

Bus Reservation System

Team-2 Members

Name	Role
Ankit Ghosh	Teamlead,UI,API, DB
JSL Prathyusha	WEB API,DB,UI
Pradyumna Biswal	UI,DB
Preeti Saha	DB,DAL
Asha HB	DB,DAL
Suraksha P	DAL,DB
Akanksha Bandi	DAL

Technology Used:

- ❖ Asp.Net Core MVC
- ❖ Database- SQL
- ❖ EF Framework- Databased Approach
- ❖ Asp.Net Core Web API

Modules:

- ❖ Admin Module
- ❖ User Module

Admin Module: Features:

- ❖ Login/Logout
- ❖ Crud Operation on Bus-Add/Search/Edit/Delete
- ❖ Admin Dashboard- Bus details report, booking report, Route details, Add bus.

User Module: Features:

- ❖ Registration & Login Module
- ❖ User Dashboard-Home, Contact us, Search bus.
- ❖ Search for availability of the Bus and Select Bus.
- ❖ Book your seat and boarding point.
- ❖ Payment Module.
- ❖ Download Ticket.

Database Overview:

Registration	
RegID	
RegNo	
RegName	
RegEmailID	
RegAddress	
RegCity	
RegPhone	
RegContact	

PickUpStand	
StandID	
RouteID	
PlaceName	
PlaceTime	

CityDetails	
CityID	
CityName	

RouteDetails	
RouteID	
Origin	
Destination	
CreateDate	

PNRDetails	
PNRDetailsID	
PNRNo	
TotalAmount	
TotalTickets	

ScheduleMaster	
ScheduleID	
Build	
Date	
Fee	
EstimateTime	
ActualTime	
DepartureTime	
RouteID	

CardDetails	
CardID	
UserID	
CardType	
BankName	
CINNo	
CardNo	

BusMaster	
Build	
BusNo	
BusType	
TotalSeat	
SeatColumn	
SeatRow	
BookedSeat	

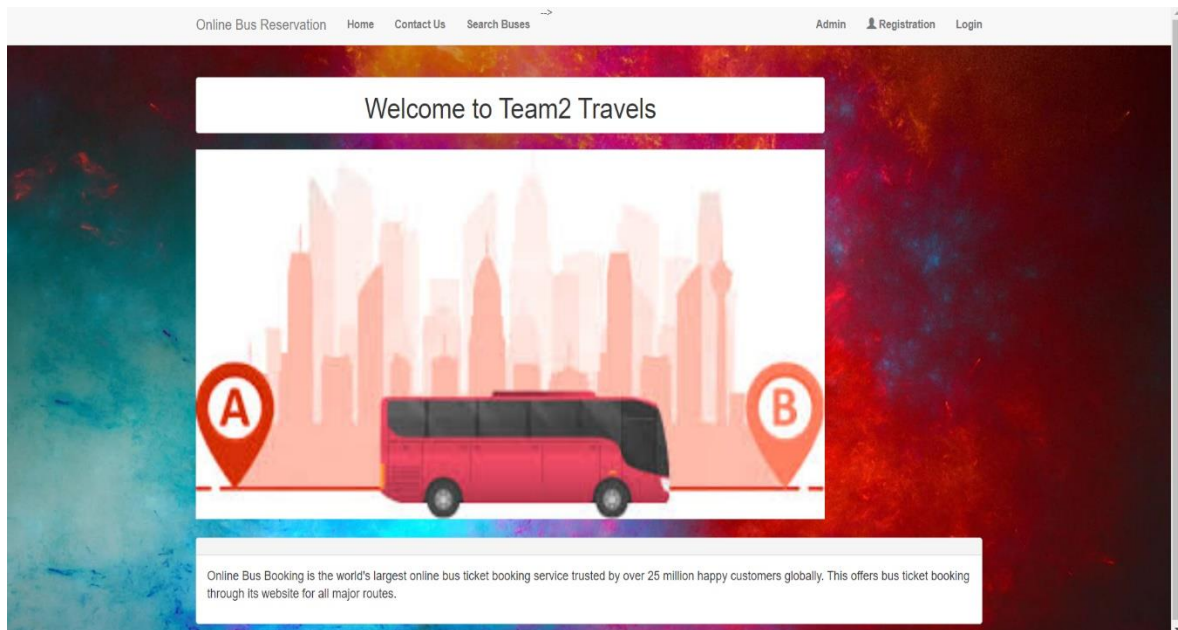
BookingMaster	
BookingID	
RegID	
Build	
RegName	
RegEmail	
Contact	
City	
SeatNo	
TravelDate	
Origin	
Destination	

Project Task Done by Teammates

Name	Task
Ankit Ghosh	<ul style="list-style-type: none"> ❖ Database design inspection ❖ UI design flow and plan ❖ UI design ❖ Web API ❖ UI design changes
J S L Prathyusha	<ul style="list-style-type: none"> ❖ ER diagram ❖ Insert values to database ❖ Working on MVC architecture ❖ Web API ❖ UI design changes
Pradyumna Biswal	<ul style="list-style-type: none"> ❖ Database design inspection ❖ UI design flow and plan ❖ UI design, work and changes
Preeti Saha	<ul style="list-style-type: none"> ❖ Building of basic structure of database. ❖ Building of database tables ❖ Final shape of database ❖ Working on MVC architecture ❖ Stored Procedure ❖ UI design changes
Asha H B	<ul style="list-style-type: none"> ❖ Building of basic structure of database. ❖ Building of database tables ❖ Final shape of database ❖ Working on MVC architecture ❖ Stored Procedure ❖ UI design changes
Suraksha P	<ul style="list-style-type: none"> ❖ ER diagram ❖ Insert values to database ❖ Working of DB first approach ❖ Working on MVC architecture ❖ UI design changes
Akanksha Bandi	<ul style="list-style-type: none"> ❖ ER diagram ❖ Insert values to database ❖ Working of DB first approach ❖ Working on MVC architecture ❖ UI design changes

