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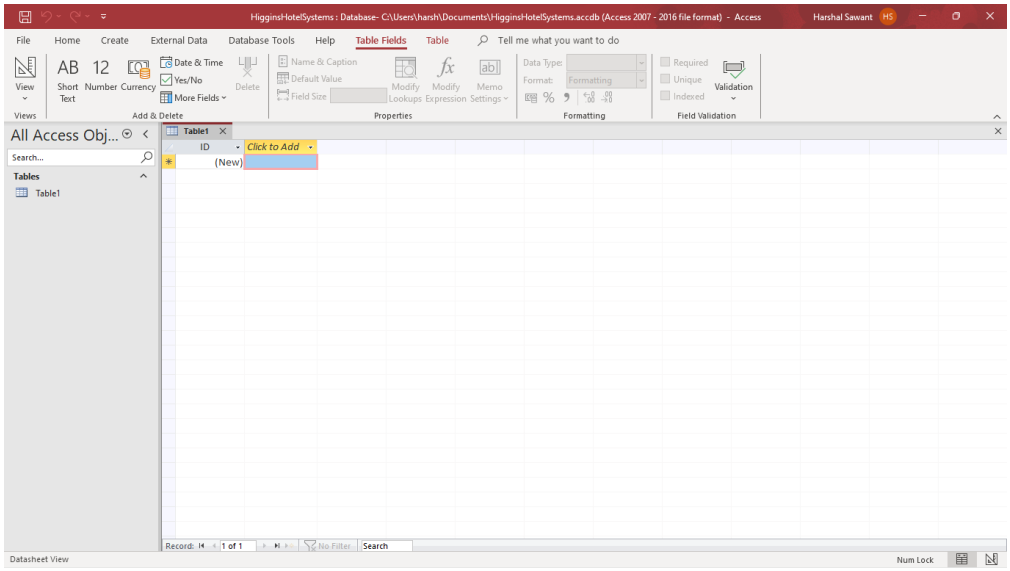
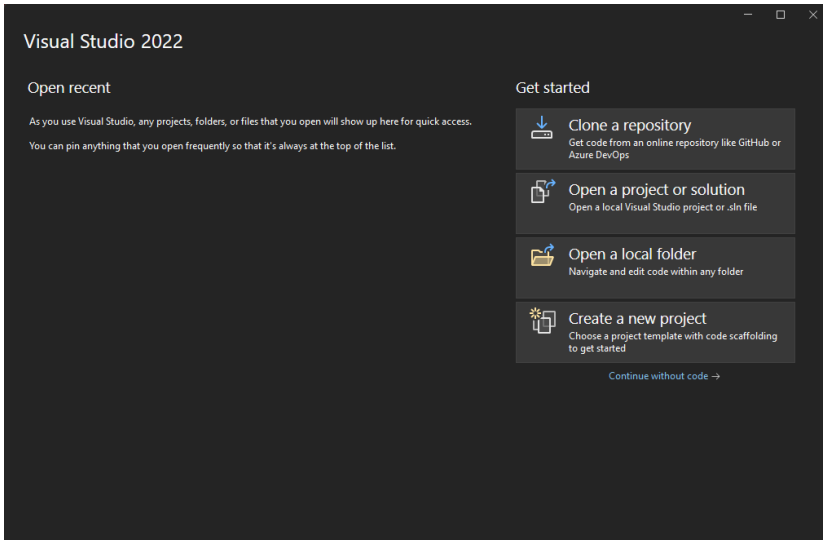
Lab 6 Submittal

