

UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA

University Area, Plot No. III - B/5, New Town, Action Area - III, Kolkata, West Bengal 700156



Software Tools Lab (CS 492)

TOPIC :- Railway Reservation System.

Submitted by:-

1. Sivangi Tandon (12)
2. Shubham Dutta (13)
3. Amitrajit Bose (14)

Under Supervision of: Prof. Kaustuv Bhattacharya and
Prof. Sreyashi Bhattacharya.

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.....

20th April, 2018.

Sivangi Tandon (12).
Shubham Dutta (13).
Amitrajit Bose (14).

CERTIFICATE

This is to certify that the project entitled “Railway Reservation System” has been developed by “Sivangi Tandon, Shubham Dutta & Amitrajit Bose”. They have worked on the project Railway Reservation System. They have used Visual Basic 6.0 to develop the project. Their work is satisfactory.

I wish them all the best for their bright future.

20th April, 2018.

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Project In-charge

Prof. Kaustuv Bhattacharya.

Prof. Sreyashi Bhattacharya.

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INTRODUCTION

This system is basically concerned with the reservation of railway tickets to the passenger. The need of this system arose because, as it is a known fact that India has the largest railway network in the whole world and it is not possible to handle such a large system manually. By computerizing it, it became possible to overcome the limitations and make the system operations more efficient. The complexity in handling data and records of such a vast system got reduced and became easier by computerizing the system.

Being more specific, this railway reservation system can perform the basic functions like reservation, displaying train schedule. The users are required to register on the server for getting access to the database and query result retrieval. Upon registration completion, each user has an account which is essentially referred to as the 'view level' of the customer. The account contains comprehensive information of the user entered during the registration and allows the user to access the details of their reservation, enquire about trains and train schedule and seat availability. The user will be able to update their account details also.

RAILWAY RESERVATION SYSTEM

The Indian Railways (IR) carries about 5.5 lakhs passengers in reserved accommodation every day. The Computerised Passenger Reservation System (PRS) facilitates the booking and cancellation of tickets from any of the 4000 terminals (i.e. PRS booking window all over the countries). These tickets can be booked or cancelled for journeys commencing in any part of India and ending in any other part, with travel time as long as 72 hours and distance up to several thousand kilometres. The project of PRS was launched on 15th November 1985, over Northern Railway with the installation of Integrated Multiple Train Passenger Reservation System (IMPRESS), an online transaction processing system developed by Indian Railways in association with Computer Maintenance Corporation Ltd., at New Delhi. The objective was to provide reserved accommodations on any train from any counter, preparation of train charts and accounting of the money collected. The application was implemented in 1987 Mumbai, Chennai, Kolkata, Secunderabad subsequently.

Railway reservation methods:

ONLINE BOOKING: With the help of this people can book their tickets online through internet, sitting in their home by a single click of mouse. Using their credit cards people can easily get their tickets done within minutes. There are certain charges for online booking as well.

COUNTER BOOKING: This is the oldest method of booking the tickets. The reservation counters are there at railway department from where people can get the tickets to their respective destinations.

Railway passengers frequently need to know about their ticket reservation status, ticket availability on a particular train or for a place,

train arrival or departure details, special trains etc.. Customer information centres at the railway stations are unable to serve such queries at peak periods. The number of the reservation counters available to the passengers and customers are very less. On most of the reservation systems there are long queues, so it takes a long time for any individual to book the ticket. As now there are no call centres facilities available to solve the queries of the passengers.

Software Used:

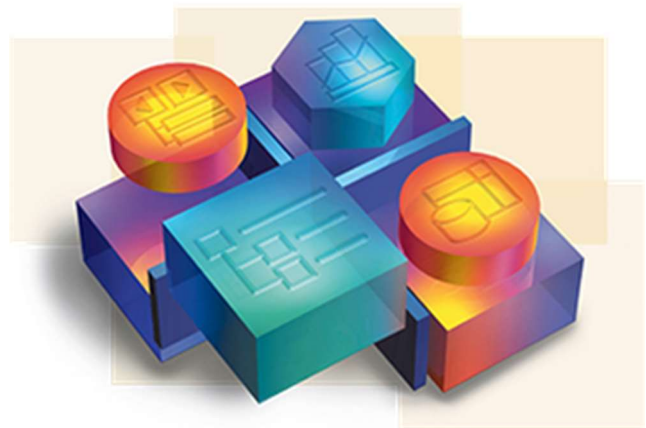
Microsoft Visual Basic 6.0.