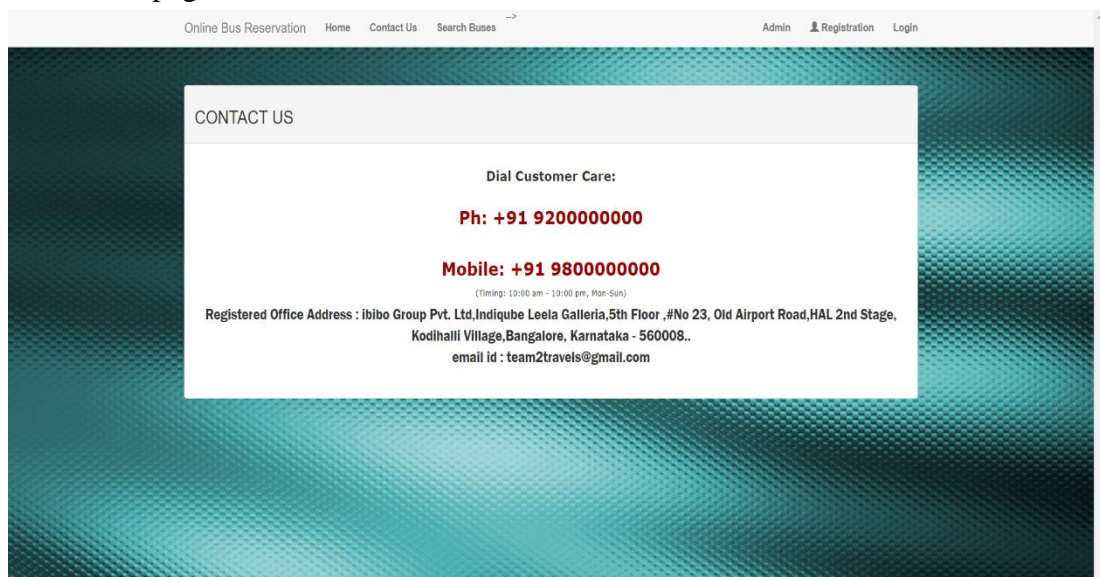
Project Highlights:

❖ Home screen Page:

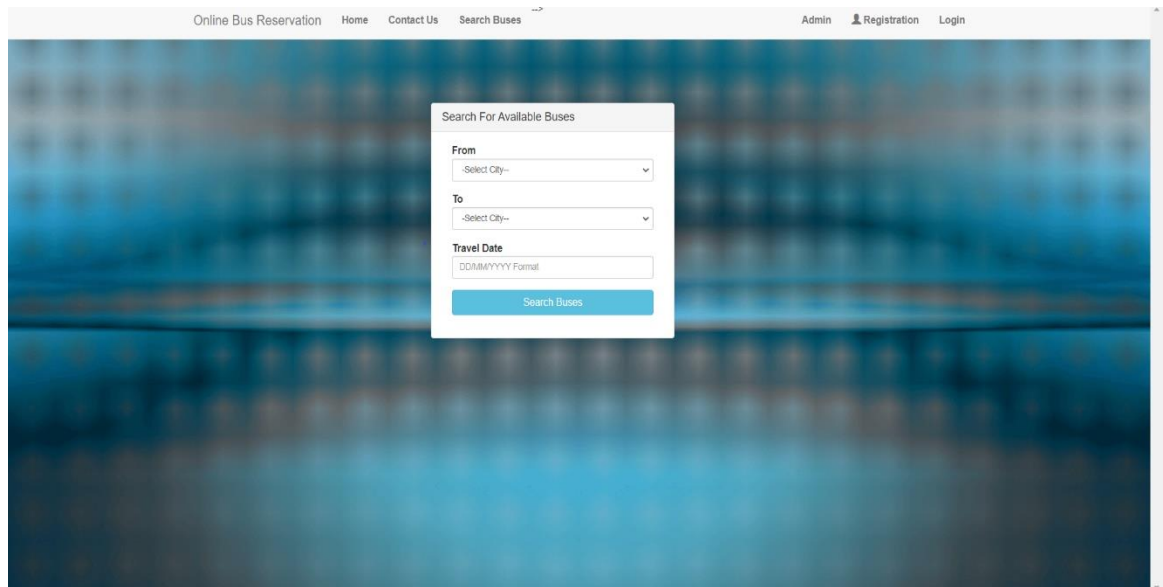


- ❖ This is the default home screen page showing the name of the travel agency and from here we can access to: -

❖ Contact us page:



❖ Search bus:



Online Bus Reservation Home Contact Us Search Buses Admin Registration Login

Search For Available Buses

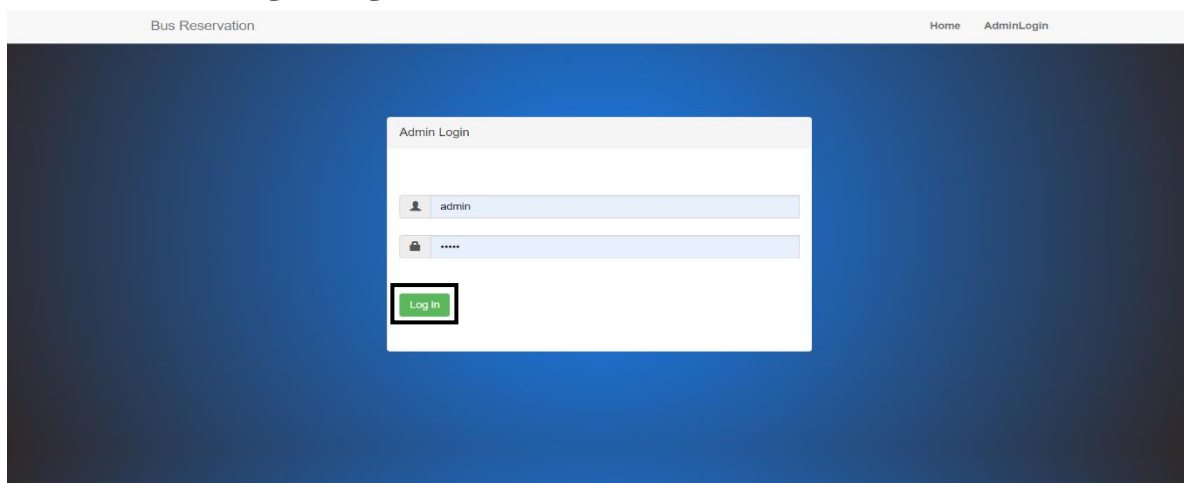
From
-Select City--

To
-Select City--

Travel Date
DD/MM/YYYY Format

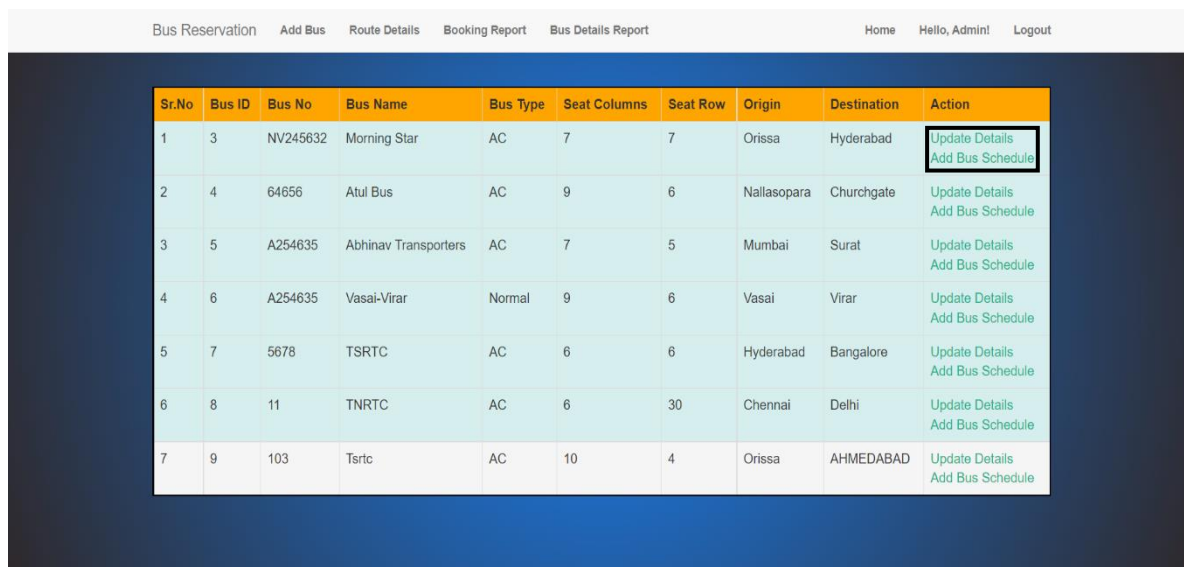
Search Buses

❖ Admin Login Page:



The screenshot shows the Admin Login page of a Bus Reservation system. The page has a dark blue background. At the top, there is a navigation bar with 'Bus Reservation' on the left and 'Home' and 'AdminLogin' on the right. In the center, there is a white box titled 'Admin Login'. Inside this box, there are two input fields: one for the username 'admin' and one for the password '*****'. Below these fields is a green 'Log In' button.

- ❖ After the Admin credentials are authorized, the Admin is redirected to the Admin homepage and from the Action field he can Update Details of Bus and Add Bus Schedule, as shown below.

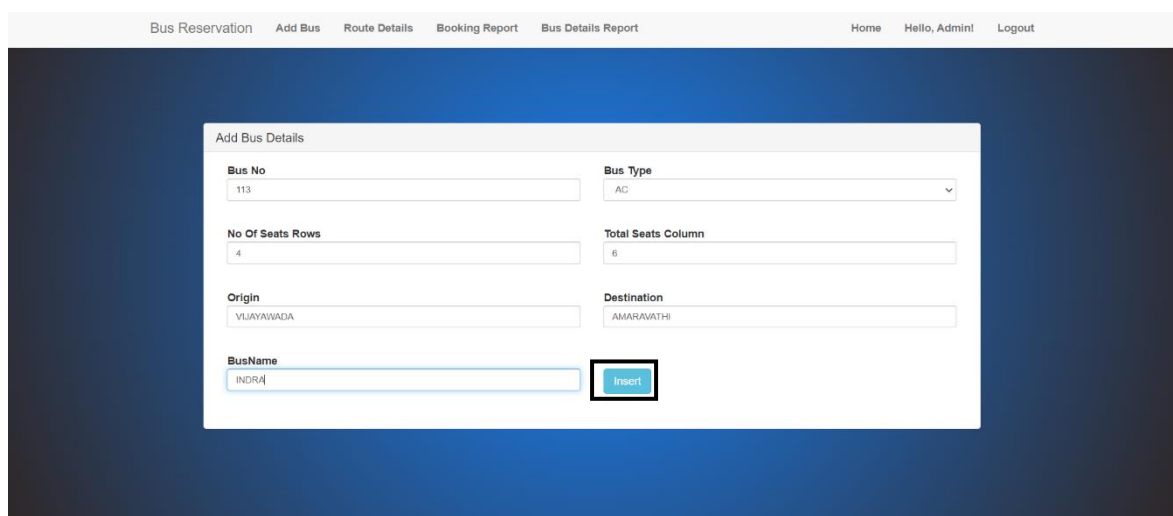


The screenshot shows the Admin homepage of the Bus Reservation system. The page has a dark blue background. At the top, there is a navigation bar with 'Bus Reservation' on the left and 'Add Bus', 'Route Details', 'Booking Report', and 'Bus Details Report' in the center. On the right, there are links for 'Home', 'Hello, Admin!', and 'Logout'. Below the navigation bar, there is a table with 10 columns: 'Sr.No', 'Bus ID', 'Bus No', 'Bus Name', 'Bus Type', 'Seat Columns', 'Seat Row', 'Origin', 'Destination', and 'Action'. The table contains 7 rows of bus data. In the 'Action' column of the first row, the 'Update Details' and 'Add Bus Schedule' links are highlighted with a red box.

