

### THAKUR POLYTECHNIC DIPLOMA IN COMPUTER ENGINEERING



**SYCO C SEMESTER 4 (2023-2024)**

### SUBJECT: GUI APPLICATION USING VB.NT

**(22034)**

### GROUP- 23

1. Niharika Singh
2. Preet Shah
3. Shreyanshi Shah
4. Sutej Shah
5. Isha Singh
6. Yug Shah

GUIDED BY – Ms. POOJA PANDEY





**Maharashtra State Board of Technical Education**

Certificate of Completion of Micro Project

This is to certify that the following group of students Roll.no. 133 to 138 of 3rd Semester of Diploma in **COMPUTER ENGINEERING** of institute,

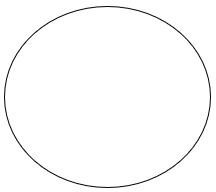
**THAKUR POLYTECHNIC (Code: 0522)** have successfully completed the Micro Project satisfactory in subject in – **GUI APPLICATION USING VB.NT (22034)** for the academic year 2023-2024 as prescribed in the curriculum.

Names of the members, roll numbers & enrollment numbers.

|  |  |  |
| --- | --- | --- |
| **Roll No.** | **Names** | **Enrollment No.** |
| **133** | Niharika Singh | 2205220459 |
| **134** | Preet Shah | 2205220460 |
| **135** | Shreyanshi Shah | 2205220461 |
| **136** | Sutej Shah | 2205220462 |
| **137** | Isha Singh | 2205220463 |
| **138** | Yug Shah | 2205220464 |

Place: Mumbai Date:

|  |  |  |
| --- | --- | --- |
| SUBJECT TEACHER | HEAD OF DEPARTMENT | PRINCIPAL |
| Ms. POOJA PANDEY | Ms. Vaishali Rane | Dr. S.M. Ganechari |





ACKNOWLEDGEMENT

We feel immense pleasure in submitting this report on **“HOTEL MANAGEMNT SYSTEM IN VB.NET”** While submitting this report, we avail this opportunity to express our gratitude to all those who helped us in completing this task. Heading the list with our own honorable Principal Dr.S.M. Ganechari who is the beginner of our inspiration. We owe our deep gratitude and also very thankful to our guide Ms.Pooja pandey, Ms. Vaishali Rane (HOD-CO) and Mrs. Pratibha Lotlikar, SY In charge who has proven to be more than just a mere guide to us. Apart from bringing to us what can be joy of successful completion of this project was only possible due to her guidance and cooperation without which this work would never have been completed. Finally, we wish to express our deep sense of respect and gratitude to each and every staff member who has helped us in many ways and also our parents who have always bared with us in any critical situation and to all others, sparing their time and helping us for completion of this project in whatever way they could. And lastly, we are grateful to each other member of our group.

THANK YOU!



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# MICROPROJECT PROPOSAL



#### 1.0)Aim/Benefits of the Project-

The aim of the course is to help the student to affiant following industry identify compendancy through various teaching, learning experience.

#### 2.0) Course Outcomes Addressed-

The theory practical experiences and relevant soft skills associated with this course are to be taught and implemented, so that the student demonstrates the following industry oriented

COs associated with the above mentioned competency:

a. Use Visual Studio IDE to design application.

b Develop GUI Application using Form Controls and its events. c Apply Object Oriented concepts in GUI Application

d Use Data access controls to store data in Database and retrieve it. e Use Data Binding in GUI Application

#### 3.0) Proposed Methodology-

In order to complete this micro-project of Basic Physics the procedure that we will follow is given below.

 Collection of information.

 Coordination with necessary ethics.

 Group discussion.

 References from books and internet websites.

 Execution of project.

 Preparing report.

 Presentation of project.

 Project submission.