Some Introduction:

Visual Basic is a third-generation event-driven programming language and integrated development environment (IDE) from Microsoft for its Component Object Model (COM) programming model first released in 1991 and declared legacy during 2008.

Microsoft intended Visual Basic to be relatively easy to learn and use. Visual Basic was derived from BASIC and enables the rapid application development (RAD) of graphical user interface (GUI) applications, access to databases using Data Access Objects, Remote Data Objects, or ActiveX Data Objects, and creation of ActiveX controls and objects.

The final release was version 6 in 1998 (now known simply as Visual Basic). On April 8, 2008, Microsoft stopped supporting Visual Basic 6.0 IDE. The Microsoft Visual Basic team still maintains compati-



Microsoft
Visual Basic 6.0

bility for Visual Basic 6.0 applications on Windows Vista, Windows Server 2008 including R2, Windows 7, Windows 8, Windows 8.1, Windows Server 2012 and Windows 10 through its "It Just Works" program. In 2014, some software developers still preferred Visual Basic 6.0 over its successor, Visual Basic .NET.

A Brief Guide

1. Welcome Page



Click on **Proceed** to advance.

2. Login Page

A screenshot of a web browser window titled "Login". The page has a white background. It contains two input fields: "USERNAME :" followed by a text box, and "PASSWORD :" followed by a text box. Below these fields, there are two buttons: "LOGIN" on the left and "SIGNUP" on the right, separated by the word "OR". The buttons have a blue gradient and a thin border.

Click on **SIGNUP** to register.

3. Registration Page

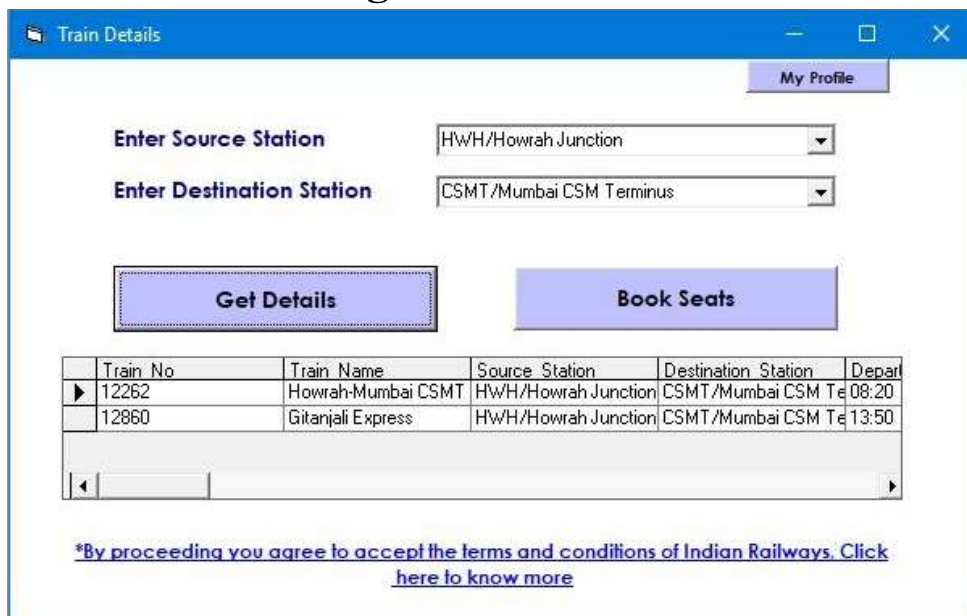


The screenshot shows a web browser window titled "Signup". The main heading is "REGISTRATION". Below the heading, there are seven input fields labeled: NAME, USERNAME, EMAIL ID, PHONE NUMBER, DATE OF BIRTH, PASSWORD, and CONFIRM PASSWORD. At the bottom of the form, there are two buttons: "REGISTER" and "CANCEL".