Sr.No	Bus ID	Bus No	Bus Name	Bus Type	Seat Columns	Seat Row	Origin	Destination	Action
1	3	NV245632	Morning Star	AC	7	7	Orissa	Hyderabad	Update Details Add Bus Schedule
2	4	64656	Atul Bus	AC	9	6	Nallasopara	Churchgate	Update Details Add Bus Schedule
3	5	A254635	Abhinav Transporters	AC	7	5	Mumbai	Surat	Update Details Add Bus Schedule
4	6	A254635	Vasai-Virar	Normal	9	6	Vasai	Virar	Update Details Add Bus Schedule
5	7	5678	TSRTC	AC	6	6	Hyderabad	Bangalore	Update Details Add Bus Schedule
6	8	11	TNRTC	AC	6	30	Chennai	Delhi	Update Details Add Bus Schedule
7	9	103	Tsrtc	AC	10	4	Orissa	AHMEDABAD	Update Details Add Bus Schedule

- ❖ Admin can do several things like:-

- ❖ Add Bus



The screenshot shows the 'Add Bus Details' form of the Bus Reservation system. The page has a dark blue background. At the top, there is a navigation bar with 'Bus Reservation' on the left and 'Add Bus', 'Route Details', 'Booking Report', and 'Bus Details Report' in the center. On the right, there are links for 'Home', 'Hello, Admin!', and 'Logout'. Below the navigation bar, there is a white box titled 'Add Bus Details'. Inside this box, there are several input fields: 'Bus No' (113), 'Bus Type' (AC), 'No Of Seats Rows' (4), 'Total Seats Column' (6), 'Origin' (VLAYAWADA), 'Destination' (AMARAVATHI), and 'BusName' (INDRA). There is a blue 'Insert' button at the bottom right of the form.

◆ Booking Report

Bus Reservation

Add Bus

Route Details

Booking Report

Bus Details Report

Home

Hello, Admin!

Logout

Sr.No	Bus Name	Passenger Name	Email ID	Contact No	Origin	Destination	Travel Date	Seat No	Fare	Booked By
1	Morning Star	AnandSingh	abc@gmail.com	8291951419	Mumbai	Pune	25 Mar 2017	34	800.00	AnandSingh
2	Morning Star	AnmoSharma	abc@gmail.com	9029451159	Mumbai	Pune	25 Mar 2017	35	800.00	AnandSingh
3	Morning Star	AtulDubey	atul@gmail.com	98989898	Mumbai	Pune	25 Mar 2017	32	800.00	AtulDubey
4	Abhinav Transporters	AtulDubey	atul@gmail.com	9561454638	Mumbai	Surat	30 Mar 2017	31	800.00	AnandSingh
5	Abhinav Transporters	AmitDubey	a@gmail.com	8886245689	Mumbai	Surat	30 Mar 2017	32	800.00	AnandSingh
6	Abhinav Transporters	SurajDubey	a@gmail.com	8945621547	Mumbai	Surat	30 Mar 2017	33	800.00	AnandSingh
7	Abhinav Transporters	NehaDubey	neha@gmail.com	9029451159	Mumbai	Surat	28 Mar 2017	26	500.00	JitendraDubey
8	Morning Star	AtulDubey	atul@gmail.com	9029451159	Mumbai	Pune	30 Mar 2017	11	250.00	JitendraDubey
9	Morning Star	KiranDubey	kiran@tiwari.com	8886245689	Mumbai	Pune	30 Mar 2017	12	250.00	JitendraDubey
10	TSRTC	prathyushajsl	abc@gmail.com	1234567890	Hyderabad	Bangalore	14 Feb 2022	17	800.00	Prathyusha.JSL

◆ Bus Details Report

- Update Details
- Add Bus schedule

Bus Reservation

Add Bus

Route Details

Booking Report

Bus Details Report

Home

Hello, Admin!