#### 4.0) Action Plan-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.No.** | **Details of Activity** | **Planned start date** | **Planned finish date** | **Name of**  **responsible team members** |
| 1. | Information search |  |  | Preet Shah and  Shreyanshi Shah |
| 2. | Group Discussion |  |  | All team members |
| 3. | Taking reference |  |  | Shreyanshi Shah & Isha Sing |
| 4. | Executions |  |  | Preet Shah  & Niharika Sing |
| 5. | Compilation of reports |  |  | Sutej Shah & Yug Shah |
| 6. | Presentation and report submission |  |  | All team members |



**5.0) Resources Required-**

|  |  |  |
| --- | --- | --- |
| **Sr. N**  **o.** | **Name of the**  **resources/mate rials** | **Specifications** |
| 1. | Books | - |
| 2. | Internet | <https://chat.openai.com/><https://github.com/>[https://www.w3schools.com](https://www.w3schools.com/)  [/](https://www.w3schools.com/)<https://dev.to/> |

#### Name of student members-

|  |  |
| --- | --- |
|  Niharika Singh | 133 |
|  Preet Shah | 134 |
|  Shreyanshi Shah | 135 |
|  Sutej Shah | 136 |
|  Isha Singh | 137 |
|  Yug Shah | 138 |

**(MS.POOJA PANDEY)**



# MICROPROJECT REPORT



#### Rationale:

VB.NET is the programming language based on Object Oriented Concepts which is prominently arsaid to develop GUI based Applications. Graphical User Interface (GUI) based application

includes various user friendly controls to accept or display data. This course will give the students at in-depth understanding of the concepts

used in VB NET and necessary skills to use programming techniques to develop NFT based applications and deploy the same

#### 2.0. Aim/ Benefits of the Micro project:

* + - Java is easy to learn. Java was designed to be easy to use and is therefore easy to write, compile, debug, and learn than other programming languages.
    - Java is object-oriented. This allows you to create modular programs and reusable code.
    - Java is platform-independent. One of the most significant advantages of Java is its ability to move easily from one computer system to another.
    - The ability to run the same program on many different systems is crucial to World Wide Web software, and Java succeeds at this by being platform-independent at both the source and binary levels.

#### 3.0. Course Outcome Address:

The theory practical experiences and relevant soft skills associated with this course are to be taught and implemented, so that the student demonstrates the following industry oriented

COs associated with the above mentioned competency:

a. Use Visual Studio IDE to design application.

b Develop GUI Application using Form Controls and its events. c Apply Object Oriented concepts in GUI Application

d Use Data access controls to store data in Database and retrieve it. e Use Data Binding in GUI Application.



#### 4.0. Literature Review:

A code of hotel management system is an excellent code in vb.net It provides excellent readability. The code is also very efficient for the system. Overall we can say that hotel management system code is very helpful to the students in learning basic fundamentals of vb.net

#### 5.0. Actual Methodology Followed:

Once the micro project title was disclosed, the given topic was divided into smaller subtopics which then were sent to all the group members. Once the group members had received their subtopics, the team members researched their sub topic and sent their respective data to the team group for everyone to read and understand. This data was then be accumulated in a report and submitted to Ms.Pooja pandey for correction.

#### 6.0. Actual Resources Used:

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Name of Resource/ material** | **Specification** |
| 1 | Internet | https://chat.openai.com/https://github.com/https://www.w3schools.com/https://dev.to/ |
| 2 | Book | - |



* 1. **Outputs of the Micro Project:**
     1. **CODE:**

**Private Sub ButtonLogin\_Click(sender As Object, e As EventArgs) Handles ButtonLogin.Click**

**Dim connection As New CONNECTION() Dim adapter As New MySqlDataAdapter() Dim command As New MySqlCommand() Dim table As New DataTable()**

**Dim username As String = TextBoxUsername.Text Dim password As String = TextBoxPassword.Text**

**Dim selectQuery As String = "SELECT \* FROM users WHERE username=@un AND password=@pass"**

**command.CommandText = selectQuery**

**command.Connection = connection.getConnection()**

**command.Parameters.Add("@un", MySqlDbType.VarChar).Value = username command.Parameters.Add("@pass", MySqlDbType.VarChar).Value = password**

