logout'. The main content area is titled 'Profile' and contains two forms. The first form is a table with user information, and the second form is for updating the user's information.

Name	Haq
Age	21
Gender	Female
Phone No.	01797539802
Address	Khulna

Change Your Info

Name

Age

Gender

Address

Password

4. Admin Home:

The screenshot shows a web browser window with the address bar displaying 'localhost/RSS/addtrainview.php'. The page has a dark background with a sunset image and train tracks. At the top right, there are links for 'Users', 'Ticket', 'Profile', 'Cart', and 'Logout'. The main content area is titled 'Admin' and contains three forms: 'Add Train Info', 'Update Train Info', and 'Delete Train Info'.

Add Train Info

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

Seat Price

Total Seats

Update Train Info

Select Train:

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

Seat Price

Total Seats

Delete Train Info

Train No	Delete
101	<input type="button" value="Delete"/>
747	<input type="button" value="Delete"/>

5. Add Train

The screenshot shows a web browser window with the URL `localhost/RSS/addtrainview.php`. The page has a navigation bar with links: [Users](#), [Ticket](#), [Profile](#), [Cart](#), and [Logout](#). The main content area is titled "Admin" and contains three sections:

- Add Train Info**: A form with fields for Train No (748), Train type (Inter City Express), Origin (Saidpur), Destination (Khulna), Departure Time (9am), Arrival Time (5pm), Seat Price (420), and Total Seats (150). A green "Enter" button is at the bottom.
- Update Train Info**: A form with a "Select Train" dropdown (101), and fields for Train No, Train type, Origin, Destination, Departure Time, Arrival Time, Seat Price, and Total Seats. A green "Enter" button is at the bottom.
- Delete Train Info**: A table with columns "Train No" and "Delete". It lists train numbers 101 and 747, each with a red "Delete" button.

The background of the page features a sunset over a field with train tracks. The Windows taskbar at the bottom shows the time as 11:22 AM on 4/17/2018.

This screenshot shows the same Admin View page after a new train has been added. A modal dialog box is displayed in the center with the text "New Train Info Added" and an "OK" button. The "Add Train Info" form now shows empty fields. The "Delete Train Info" table now includes a third row for train number 748 with a red "Delete" button. A status message "Transferring data from localhost..." is visible at the bottom left of the page. The Windows taskbar at the bottom shows the time as 11:22 AM on 4/17/2018.