Logout

Add Bus Details

Bus No

113

Bus Type

AC

No Of Seats Rows

4

Total Seats Column

6

Origin

VIJAYAWADA

Destination

VIZAG

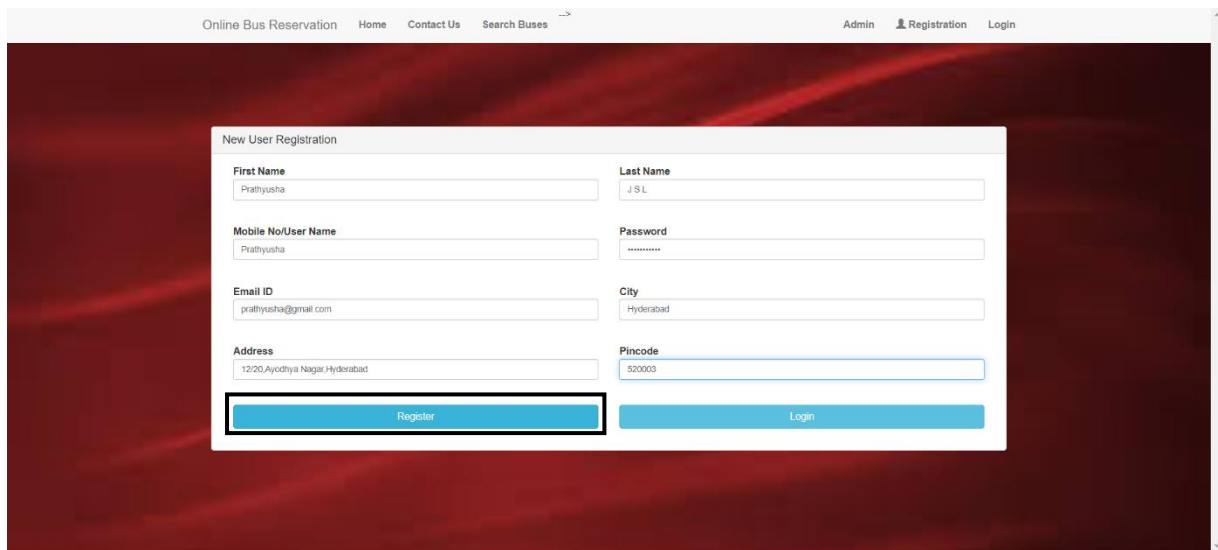
BusName

INDRA

Update

[Bus Reservation](#)
[Add Bus](#)
[Route Details](#)
[Booking Report](#)
[Bus Details Report](#)
[Home](#)
[Hello, Admin!](#)
[Logout](#)

User Registration Page:



The screenshot shows the 'New User Registration' form on a website. The form is centered on a dark red background. It contains several input fields for user details: First Name (Prathyusha), Last Name (J S L), Mobile No/User Name (Prathyusha), Password (masked with dots), Email ID (prathyusha@gmail.com), City (Hyderabad), Address (12/20, Ajodhya Nagar Hyderabad), and Pincode (520003). At the bottom of the form, there are two buttons: 'Register' and 'Login'. The 'Register' button is highlighted with a black border.

Online Bus Reservation Home Contact Us Search Buses → Admin Registration Login

New User Registration

First Name: Prathyusha Last Name: J S L

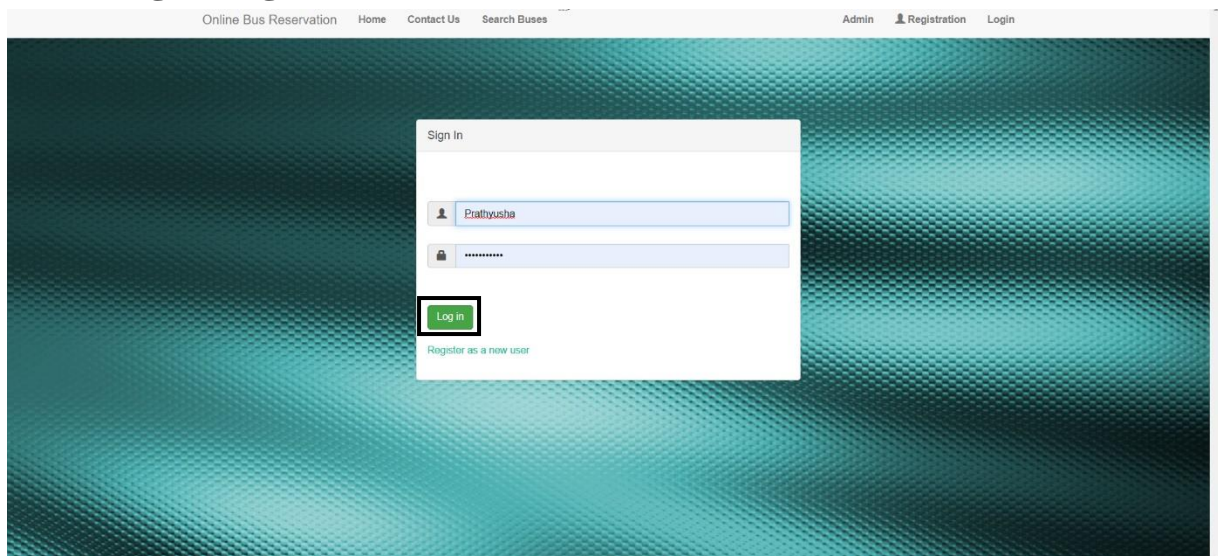
Mobile No/User Name: Prathyusha Password:

Email ID: prathyusha@gmail.com City: Hyderabad

Address: 12/20, Ajodhya Nagar Hyderabad Pincode: 520003

Register Login

User Login Page:



The screenshot shows the 'Sign In' form on a website. The form is centered on a teal background with a subtle pattern. It contains two input fields: Username (Prathyusha) and Password (masked with dots). Below the password field is a 'Log in' button, which is highlighted with a black border. At the bottom of the form, there is a link that says 'Register as a new user'.