Step 1: Create a Database File



Step 2: Open a new MS Visual Studio Empty Web Project



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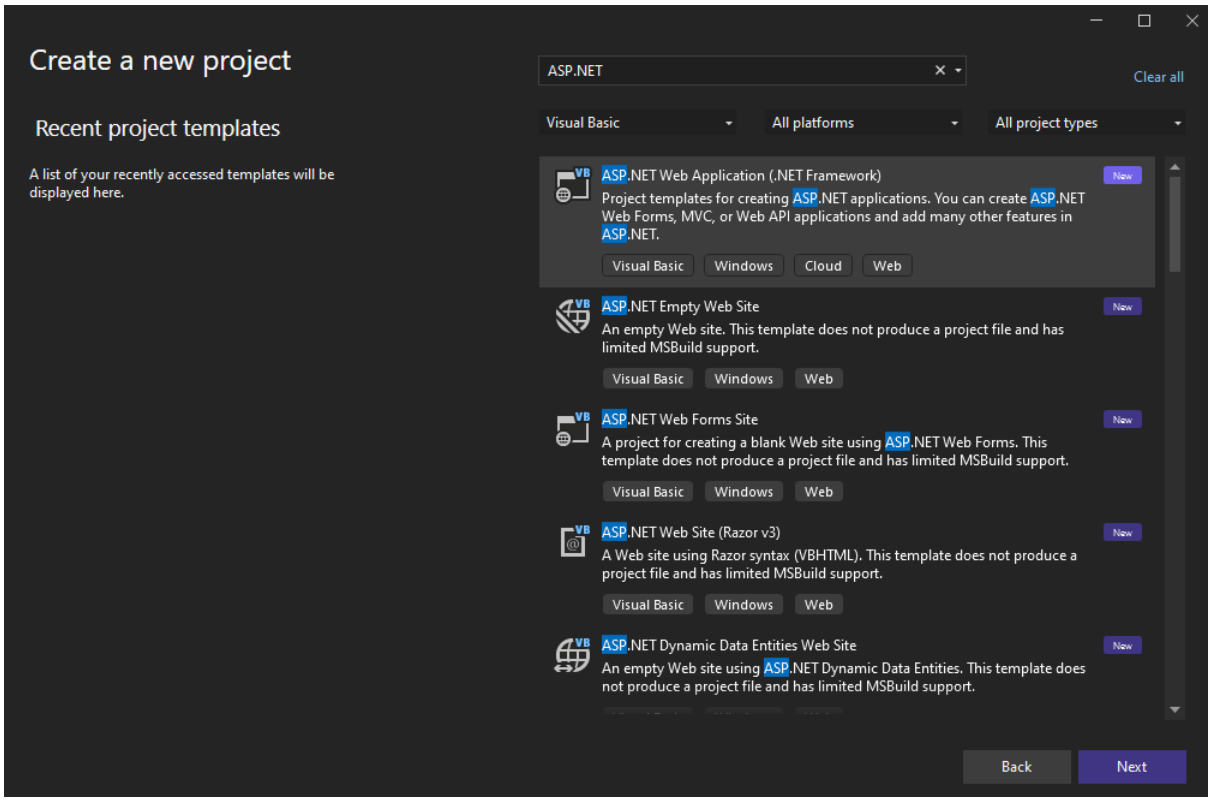
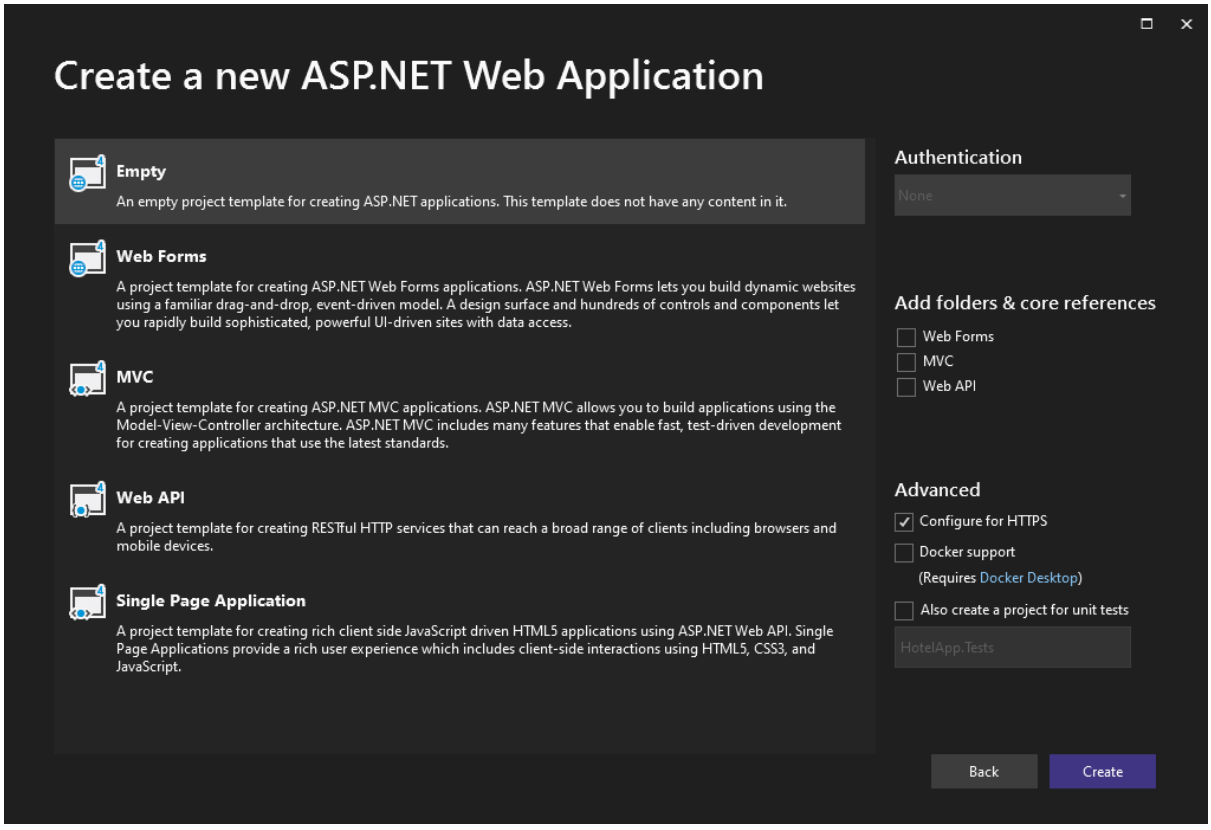


