A VISUAL STUDIO APPLICATION ON ONLINE BUS BOOKING SYSTEM



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1. INTRODUCTION TO THE ONLINE BUS BOOKING SYSTEM:

Online Bus Booking System is a software product which manages the bus reservations for the

passengers. This will totally automate the reservation system for the seats in the bus and will

eliminate the inconvenience of standing in queue for the reservation. And this will save a lot of

time.

This system consist of three modules that are

a. Admin,

b. User and

c. Staff Manager.

The system will be able to identify if a person is an application administrator or the user or the

staff manager when they login.

Staff manager has the few authorities which are

• He will be able to see all the reservations made on that mayor any particular day.

• They can book a new ticket.

• Request extra tickets for a particular service.

Admin can have some privileges like:

• He will be able to process all the extra tickets request made by staff manger

An user can be able to:

• Book a ticket of their choice and will be traversed throughout the application from the

home page → login page → New booking details page → Traveller details page →

Payment Details page \rightarrow confirmation page during the booking process.

2. ONLINE BUS BOOKING SYSTEM

1. The list of usernames and passwords to test the application

• Username: admin Password: Houston

• **Username:** test **Password**: Houston

• **Username:** mgr **Password**: Houston

2. Special features in the project:

This application offers some special features like:

- 1. The users can reserve seats of their wish for their journey. Seats are reserved on the basis of first come first serve.
- **2.** A new user can sign up in to the application by providing some basic information to reserve a seat in the bus.
- **3.** A user can always access their account if they forget their password by clicking on "Forgot password" and their password will be sent to their email address.
- 4. After signing in it takes user to new booking details and after selecting route name date user is directed to Traveller Details. On that page user will need to add the traveller's name and phone number and after that the user will be directed to Payment Details page, in which it gives user the option for the method of payment and user will need to add some details about the card and make the payment.
- **5.** User will receive the confirmation once the payment is done successfully.
- **6.** The registered user can directly log in and reserve the seat in the bus.
- 7. This makes it easier to book the seats in the bus without any hassles.
- **8.** After confirmation is received the user can carry the e copy of the ticket or can manually print it out whenever it is needed.

3. GROUP HOMEPAGE

The group home page contains few links of our project, images and some description about the project. The things that we have included in our project are as follows

- The group home page contains the title of the project.
- It contains a short description of what is our group project about in the link website.
- In the same link we have also links to the documents of our project.
- One can register in our website by going to the link Registration.
- One can Login in our website by going to the link Login.

• The group home page also contains the details of the group members, their presentation id, name, photo, personal home page address etc.

GROUP PHOTO

4. DESIGN OVERVIEW

Online bus booking system provides bus transportation system, a facility to reserve the seats in the bus. This online booking system keeps track of the user's data in the database which is easy to manage compared to the traditional database. It maintains all the data of users, bus details, route of the bus, ticket fare as per the route, reservation details and etc.

In traditional bus booking the customer has to go to the counter to buy the bus tickets or ask for the schedule of the buses. Furthermore, customer needs to stand in the queue for long time to get the ticket. Besides that customer also were not allowed to buy the bus tickets through the telephones. Lack of immediate information storage - the information generated by various transactions takes time and effort to be stored at a right file. Lack of prompt updating- various changes the information like passenger details are difficult to make as paper work is involved. Inability to automatically schedule services, generate receipt and receive payments form passengers.

We also have to consider few problems regarding the online bus booking system. The only limitation of this online bus booking is shortage of tickets, to clearly understand this scenario, let us consider an example where a booking gets declined a reservation cannot be made if the user tries to book the number of seats which are more than the number of allocated seats. The solution for this problem is Extra-Ticketing; this module is one of the most effective tools available now. When the customer faces this kind of situation, he can simply visit his nearest staff manager location, where staff manager can request for extra seats for that bus. Once this process is done, admin will be able to see the extra ticket requests, and can approve/decline the request.