Online Bus Reservation Home Contact Us Search Buses → Admin Registration Login

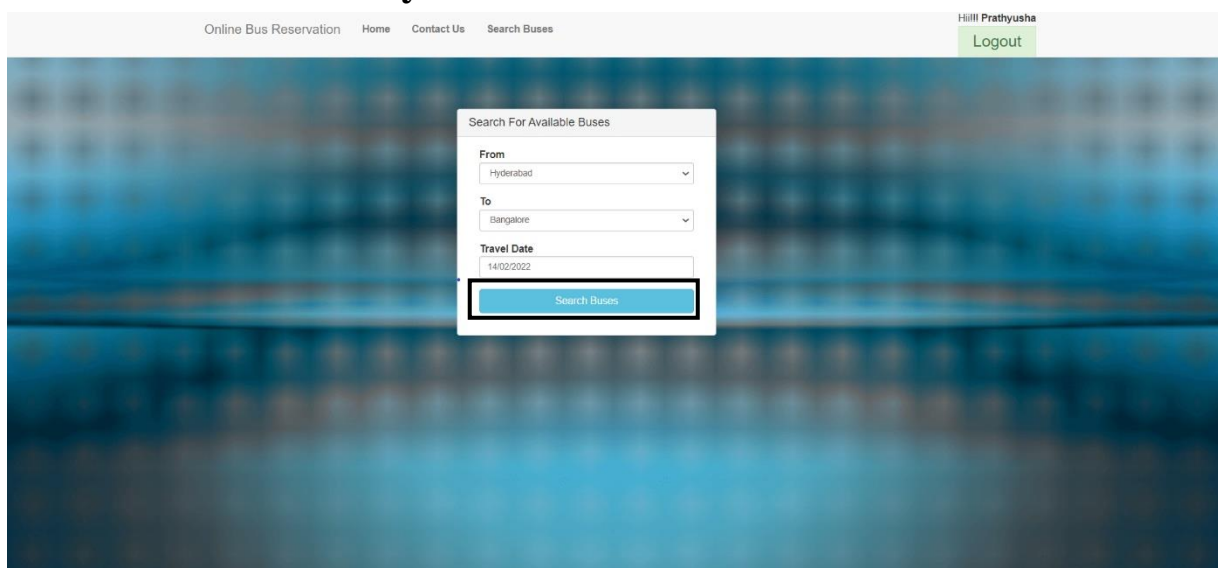
Sign In

Username: Prathyusha Password:

Log in

[Register as a new user](#)

Search Bus Availability:



The screenshot shows the 'Search For Available Buses' form on a website. The form is centered on a blue background with a subtle pattern. It contains three input fields: From (Hyderabad), To (Bangalore), and Travel Date (14/02/2022). Below the date field is a 'Search Buses' button, which is highlighted with a black border. In the top right corner, there is a user profile section showing 'Hi!!! Prathyusha' and a 'Logout' button.

Online Bus Reservation Home Contact Us Search Buses → Hi!!! Prathyusha Logout

Search For Available Buses

From: Hyderabad To: Bangalore Travel Date: 14/02/2022

Search Buses

Online Bus Reservation Home Contact Us Search Buses					Hi!!! Prathyusha Logout
Bus Name	Departure Time	Arrival Time	Available Seats	Fare	Action
TSRTC	01:00 AM	12:00 PM	21	800.00	Select Bus

Selection of Seat and selection of Boarding point:

Online Bus Reservation Home Contact Us Search Buses					Hi!!! Prathyusha Logout
Choose seats by clicking the corresponding seat in the layout below:					Back To Search List
<div> <div>Front</div> <div>Rear</div> </div>			<div>Journey Details</div> <div>Onward Journey From Hyderabad To Bangalore on Mon,14 Feb,2022</div> <div> <div>Selected Seat No</div> <div>Per Seat Fare 0.00</div> <div>Amount 0.00</div> </div> <div> <div>Boarding Points</div> <div>City Central - 01:00 AM</div> </div> <div>Make Payment</div>		
<div> <div>Available Seat</div> <div>Booked Seat</div> <div>Selected Seat</div> </div>			Show Selected Seats		

Confirming the passenger's details and making payment:

Online Bus Reservation Home Contact Us Search Buses Hi!!! Prathyusha Logout

Row Number	First Name	Last Name	Email	Contact	City	
1	Pradyumna	Biswal	biswal@gmail.com	9871234560	Hyderabad	
						Add New Passanger Details

Confirm Booking

Card Details For Payment

Select Your Card
Debit Card

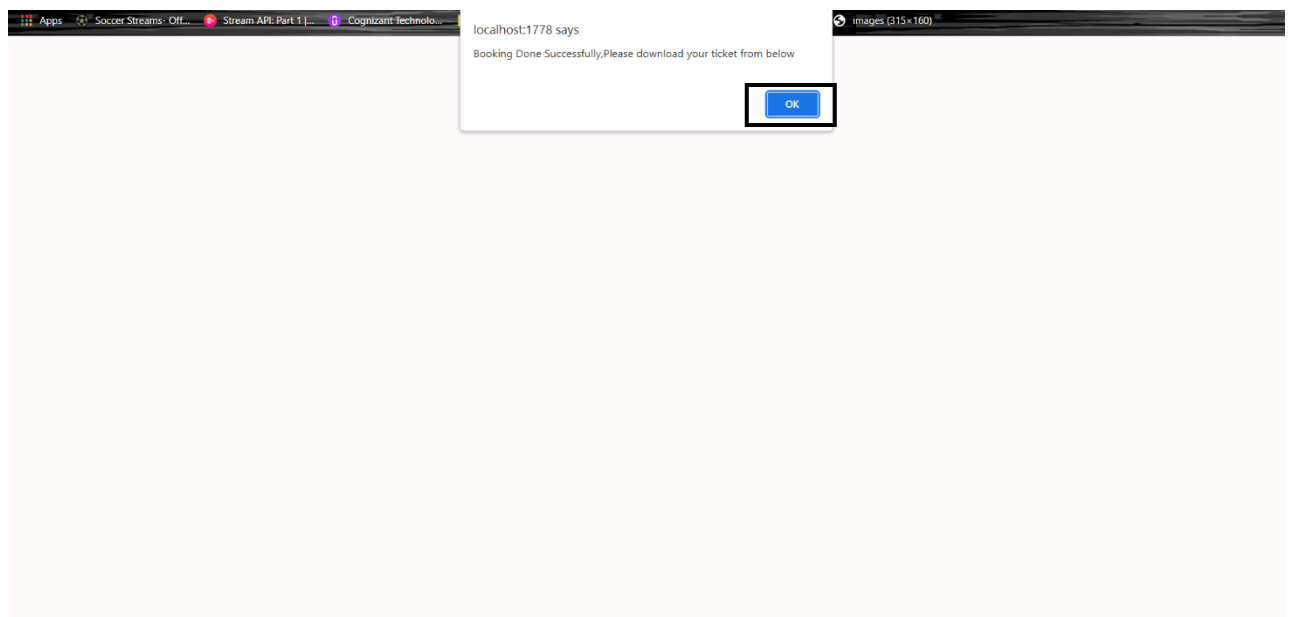
3 Digit CVV Code
369

Select Bank
HDFC Bank

Card No
36960214703214

Make Payment

Confirmation message for booked ticket:



Final booking report:

Online Bus Reservation Home Contact Us Search Buses

Logout

Sr.No	PNR No	Total Booked Tickets	Booking Amount	Action
1	F48K2A	1	800.00	Download Ticket
2	6MPWIU	1	800.00	Download Ticket
3	VS9PQR	2	1600.00	Download Ticket
4	RV31WC	1	800.00	Download Ticket

Happy & Safe Journey

Downloaded ticket:

Online Bus Booking

PNR Details

PNR No	RV31WC
Total Tickets	1
Total Amount	800.00
Bus Name	TSRTC

Passenger's Details

Sr.No	First Name	Last Name	Contact	SeatNo	Travel Date	From	To	Boarding Place
1	Pradyumna	Biswal	9871234560	7	14/02/2022	Hyderabad	Bangalore	City Central

Thank you for booking Ticket with us,have a pleasant journey!!!!

❖ Admin Login Code:

```
namespace BusBookingProject.Admin
{
    public partial class AdminLogin :
    System.Web.UI.Page
    {
        protected void Page_Load(object sender,
        EventArgs e)
        {

        }

        protected void btnLogin_Click(object
        sender, EventArgs e)
        {
            if(txtUserId.Text=="admin" &&
            txtPassword.Text=="admin")
            {
                Session["UserName"] = "Admin";

                Response.Redirect("BusDetailsReport.aspx");
            }
            else
            {

                ScriptManager.RegisterClientScriptBlock(this,
                this.GetType(), "alertMessage",
                "alert('Username and password is incorrect
                please enter valid credentials')", true);
            }
        }
    }
}
```

❖ User Login Code:

```
public partial class Login : System.Web.UI.Page
{
    #region Global Variable
        SqlConnection connString = new
        SqlConnection(ConfigurationManager.ConnectionStrings["OnlineBusBookingCon
        nexionString"].ToString());
    #endregion
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    private DataSet getUserData()
    {
        DataSet dsGetData = new DataSet();
        SqlCommand sqlCmd = new SqlCommand();
        if(connString.State==ConnectionState.Closed)
        {
            connString.Open();
        }
        sqlCmd.CommandType = CommandType.StoredProcedure;
        sqlCmd.Parameters.AddWithValue("@MobileNo",
        Convert.ToString(txtUserId.Text));

        sqlCmd.Parameters.AddWithValue("@Password",Convert.ToString(txtPassword.T
        ext));

        sqlCmd.CommandText = "ispUserLogin";
        sqlCmd.Connection = connString;
        SqlDataAdapter sda = new SqlDataAdapter(sqlCmd);
        sda.Fill(dsGetData);
        return dsGetData;
    }
}
```

❖ User Registration Code:

```
private int Registration()
{
    try
    {
        int ResultCout = 0;
        SqlCommand sqlCmd = new SqlCommand();
        if (connString.State == ConnectionState.Closed)
        {
            connString.Open();
        }
        sqlCmd.CommandType = CommandType.StoredProcedure;
        sqlCmd.Parameters.AddWithValue("@FName", Convert.ToString(txtFirstName.Text));
        sqlCmd.Parameters.AddWithValue("@LName", Convert.ToString(txtLastName.Text));
        sqlCmd.Parameters.AddWithValue("@EmailId", Convert.ToString(txtEmailID.Text));
        sqlCmd.Parameters.AddWithValue("@Address", Convert.ToString(txtAddress.Text));
        sqlCmd.Parameters.AddWithValue("@City", Convert.ToString(txtCity.Text));
        sqlCmd.Parameters.AddWithValue("@PinCode", Convert.ToString(txtPincode.Text));
        sqlCmd.Parameters.AddWithValue("@ContactNo",
        Convert.ToString(txtMobileNo.Text));
        sqlCmd.Parameters.AddWithValue("@Password", Convert.ToString(txtPassword.Text));
        sqlCmd.Parameters.AddWithValue("@Ret_Val", SqlDbType.BigInt);
        sqlCmd.Parameters["@Ret_Val"].Direction = ParameterDirection.Output;
        sqlCmd.CommandText = "ispUserRegistration";
        sqlCmd.Connection = connString;
        sqlCmd.ExecuteNonQuery();
        ResultCout = Convert.ToInt32(sqlCmd.Parameters["@Ret_Val"].Value);
        return ResultCout;
    }
    catch (Exception ex)
    {
        throw;
    }
}
```

❖ Adding Bus Code:

```
private int AddBusDetails()
{
    int ResultCout = 0;

    SqlCommand sqlCmd = new SqlCommand();

    if (connString.State == ConnectionState.Closed)
    {
        connString.Open();
    }

    sqlCmd.CommandType = CommandType.StoredProcedure;

    sqlCmd.Parameters.AddWithValue("@BusNo", Convert.ToString(txtBusNo.Text));

    sqlCmd.Parameters.AddWithValue("@BusName", Convert.ToString(txtBusName.Text));

    sqlCmd.Parameters.AddWithValue("@BustType",
    Convert.ToString(ddlBusType.SelectedItem.Text));

    sqlCmd.Parameters.AddWithValue("@SeatColumn",
    Convert.ToInt32(txtSeatColumn.Text));

    sqlCmd.Parameters.AddWithValue("@SeatRow", Convert.ToInt32(txtSeatRows.Text));

    sqlCmd.Parameters.AddWithValue("@Origin", Convert.ToString(txtOrigin.Text));

    sqlCmd.Parameters.AddWithValue("@Destination",
    Convert.ToString(txtDetination.Text));

    sqlCmd.CommandText = "ispAddBusDetails";

    sqlCmd.Connection = connString;

    ResultCout = sqlCmd.ExecuteNonQuery(); ;

    return ResultCout;
}
```