**adapter.SelectCommand = command adapter.Fill(table)**

**If table.Rows.Count > 0 Then**

**Dim mainForm As New MainForm() mainForm.Show()**

**Me.Hide() Else**

**MessageBox.Show("Invalid Username Or Password", "Login Error", MessageBoxButtons.OK, MessageBoxIcon.Error)**

**End If**

**End Sub**



**vb.net hotel management system - login form**

**Private Sub LabelMClients\_Click(sender As Object, e As EventArgs) Handles LabelMClients.Click**

**Dim manage\_Cl\_Form As New ManageClientsForm() manage\_Cl\_Form.ShowDialog()**

**End Sub**

**Private Sub LabelMRooms\_Click(sender As Object, e As EventArgs) Handles LabelMRooms.Click**

**Dim manage\_Rm\_Form As New ManageRoomsForm() manage\_Rm\_Form.ShowDialog()**

**End Sub**

**Private Sub LabelMReservastions\_Click(sender As Object, e As EventArgs) Handles LabelMReservastions.Click**

**Dim manage\_Rv\_Form As New ManageReservationsForm() manage\_Rv\_Form.ShowDialog()**

**End Sub**



**rivate Sub ButtonAdd\_Click(sender As Object, e As EventArgs) Handles ButtonAdd.Click Try**

**Dim type As Integer = Convert.ToInt32(ComboBoxType.SelectedValue) Dim phone As String = TextBoxPhone.Text**

**Dim reserved As String = ""**

**If RadioButtonYes.Checked Then reserved = "Yes"**

**ElseIf RadioButtonNo.Checked Then reserved = "No"**

**End If**

**If TextBoxNumber.Text.Trim().Equals("") Or TextBoxPhone.Text.Trim().Equals("")**

**Then**

**MessageBox.Show("Make Sure to Enter The Room Number and The Phone Number", "Empty Fields", MessageBoxButtons.OK, MessageBoxIcon.Error)**

**Else**

**Dim number As Integer = Convert.ToInt32(TextBoxNumber.Text) If room.addRoom(number, type, phone, reserved) Then**

**MessageBox.Show("Room Added Successfully", "Add Room", MessageBoxButtons.OK, MessageBoxIcon.Information)**

**DataGridView1.DataSource = room.getAllRooms()**

**' display the number of rooms on the LabelRoomsCount**

**LabelRoomsCount.Text = room.getAllRooms().Rows.Count.ToString() + " Room"**

**Else**



**MessageBox.Show("Room Not Added", "Add Room", MessageBoxButtons.OK, MessageBoxIcon.Error)**

**End If End If**

**Catch ex As Exception**

**MessageBox.Show(ex.Message, "Duplicate Room Number", MessageBoxButtons.OK, MessageBoxIcon.Warning)**

**End Try End Sub**

**- Edit The Selected Room Button**

**Private Sub ButtonEdit\_Click(sender As Object, e As EventArgs) Handles ButtonEdit.Click**

**Try**

**Dim type As Integer = Convert.ToInt32(ComboBoxType.SelectedValue) Dim phone As String = TextBoxPhone.Text**

**Dim reserved As String = ""**

**If RadioButtonYes.Checked Then reserved = "Yes"**

**ElseIf RadioButtonNo.Checked Then reserved = "No"**

**End If**

**If**



**TextBoxNumber.Text.Trim().Equals("") Or TextBoxPhone.Text.Trim().Equals("") Then**

**MessageBox.Show("Make Sure to Enter The Room Number and The Phone Number", "Empty Fields", MessageBoxButtons.OK, MessageBoxIcon.Error)**