Selecting ASP.NET WEB Application



Selecting an empty project

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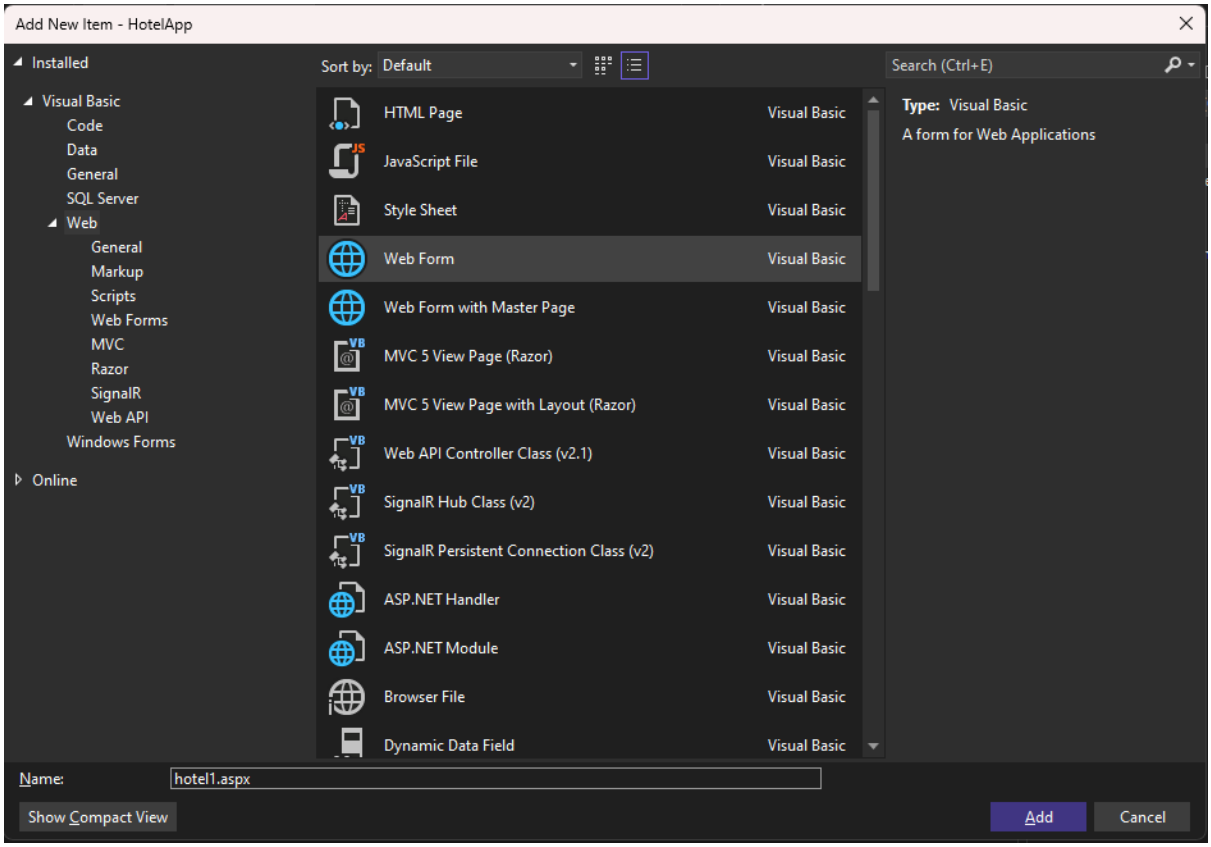
Step 3: Add a New Web Form