Enter your credentials in the respective fields and click on **REGISTER** to create your account.

4. Enter your Username and Password in the Login Page and click on **LOGIN**.

5. Search Results Page



The screenshot shows a web browser window titled "Train Details". In the top right corner, there is a button labeled "My Profile". Below this, there are two dropdown menus: "Enter Source Station" (selected: HWH/Howrah Junction) and "Enter Destination Station" (selected: CSMT/Mumbai CSM Terminus). Below these are two buttons: "Get Details" and "Book Seats".

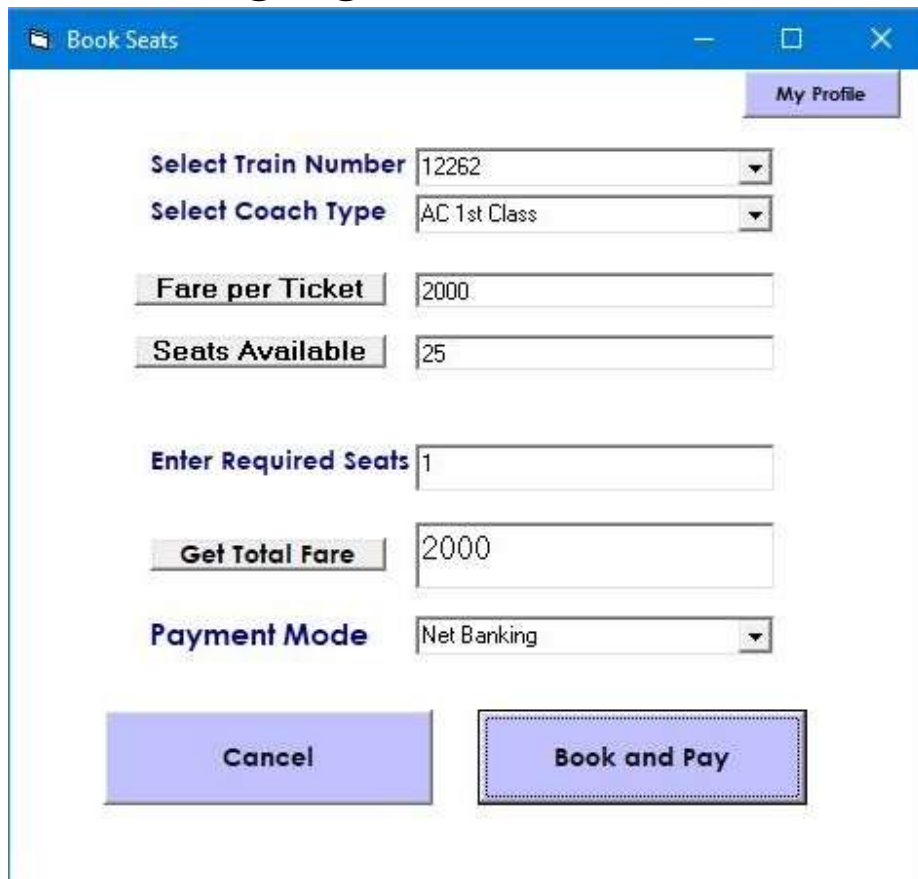
| | Train No | Train Name | Source Station | Destination Station | Depart |
|---|----------|--------------------|---------------------|---------------------|--------|
| ▶ | 12262 | Howrah-Mumbai CSMT | HWH/Howrah Junction | CSMT/Mumbai CSM T | 08:20 |
| | 12860 | Gitanjali Express | HWH/Howrah Junction | CSMT/Mumbai CSM T | 13:50 |

Below the table, there is a pagination bar with a left arrow, a text input field, and a right arrow. At the bottom, there is a disclaimer: "*By proceeding you agree to accept the terms and conditions of Indian Railways. Click [here to know more](#)".

Enter Source Station and Destination Station and click on **Get Details** to get the list of trains travelling in your desired stations.

To book seats please do remember the train number and click on **Book Seats**.