This application helps the user to book, modify and cancel the tickets online from home instead for waiting in the queue at reservation centers when a person plans an unexpected trip. As online booking provides a flexible user-friendly interface, passengers can search for many options

like convenient dates and fares and plan their trip most economically by using different online promotions.

Users are given options to select from the city, date origin and destination or route in the new booking page, and depending on the selection of the search criteria the fares are retrieved from the database calculating the total fares from the selected number of seats that has been booked by the user and then the user is navigated to the passenger details page in which user have to provide the name of the passengers traveling and the phone number of the passenger, submitting that passenger detail page user id navigated to the payment details page. That is where the user has to make the payment for their reservations where user has to select the particular method of payment from the available list. At the final stage, the passengers will be able to see all the journey and contact details in the Itinerary page.

To Reserve a seat through Online, User should have to go through 3 steps

Step 1: Sign Up page, where user has to enter user's basic personal information.

Step 2: Login Page, where you login into the site and give details of the journey, choose seats and then details of traveler.

Step 3: Payment Page, last phase to complete the booking where user has to do payment. After which an itinerary is generated to the user.

5. PROJECT WEBSITE:

5.1: Website Description:

The web application to be produced is to reserve a seat in a bus which will automate the major travel service operations.

The system is a Reservation and Booking System to keep track of reservations and availability of seats for a particular bus.

Reservation of bus ticket

Sign Up

Select Date

Number of seats

Payment

Once Payment is done an itinerary is generated to the user

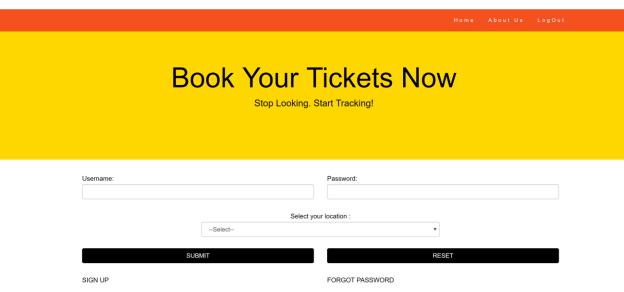
.

Overview of the website:

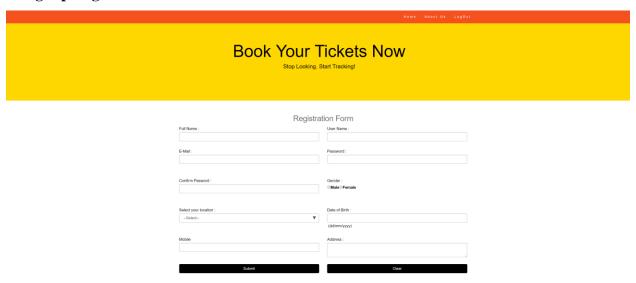
1. Home Page:



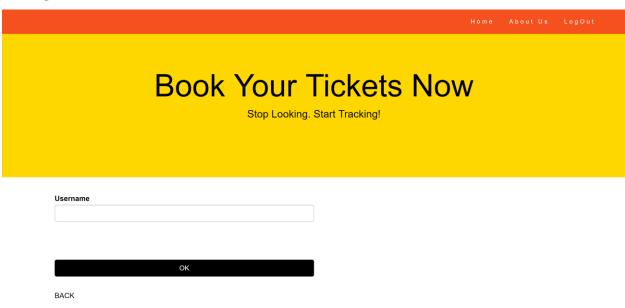
2. Login Page:



3. Signup Page:



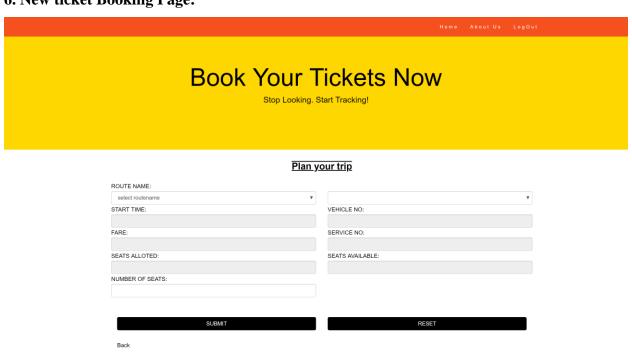
4. Forgot Password:



5. Asking admin to process the extra ticket request:



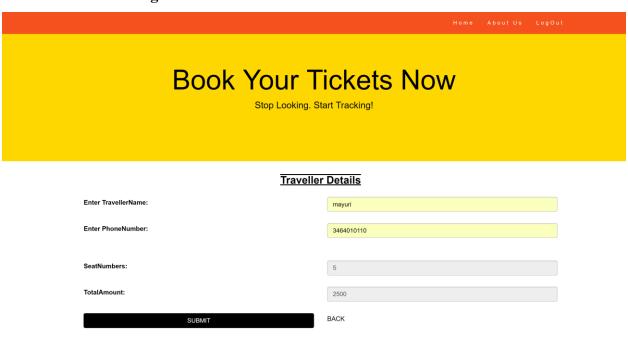
6. New ticket Booking Page:



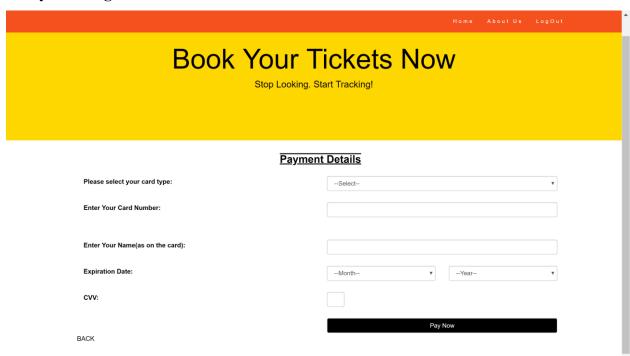
7. Request for Extra ticket:



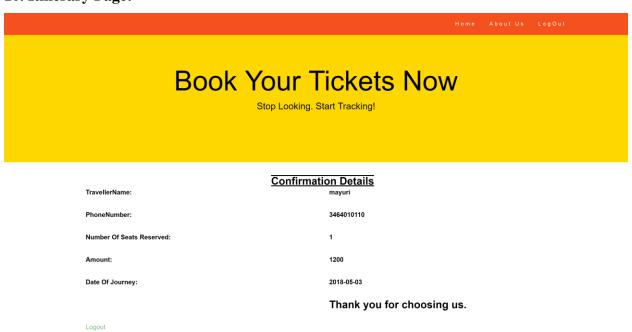
8. Traveler Details Page:



9. Payment Page:



10. Itinerary Page:



6. LESSONS LEARNT

It was challenging to learn and implement the following features during the project development phase.

- How to create user control with regular expression validator?
- How to pass information from one page to page to perform specific functions?
- How to send a recovery email using SMTP protocol in code behind file?
- How to establish and publish database connection and creation of tables in a web server DB?
- How to place and raise events for server controls like Calendar, Dropdown List, Button, etc.?
- How to track user sessions and cookies to maintain state of the application?
- How to navigate from one page to other page on hyperlink click event?
- How to embed java script code to perform client side validation and routines?
- How to link and traverse xml file to save and load the data source?
- How to use CSS property dialog to edit look and feel of the web application?

7. STEPS TO DEVELOP AND DEPLOY THE APPLICATION

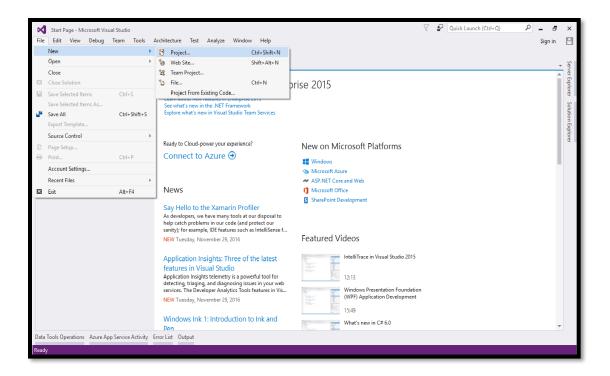
7.1 Develop application:

In order to develop a web application using ASP .NET the following should be installed in the developer's PC

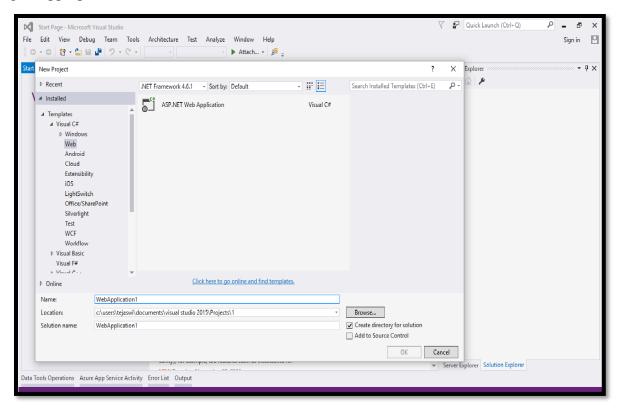
- Microsoft Visual Studio 2012 or higher
- Microsoft SQL Server Express
- IIS

Follow the below steps to create the project and individual project files

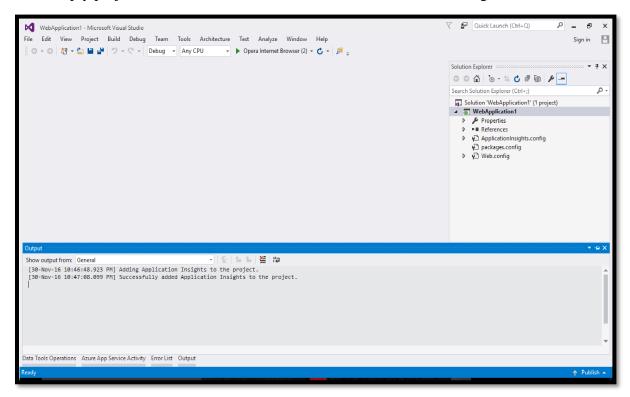
1. Open visual studio IDE, Click on File \rightarrow New \rightarrow Project.



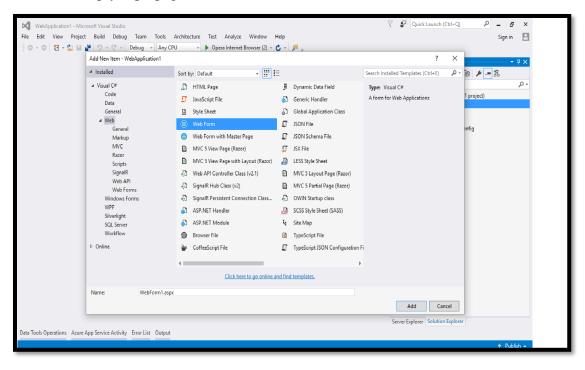
2. New project dialog will be opened. Choose Visual C# \rightarrow web \rightarrow empty web application and give appropriate name.



3. An empty project with default class files, reference files and web.config files is created.



4. To add default.aspx page, Select the project solution name and right click and select add new item → empty aspx page.



5. Design all the client/server control as per requirement and edit their properties using CSS and control properties dialog.

7.2 Deploy application:

To deploy the web application, all the configuration about the web server should be configured using the publish menu. Select the project solution name, right click and select publish menu item. The publish web dialog will then open. Configure the web server name as DCM Server and go to the connection tab to input the publish method as FTP, Server address pointing to the given web DCM server at uhcl.edu, give user login details and finally give the destination URL to open after Publishing the web application. The user can click on validate connection button to test if the connection is successful with the given configuration settings. After all the settings are given click on the publish button to publish the web application. If the hosting is successful then it opens the website URL and displays the contents designed using the ASP.NET. If there are any issues with the coding or hosting then the URL returns an error code. Most of the issues can be easily found using the error code. The developer can also verify if the hosting is successful by going to the ftp path and check manually if it contains all the necessary files under pages folder.