Step 4: Add Code to the Web Form File

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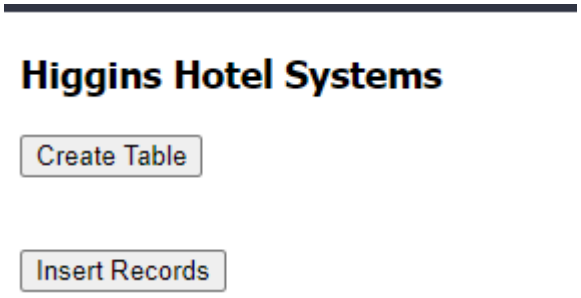
hotel1.aspx* HotelApp: Overview

```
<%@ Page Language = "VB" %>
<%@ Import Namespace = "System.Data.OleDb" %>
<!DOCTYPE html>
<html xmlns = "http://www.w3.org/1999/xhtml">
<head id = "Head1" runat = "server">
<title>Connection</title>
<script runat = "server">
    Sub Create_Click(Src As Object, E As EventArgs)
        Try
            'Connect to the Database
            Dim cnAccess As New OleDbConnection(
            "Provider = Microsoft.ACE.OLEDB.12.0;" &
            "Data Source = C:\Users\harsh\Documents\HigginsHotelSystems.accdb")
            Dim sSelectSQL As String = "CREATE TABLE Guests"
            sSelectSQL &= "([GuestID] Number, [LName] TEXT(20),"
            sSelectSQL &= "[FName] TEXT(20), [ZipCode] Number,"
            sSelectSQL &= "[StateID] TEXT(20))"

            Dim cmdSelect As New OleDbCommand(sSelectSQL, cnAccess)
            cnAccess.Open()
            cmdSelect.ExecuteNonQuery()
            cnAccess.Close()
            msg.Text = "Table Created!"

        Catch ex As Exception
            msg.Text = ex.Message
            ' Response.Write("Table Exists or Connection Failed")
        End Try
    End Sub

    Sub GoTo_Click(Src As Object, E As EventArgs)
        Response.Redirect("hotel2.aspx")
    End Sub
</script>
</head>
<body style = "font-family:Tahoma;">
```

100 % No issues found

Step 5: Test the Server – Side Application



After running the application

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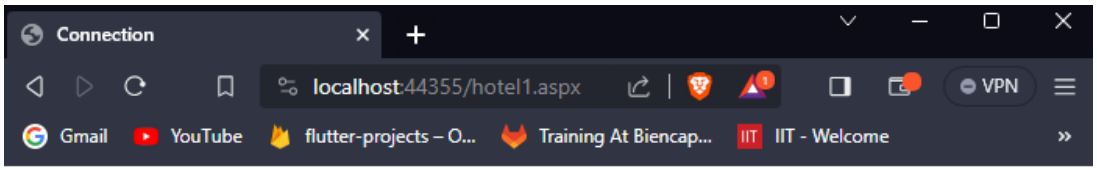

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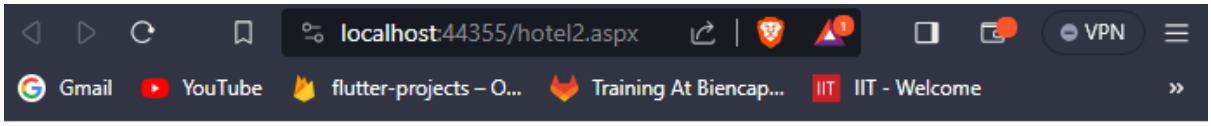
Create Table

Table 'Guests' already exists.

Insert Records

After creating a table named Guests

Step 6: Create a New Web Form



Enter Guest Details

ID
Last Name:
First Name:
ZipCode:
StateID:

Insert

Retrieve Records

After running the given code block

Step 7: Populate the Guests Table

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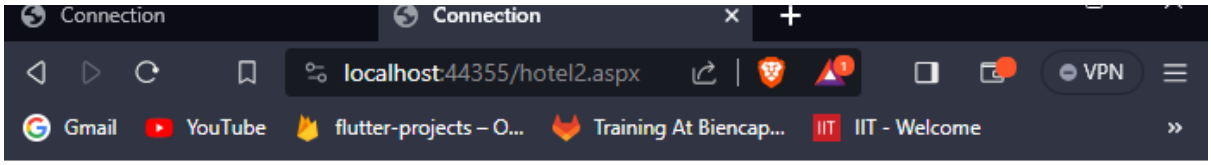


Data Recorded!