6. Seat Booking Page



The screenshot shows a web browser window titled "Book Seats". In the top right corner, there is a button labeled "My Profile". The form contains the following fields and controls:

- Select Train Number:** A dropdown menu with "12262" selected.
- Select Coach Type:** A dropdown menu with "AC 1st Class" selected.
- Fare per Ticket:** A text input field containing "2000".
- Seats Available:** A text input field containing "25".
- Enter Required Seats:** A text input field containing "1".
- Get Total Fare:** A text input field containing "2000".
- Payment Mode:** A dropdown menu with "Net Banking" selected.
- At the bottom, there are two buttons: "Cancel" and "Book and Pay".

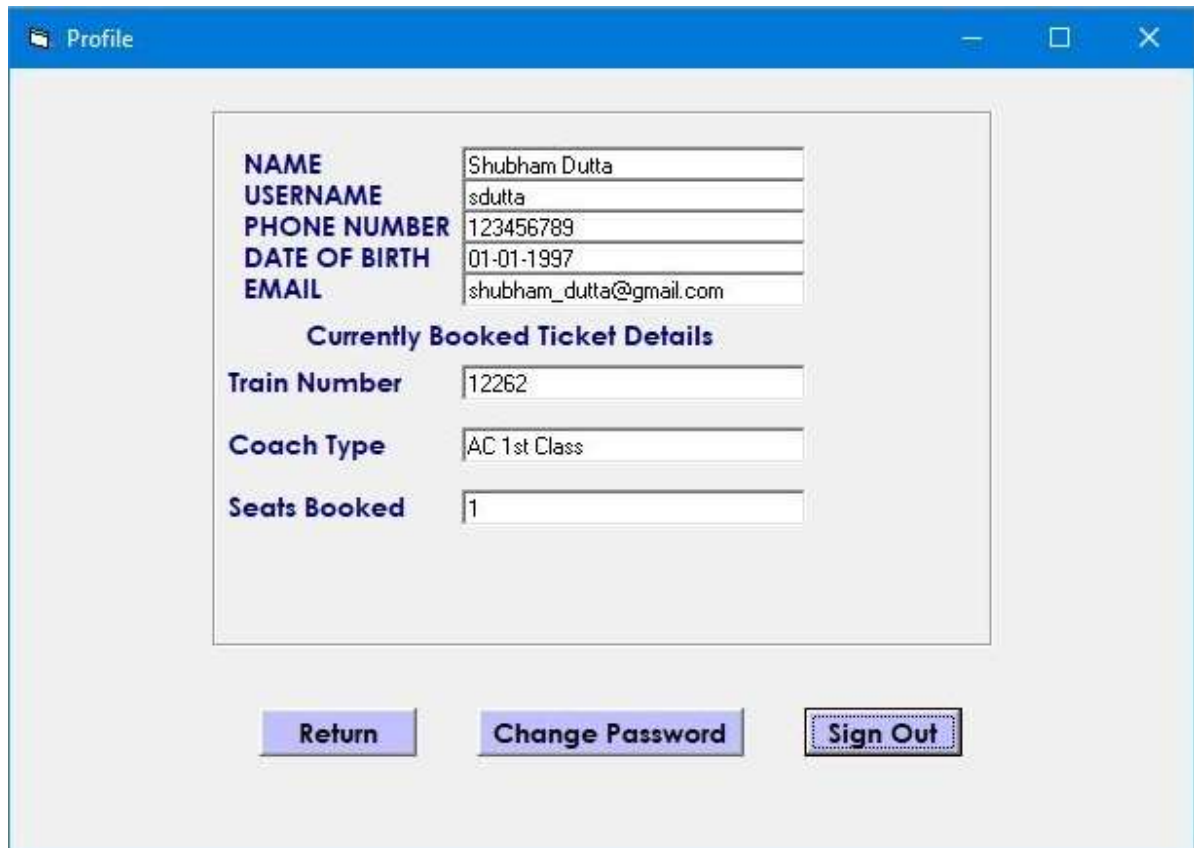
For demonstration purposes, here we have taken the train 12262 → Howrah – Mumbai (CSTM) Duronto Express.

To book seats enter your desired Coach Type, Number of Seats, Payment Mode and then click on **Book and Pay** and click on **OK** to go to the Online Payment Portal.