**Else**

**Dim number As Integer = Convert.ToInt32(TextBoxNumber.Text) If room.editRoom(number, type, phone, reserved) Then**

**MessageBox.Show("Room Updated Successfully", "Edit Room", MessageBoxButtons.OK, MessageBoxIcon.Information)**

**DataGridView1.DataSource = room.getAllRooms() Else**

**MessageBox.Show("Room Not Updated", "Edit Room", MessageBoxButtons.OK, MessageBoxIcon.Error)**

**End If End If**

**Catch ex As Exception**

**MessageBox.Show(ex.Message) End Try**

**End Sub**

**- Delete The Selected Room Button**

**Private Sub ButtonRemove\_Click(sender As Object, e As EventArgs) Handles ButtonRemove.Click**

**Try**



**Dim number As Integer = Convert.ToInt32(TextBoxNumber.Text) If room.removeRoom(number) Then**

**MessageBox.Show("Room Deleted Successfully", "Delete Room", MessageBoxButtons.OK, MessageBoxIcon.Information)**

**DataGridView1.DataSource = room.getAllRooms()**

**' reset and clear fields TextBoxNumber.Text = "" ComboBoxType.SelectedIndex = 0 TextBoxPhone.Text = ""**

**RadioButtonYes.Checked = True**

**' display the number of rooms on the LabelRoomsCount**

**LabelRoomsCount.Text = room.getAllRooms().Rows.Count.ToString() + " Room" Else**

**MessageBox.Show("Room Not Deleted", "Delete Room",**

**MessageBoxButtons.OK, MessageBoxIcon.Warning) End If**

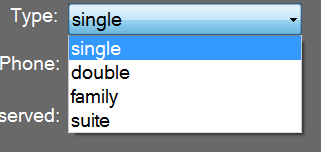
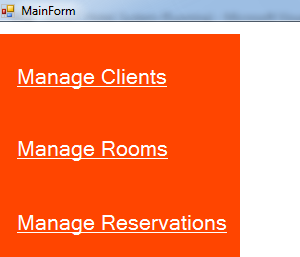
**Catch ex As Exception**

**MessageBox.Show(ex.Message) End Try**

**End Sub**



**8.0. OUTPUT**



**EXPLANATION:**

Certainly! Let's break down the code you provided:

Login Form (ButtonLogin\_Click):

This subroutine is triggered when the login button (ButtonLogin) is clicked.

It creates a new connection to a MySQL database using a custom CONNECTION class.

It defines a SQL query to select a user from the users table based on the provided username and password.

It sets the parameters (@un for username and @pass for password) for the query.

It executes the query using a MySqlDataAdapter and fills the result into a DataTable.

If the query returns a row (i.e., the user exists in the database), it hides the current login form (Me.Hide()) and shows a new form (MainForm).

If the query returns no rows, it displays an error message using MessageBox.Show.

Navigation Labels (LabelMClients\_Click, LabelMRooms\_Click, LabelMReservations\_Click):

These subroutines are triggered when the respective labels are clicked.

They create new instances of forms (ManageClientsForm, ManageRoomsForm, ManageReservationsForm) and show them using ShowDialog(), which opens the forms as modal dialogs.

Add Room Button (ButtonAdd\_Click):



This

subroutine is triggered when the add room button (ButtonAdd) is clicked.

It tries to convert the selected room type, phone number, and reservation status into appropriate formats.

It checks if the room number and phone number are not empty.

If the room number and phone number are valid, it attempts to add the room to the database using the addRoom method of the room object.

If the room is added successfully, it displays a success message and updates the data grid view (DataGridView1) with all rooms.

If there is an error (e.g., duplicate room number), it catches the exception and displays a warning message.

Edit Room Button (ButtonEdit\_Click):

This subroutine is triggered when the edit room button (ButtonEdit) is clicked.

It follows a similar structure to the add room button but uses the editRoom method of the room object to update an existing room in the database.

Delete Room Button (ButtonRemove\_Click):

This subroutine is triggered when the delete room button (ButtonRemove) is clicked.

It tries to convert the room number into an integer.

It attempts to remove the room from the database using the removeRoom method of the room object.

If the room is removed successfully, it displays a success message, updates the data grid view, and resets the input fields.

If there is an error, it catches the exception and displays a warning message.



Please note that the functionality of adding, editing, and deleting rooms depends on the implementation of the room class, which is not included in the code you provided.

#### Applications of the Micro Project:

**The programming language used in microproject i.e vb.net can be useful in the future for**

* + - Windows console mode application
    - Windows services

## Standard window application

* + - Web services

## Windows control and Windows control libraries



### Names and Roll No. Of Team Members:

|  |  |
| --- | --- |
| **Roll No.** | **Names** |
| **133** | Niharika Singh |
| **134** | Preet Shah |
| **135** | Shreyanshi Shah |
| **136** | Sutej Shah |
| **137** | Isha Singh |
| **138** | Yug Shah |

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