Enter Guest Details

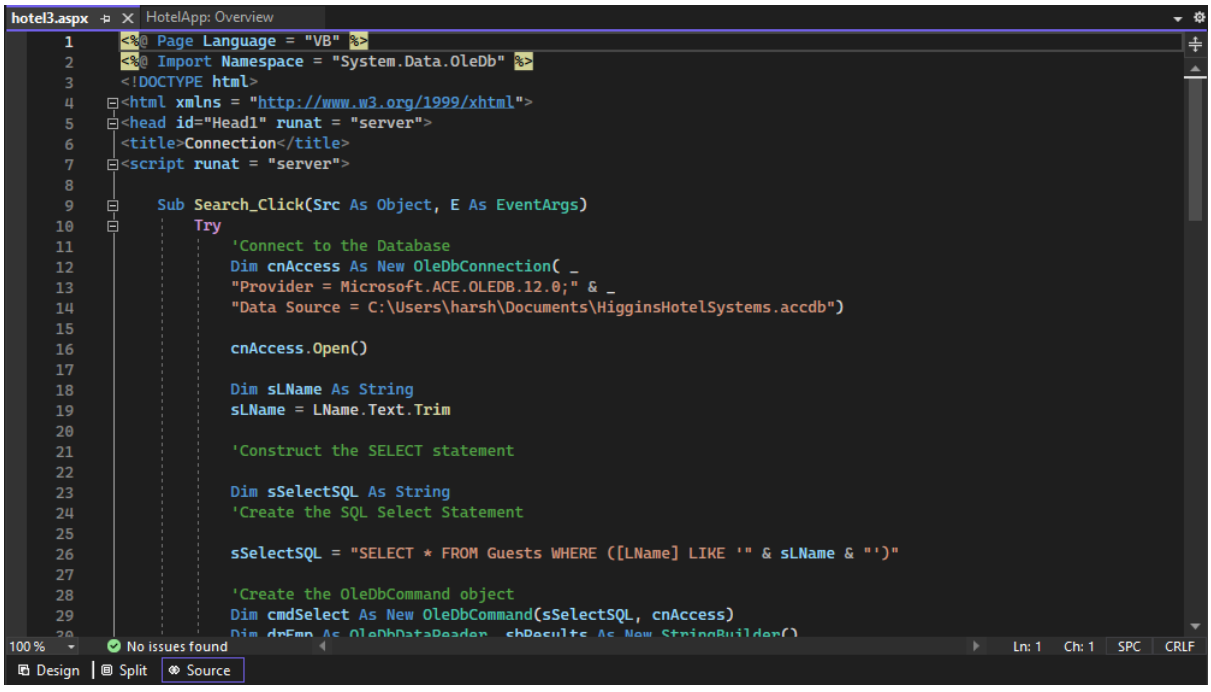
ID	19
Last Name:	Jadhav
First Name:	Avadhoot
ZipCode:	60616
StateID:	4586

Insert

Retrieve Records

As we can see the above dialog which says “Data Recorded” after clicking on Insert indicates that the data has been stored.
Similarly, I inserted 5 records.

Step 8: Create a New Web Form



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Enter Guest Name

Last Name:

Search

Step 9: Test the Search Web Form

Data Found!