To cancel booking procedure, click on **Cancel**.

7. My Profile Page

By clicking on **My Profile** in the above page, you can view your profile details, booking details and can also change your password.



The screenshot shows a window titled "Profile" with a blue header bar. Inside, there is a form with two sections. The first section contains user details: NAME (Shubham Dutta), USERNAME (sdutta), PHONE NUMBER (123456789), DATE OF BIRTH (01-01-1997), and EMAIL (shubham_dutta@gmail.com). The second section, titled "Currently Booked Ticket Details", contains: Train Number (12262), Coach Type (AC 1st Class), and Seats Booked (1). At the bottom of the window are three buttons: "Return", "Change Password", and "Sign Out".

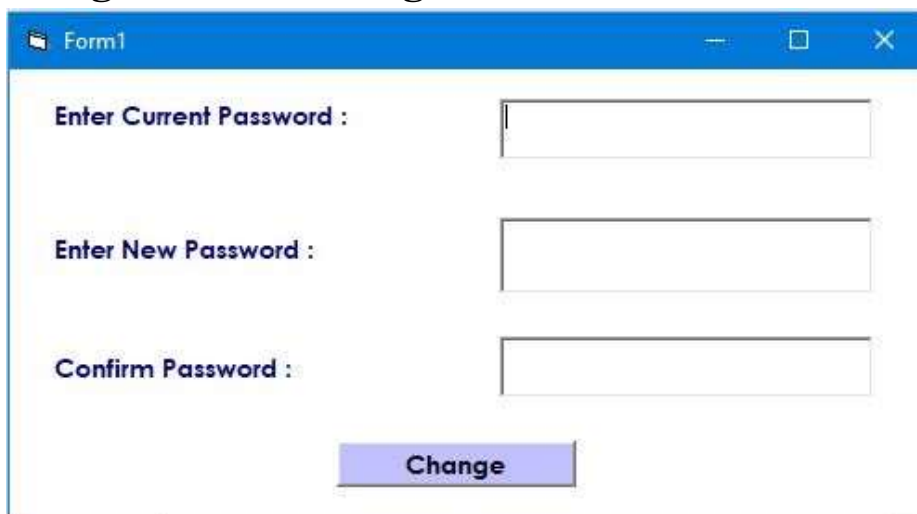
| | |
|---------------|-------------------------|
| NAME | Shubham Dutta |
| USERNAME | sdutta |
| PHONE NUMBER | 123456789 |
| DATE OF BIRTH | 01-01-1997 |
| EMAIL | shubham_dutta@gmail.com |

Currently Booked Ticket Details

| | |
|--------------|--------------|
| Train Number | 12262 |
| Coach Type | AC 1st Class |
| Seats Booked | 1 |

[Return](#) [Change Password](#) [Sign Out](#)

7a. Change Password Page



The screenshot shows a window titled "Form1" with a blue header bar. Inside, there are three text input fields with labels: "Enter Current Password :", "Enter New Password :", and "Confirm Password :". Below these fields is a "Change" button.

Enter Current Password :

Enter New Password :

Confirm Password :

[Change](#)

SUMMARY & CONCLUSION

For journey of longer distances most of the people use the railways, which is most convenient, affordable means of transport in India. So, keeping this in view, the reservation of railways is a most important task and it must be faster and efficient as the demand (travellers) is very high. In order to meet this demand, manual reservation is completely ruled out and it requires an efficient program to implement the online reservation.

This reservation system enables us to choose the train even there is no necessary to fill a form at the railway reservation counter, i.e. we can directly select from the choices provided for us with train numbers and their origin, departure time, destination & arrival time at that station and the class to travel in.

After choosing the desired destination, train, coach type, etc. we are getting redirected to the online payments portal for booking out tickets, if there is any concession we can also avail it and then program gives us the final output as train ticket with the amount to be paid. It is completely developed in Visual Basic 6.0 with the help of Microsoft Access database. Thus, this system simplifies our reservation procedure and makes things faster in the mode of railways.

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SOURCE

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- www.vbforums.com
- docs.microsoft.com
- msdn.microsoft.com

INSPIRATION

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