6. Update Train:

Admin View

localhost/RSS/addtrainview.php

Users Ticket Profile Cart Logout

Admin

Add Train Info

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

Seat Price

Total Seats

Enter

Update Train Info

Select Train: 101

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

Seat Price

Total Seats

Enter

Delete Train Info

Train No	Delete
101	Delete
747	Delete
748	Delete

7. Delete Train:

Admin View

localhost/RSS/addtrainview.php

Users Ticket Profile Cart Logout

Admin

Add Train Info

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

Seat Price

Total Seats

Enter

Update Train Info

Select Train: 101

Train No

Train type

Origin

Destination

Departure Time

Arrival Time

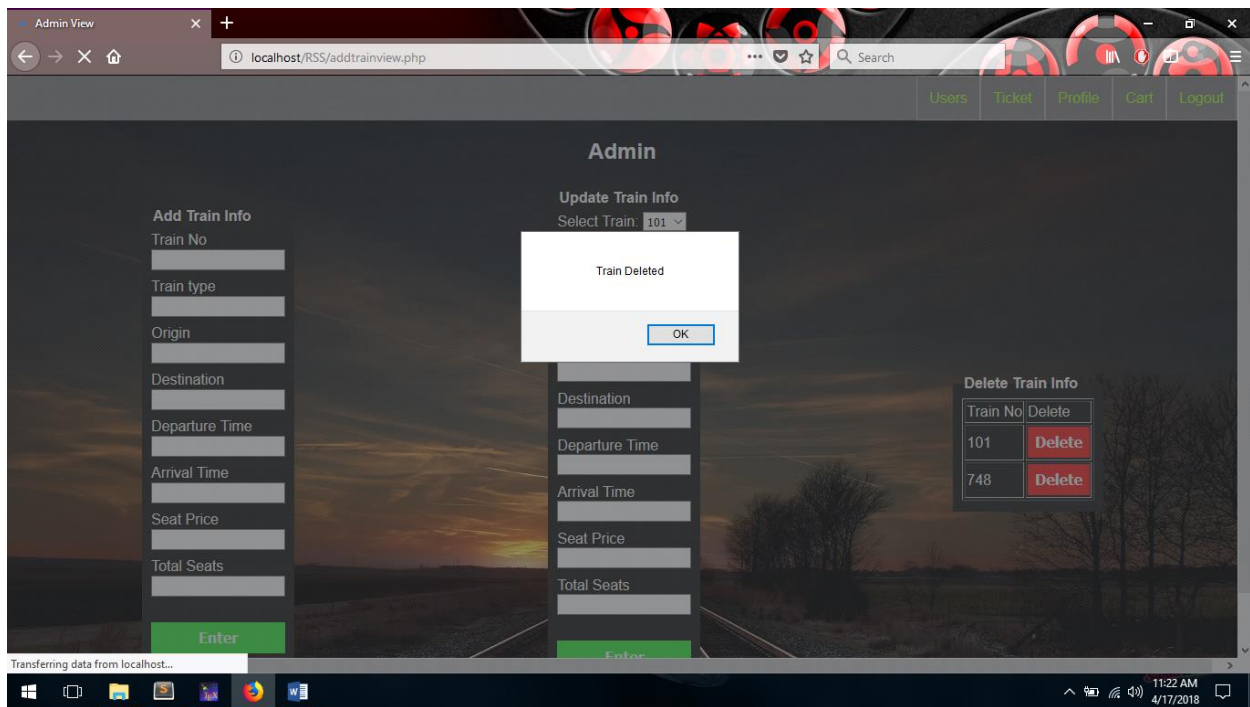
Seat Price

Total Seats

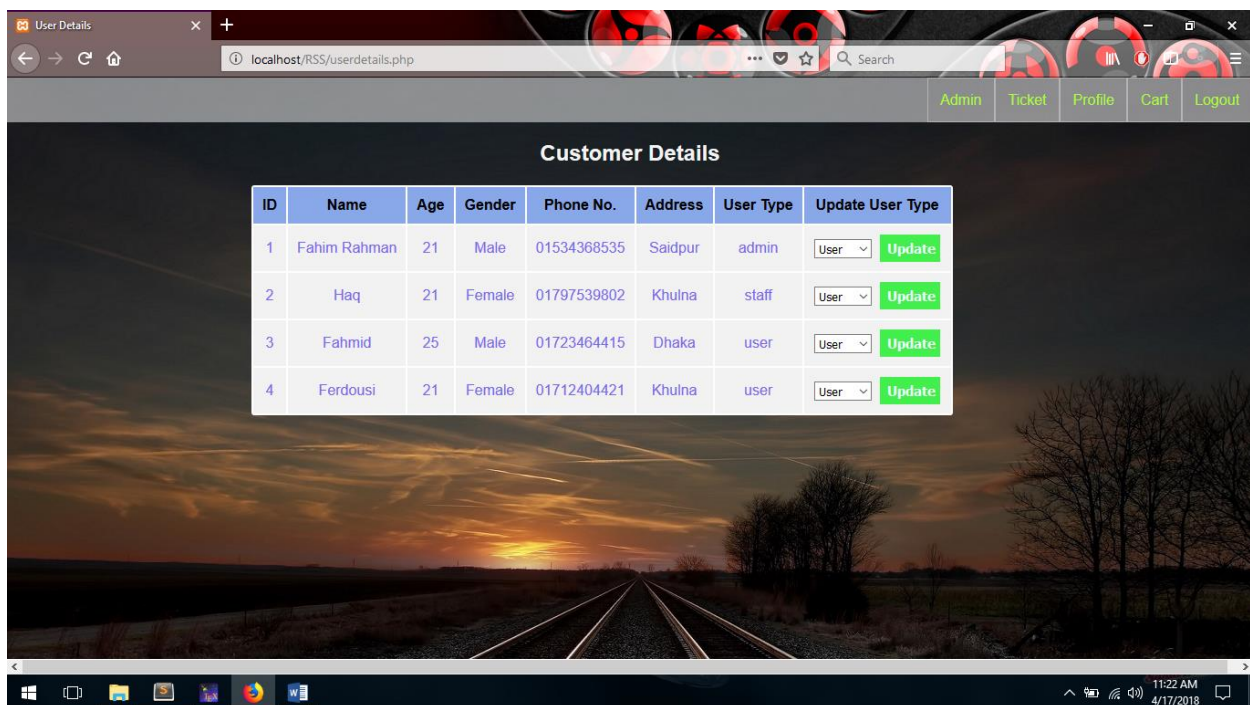
Enter

Delete Train Info

Train No	Delete
101	Delete
747	Delete
748	Delete



8. Manage User:



9. Buy Ticket:


localhost/RSS/userhome.php

localhost/RSS/userhome.php

Users Admin Profile Cart Logout

Train Details for Apr-17-2018

Train No	Train Type	Origin	Destination	Departure Time	Arrival Time	Seat Price	Total Seats	Remaining Seats	Buy Tickets
101	Inter City	Khulna	Dhaka	8:30pm	6pm	505	100	100	<input type="text"/> Enter
748	Inter City	Saidpur	Khulna	9am	5pm	420	150	150	<input type="text"/> Enter



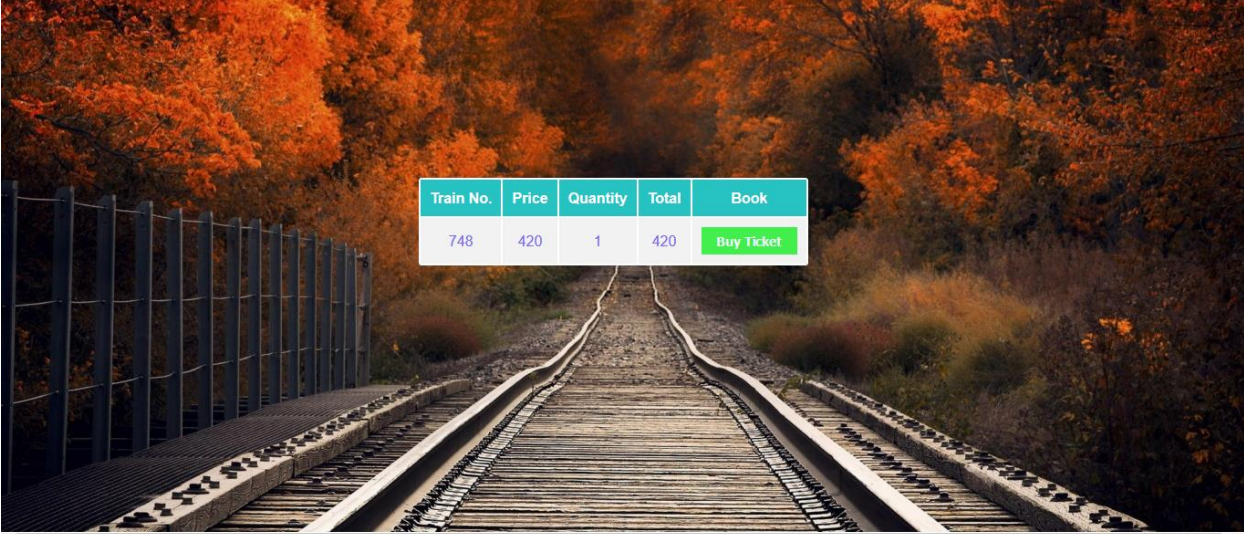
11:22 AM 4/17/2018

localhost/RSS/viewcart.php

localhost/RSS/viewcart.php

Users Admin Ticket Profile Cancel Cart Logout

Train No.	Price	Quantity	Total	Book
748	420	1	420	Buy Ticket



11:25 AM 4/17/2018

Conclusion:

The railway schedule system can help people to see the time schedule and helps them to buy ticket from anywhere without going to railway station. This can be very helpful at the time of nation vacation like Eid-ul-Fitor or Eid-ul-Azha or Durga Puja.