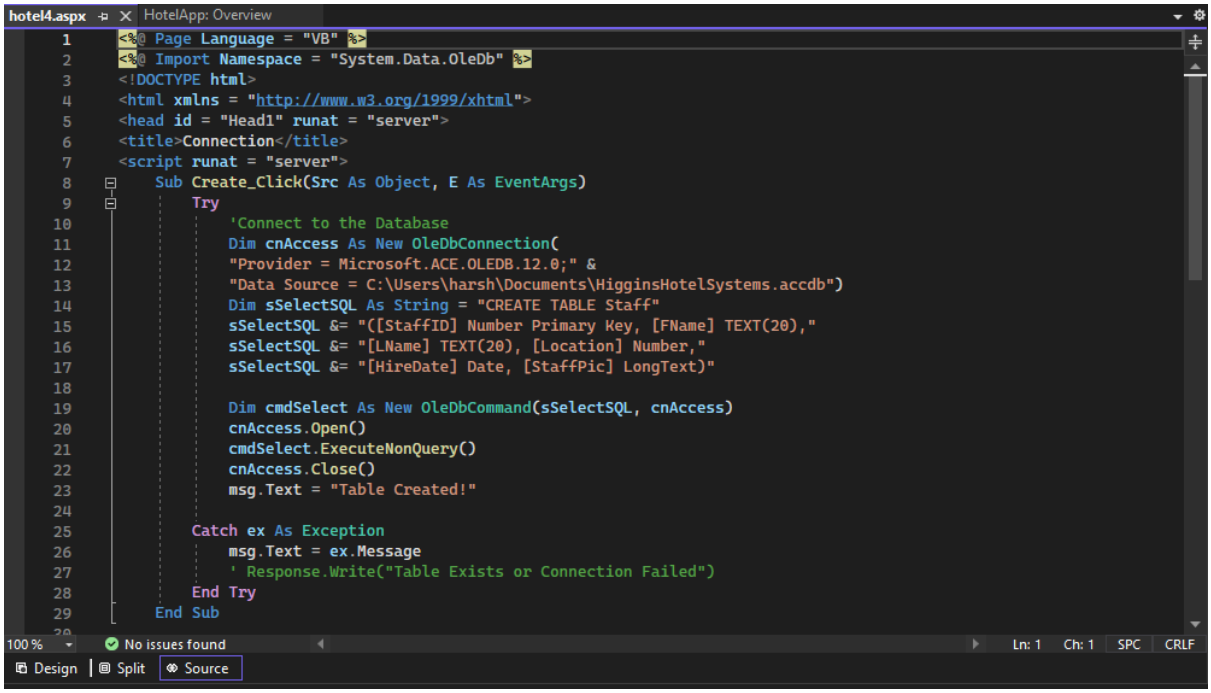
Enter Guest Name

Last Name: Darade

Search

26 Darade Pratik 60616

Step 10: Add a New Web Form to your Hotel Application.



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Create Table

Table Created!

Insert Records

Step 11: Open MS Access and Populate the Staff Table

Staff

StaffID	FName	LName	Location	HireDate	StaffPic
10	Atharv	Khandke	60616	01-11-2023	mypic1.jpeg
20	Prathmesh	Utture	60616	03-11-2023	mypic2.jpeg
30	Aniket	Singh	60616	05-11-2023	mypic3.jpeg
40	Prasad	Pawar	60616	07-11-2023	mypic4.jpeg
50	Pranav	Barne	60616	09-11-2023	mypic5.jpeg

Step 12: Add a New Web Form to your Application.

hotel5.aspx | HotelApp: Overview

```
<%@ Page Language="VB" %>
<%@ Import Namespace="System.Data.OleDb" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head id="Head1" runat="server">
    <title>Staff Search</title>
    <script runat="server">

        Sub Search_Click(Src As Object, E As EventArgs)
            Try
                'Connect to the Database
                Dim cnAccess As New OleDbConnection(
                "Provider=Microsoft.ACE.OLEDB.12.0;" &
                "Data Source= C:\Users\ishan\Documents\HigginsHotelSystems.accdb")

                cnAccess.Open()

                Dim sLName As String
                sLName = LName.Text.Trim

                'Construct the SELECT statement
                Dim sSelectSQL As String
                'Create the SQL Select Statement
                sSelectSQL = "SELECT * FROM Staff WHERE ([LName] LIKE '" & sLName & "')"

                'Create the OleDbCommand object
                Dim cmdSelect As New OleDbCommand(sSelectSQL, cnAccess)
                Dim drEmp As OleDbDataReader, sbResults As New StringBuilder()

                drEmp = cmdSelect.ExecuteReader()
```

100 % | No issues found | Ln: 1 | Ch: 1 | SPC | LF

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Enter Staff Last Name

Last Name:

Search

Data Found for Staff!

Enter Staff Last Name

Last Name: Barne

Search

Staff ID	First Name	Last Name	Location	Hire Date	Staff Pic
50	Pranav	Barne	60616	2023-11-09	

Step 13: Test your Application.