❖ Updating Bus Code:

```
private int UpdateData()
{
    int ResultCout = 0;

    SqlCommand sqlCmd = new SqlCommand();

    if (connString.State == ConnectionState.Closed)
    {
        connString.Open();
    }

    sqlCmd.CommandType = CommandType.StoredProcedure;

    sqlCmd.Parameters.AddWithValue("@BusID",
    Convert.ToInt32(Request.QueryString["BusID"]));

    sqlCmd.Parameters.AddWithValue("@BusNo", Convert.ToString(txtBusNo.Text));

    sqlCmd.Parameters.AddWithValue("@BusName",
    Convert.ToString(txtBusName.Text));

    sqlCmd.Parameters.AddWithValue("@BusType",
    Convert.ToString(ddlBusType.SelectedItem.Text));

    sqlCmd.Parameters.AddWithValue("@seatColumn",
    Convert.ToInt32(txtSeatColumn.Text));

    sqlCmd.Parameters.AddWithValue("@SeatRow",
    Convert.ToInt32(txtSeatRows.Text));

    sqlCmd.Parameters.AddWithValue("@Origin", Convert.ToString(txtOrigin.Text));

    sqlCmd.Parameters.AddWithValue("@Destination",
    Convert.ToString(txtDetination.Text));

    sqlCmd.CommandText = "ispUpdateBusData";

    sqlCmd.Connection = connString;

    ResultCout = sqlCmd.ExecuteNonQuery(); ;

    return ResultCout;
}
```

❖ Search Bus Code:

```
private void bindSearchDetails()
{
    DataSet dsGetData = new DataSet();

    SqlCommand sqlCmd = new SqlCommand();

    if (connString.State == ConnectionState.Closed)
    {
        connString.Open();
    }

    sqlCmd.CommandType = CommandType.StoredProcedure;

    sqlCmd.Parameters.AddWithValue("@Origin", Convert.ToString(Request.QueryString["Origin"]));

    sqlCmd.Parameters.AddWithValue("@Destination",
    Convert.ToString(Request.QueryString["Destination"]));

    sqlCmd.Parameters.AddWithValue("@TravelDate", Convert.ToString(Request.QueryString["TravelDate"]));

    sqlCmd.CommandText = "ispGetAvailableBusDetails";

    sqlCmd.Connection = connString;

    SqlDataAdapter sda = new SqlDataAdapter(sqlCmd);

    sda.Fill(dsGetData);

    if(dsGetData.Tables[0].Rows.Count>0)
    {
        hlinkSearch.Visible = false;

        gvBusDetails.DataSource = dsGetData.Tables[0];

        gvBusDetails.DataBind();
    }
    else
    {
        ScriptManager.RegisterClientScriptBlock(this, this.GetType(), "alertMessage",
        "alert('Trip not available,Please search again with different date')", true);

        hlinkSearch.Visible = true;
    }
}
```

❖ **Booked seat Code:**

```
private DataTable getBookedSeat()
{
    DataTable dt = new DataTable();
    SqlCommand sqlCmd = new SqlCommand();
    if (connString.State == ConnectionState.Closed)
    {
        connString.Open();
    }
    sqlCmd.CommandType = CommandType.StoredProcedure;
    sqlCmd.Parameters.AddWithValue("@BusID",
    Convert.ToInt32(Request.QueryString["BusID"]));
    sqlCmd.Parameters.AddWithValue("@TravelDate",
    Convert.ToString(Request.QueryString["TravelDate"]));
    sqlCmd.CommandText = "ispGetBookedSeatNo";
    sqlCmd.Connection = connString;
    SqlDataAdapter sda = new SqlDataAdapter(sqlCmd);
    sda.Fill(dt);
    return dt;
}
```

❖ **Making payment:**

```
private void addCardDetails()
{
    string newFare = Convert.ToString(Request.QueryString["Fare"]);
    string[] fareArray = newFare.Split(',').Select(str => str.Trim()).ToArray();
    decimal amount=0;
    for(int i=0;i<fareArray.Length;i++)
    {
        amount+=Convert.ToDecimal(fareArray[i]);
    }
    SqlCommand sqlCmd = new SqlCommand();
    if (connString.State == ConnectionState.Closed)
    {
        connString.Open();
    }
    sqlCmd.CommandType = CommandType.StoredProcedure;
    sqlCmd.Parameters.AddWithValue("@UserID",Convert.ToInt32(Session["UserID"]));
    sqlCmd.Parameters.AddWithValue("@CardType",
    Convert.ToString(ddlCardType.SelectedItem.Text));
    sqlCmd.Parameters.AddWithValue("@BankName",
    Convert.ToString(ddlBank.SelectedItem.Text));
    sqlCmd.Parameters.AddWithValue("@CVVNo", Convert.ToString(txtCode.Text));
    sqlCmd.Parameters.AddWithValue("@CardNo", Convert.ToString(txtCardNo.Text));
    sqlCmd.Parameters.AddWithValue("@TotalAmount", Convert.ToDecimal(amount));

    sqlCmd.CommandText = "ispAddCardDetails";
    sqlCmd.Connection = connString;
    sqlCmd.ExecuteNonQuery();
}
```