Welcome to the Hotel Reservation System

- Guest
- Guest Details
- Search Guest
- Staff
- Search Staff

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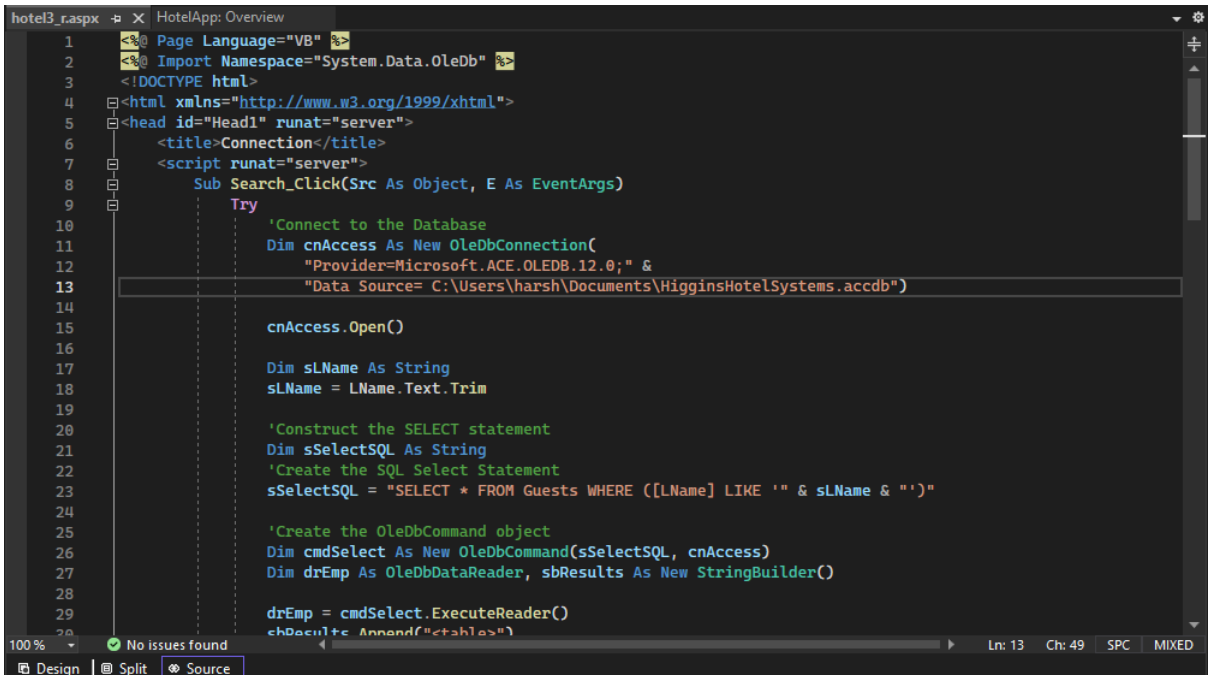
Step 14: Questions and Reflections concerning this Database project.

(1)

There are differences between AWS and Microsoft Azure's cloud service architectures.
AWS:
AWS is distinguished by its modular architecture, which offers consumers broad flexibility and scalability over an international infrastructure. It provides a wide range of customized services that let users choose and pay for particular features.
Azure:
Microsoft Azure, on the other hand, places a strong emphasis on integration and serves companies who are heavily dependent on Microsoft products. Its architecture places an emphasis on a single platform that unifies several services and encourages seamless interoperability with Windows-based applications. When it comes to hybrid cloud solutions, Azure shines, making the integration of cloud and on-premises systems easier.
A company's current infrastructure, preferred technologies, and the degree of customisation or integration needed for their apps all play a role in the choice between the two.

(2)



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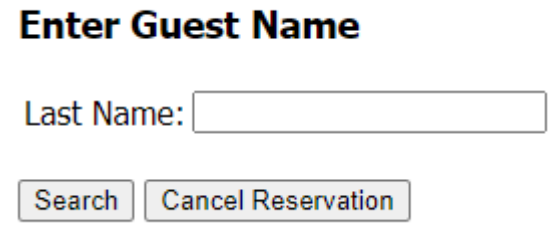
hotel3_r.aspx | HotelApp: Overview

```
55          Sub CancelReservation_Click(Src As Object, E As EventArgs)
56              ' Add code here to cancel the reservation based on the selected guest.
57              ' You may want to prompt the user for confirmation before canceling.
58              ' Perform necessary database operations to update the reservation status or remove the reservation.
59              ' Display a success or error message accordingly.
60          End Sub
61      </script>
62  </head>
63  <body style="font-family:Tahoma;">
64      <h3>Enter Guest Name</h3>
65      <form runat="server" id="form1">
66          <table>
67              <tr>
68                  <td>Last Name: </td>
69                  <td><asp:TextBox ID="LName" runat="server" /></td>
70              </tr>
71          </table>
72          <br />
73          <asp:Button Text="Search" OnClick="Search_Click" runat="server" ID="Button1" />
74          <asp:Button Text="Cancel Reservation" OnClick="CancelReservation_Click" runat="server" ID="CancelBtn" />
75          <p>
76              <asp:Label ID="msg" runat="server" />
77          </p>
78      </form>
79      <div></div>
80  </body>
81  </html>
```

100 % | No issues found | Ln: 13 | Ch: 49 | SPC | MIXED

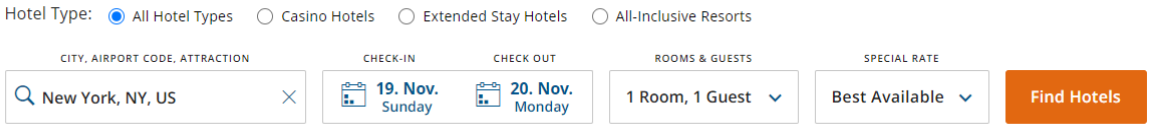


I will add a cancellation button for the reservation to be cancelled. We can search the reservation made based on the last name and according to that we can cancel the reservation.

(3)

(A) Inputs required to do the reservation is:

Firstly, we need to give Location.
Then Check-in and Check-out date.
Then room and guest count.
Then select best available rate if special rate is available.



(B) After the inputs are provided:

We get hotels in that location.
Then we can filter according to our exact location preferences.
Then we can filter according to our needs such as swimming pool, free Wi-Fi, smoking free, parking, distance from the airport, etc.

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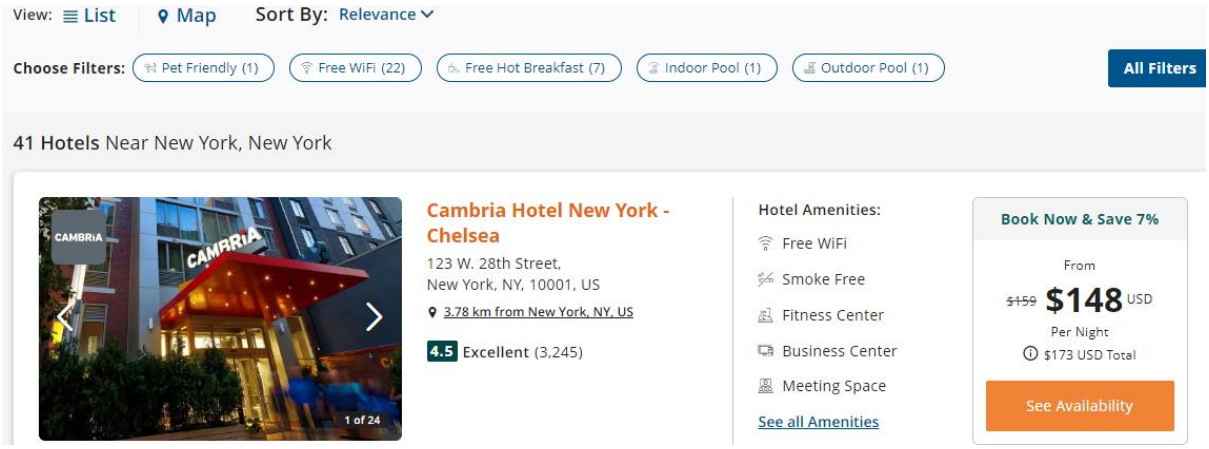

(4)

In both hotel reservation and educational registration systems, similarities exist in various components. Personal information, reservation/course details, payment data, and confirmation receipts are typical input elements in both hotel reservation and educational registration systems. Databases including consumer and student data, registration and reservation records, and financial transaction logs are examples of comparable files. Database and file servers are needed for storage, and local and wide area networks are part of the network architecture, which guarantees safe connections for data transmission. These systems share the core components—data storage, network connectivity, and input requirements—necessary for managing reservations and enrollments and enabling seamless operations in both hospitality and educational environments, despite variations in scale and particular specifics.

(5)

Generally speaking, organized data is advised for a reservation system. Structured data fits nicely into tables or databases, is arranged, and adheres to a specified structure. This is why it is better to have structured data:

1. Query Efficiency: Quicker and simpler querying is made possible by structured data. Rapid access to data, such as available rooms or courses, client information, and booking history, is essential in a reservation system. The systematic nature of structured data makes these searches easier to use.

2. Consistency and Reliability: Data in a predetermined format is more reliable and consistent, and error-prone data is less likely. Accuracy in a reservation system is essential. Financial records, reservation details, and client information are all uniformly stored thanks to structured data.

3. Integration and Analysis: Analytical tools and system integration are made easier with structured data. It makes it simple to integrate with analytics platforms, CRM systems, and payment gateways, promoting a deeper comprehension of consumer behavior and preferences.

4. Scalability and Maintenance: Structured data is more scalable since reservation systems frequently handle enormous amounts of data. Databases and systems scale more easily when

the data is organized in a systematic manner. Additionally, upgrades and maintenance are simpler.

While handling a variety of data types, such as emails, images, and social media content, is one advantage of unstructured data, for a reservation system that focuses on customer information, bookings, and financial transactions, the structured format offers the efficiency and organization required for efficient system operation.