

UNIVERSITY POLYTECHNIC BIRLA INSTITUTE OF TECHNOLOGY MESRA, RANCHI-835215

2021

STUDENT REGISTRATION SYSTEM

A

PROJECT REPORT SUBMITTED

IN PARTIAL-FULFILLMENT OF THE REQUIREMENTS

FOR THE SIX SEMESTER

OF

DIPLOMA IN COMPUTER ENGINEERING BY

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Approval of the guide

Project Recommended that the project report titled "STUDENT REGISTRATION SYSTEM" prepared by NITISH RANA (D29/18), PRAWIST LAKRA(D70/18), VISHWAJEET KUMAR (D114/17) under my supervision and guidance be accepted as fulfilling this part of the requirement for award of Diploma in technology in Computer Engineering.

To the best of my knowledge, the content of this report did not form a basic for award of any previous degree to anybody else. The program of the project is found to be satisfactory.

Mr. ABHAY KUMAR (Course Coordinator)

Project Guide

CERIFICATE OF APPROVAL

This project entitled "STUDENT REGISTRATION SYSTEM" is a joint effort of NITISH RANA(D29/18), PRAWIST LAKRA(D70/18), VISWAJEET KUMAR(D144/18) and is accept as fulfilling this part of requirements for the award of Diploma in Computer Engineering from UNIVERSITY POLYTECHNIC B.I.T MESRA, RANCHI.

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MESRA RANCHI 835215

ACKNOWLEDGEMENT

We are graceful to all concerned present this at "Student Registration System" has been taken. Their co-operation has helped us in given a realistic shape to this software. We extended our sincere thanks to our project guide Mr. ABHAY KUMAR, University Polytechnic BIT Mesra and also faculty members for this technical suggestion in their respective areas. We also express our obligation to Mr. NIRAJ KUMAR, Mr. ABHAY KUMAR, Mr. RAMNISH SINHA and Mr. RAJENDRA MAHTO for giving us necessary advice and guidance, which were extremely valuable for our study about this project. Also thanks to Mr. RISHIKESH MAHTO for help.

Project Member:

NITISH RANA(D29/18)

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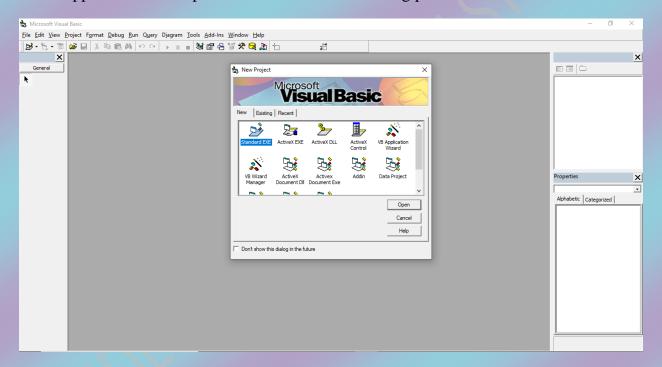
VISHWAJEET KUMAR(D114/17)

INTRODUCTION OF VISUAL BASIC

Visual Basic implement graphical user interface that allows the use of graphics for different applications. It provides visual interactive windows with user, like Dialogue box for (colour, font...), Input box and output box. Also it is able to create menu to simplify user applications.

To run this program on user computer: Start>Programs>Microsoft Visual Studio 6.0>Microsoft Visual Basic 6.0.

It will appear on the computer screen as in the following picture.



The Important Of Visuals Basic Program

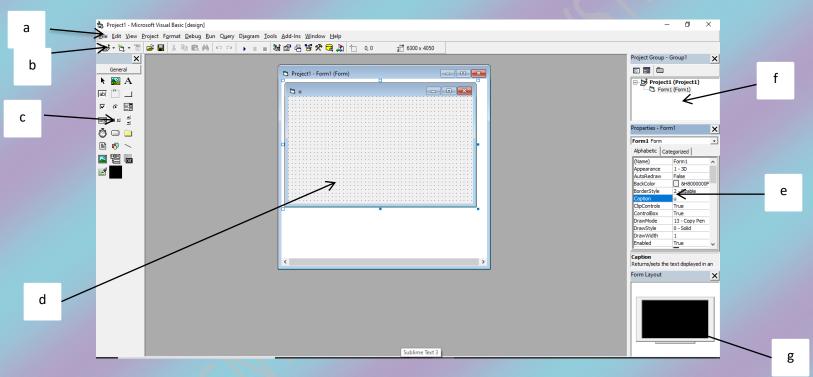
Languages like basic and pascal depends on variables and procedures to build the applications. This is why it is called procedural languages. The new approach is called object programming approach everything (form, command buttons, controls) is an object.

1. The reasons for implementing development environment (IDE) which is easier for the user to minimize code writing.

- 2. All visual programs allows the same concepts, therefor the user will become more familiar with visual approach for other visual languages.
- 3. It provides input box and output box as an interactive windows with user.
- 4. It is able to connect to internet, and to call explorer.

Element of the integrated development environment (IDE)

The IDE environment consists of many elements. Some elements are displayed when visual basic is started (By default) as in the following figure. Other elements are displayed if the user requires them. We will list some of these elements.



- a. Menu Bar: It contains standard command like: file, edit, view, window, help menus, and specific command such as project, format or debug menus.
- b. Tool Bar: It contains the most commonly used commands(buttons), if clicked and action represented by that button is carried out.
- c. Tool Box: It contains a collection of tools that needed for project design.
- d. Form Designer: It contains a windows for each form to customize the design interface of the application using the form designer, the user can add control, graphics, and text to create the desired form appearance.
- e. Project Window: It is a list of properties settings for a selected form or a control. These property characteristics (such as size, visible or color) of the selected object it provides an easy to set properties.

- f. Project Explorer Window: it is list of the forms and module for the current project. It is a hierarchical tree-branch structure, where the project at top of tree and other parts like forms, modules descend form this tree.
- g. Form Layout Window: The form layout window is a small screen, which is used to reposition the form of the application so that it appears in proper place when project is run?
- h. Code Editor Window: Code Editor Window is used to write a VB code for an application. For each form there is a separate code editor window. It is displayed when user double click on form or objects in form.

To Create An Application

The title of the program includes the name of the project, and when the user first start the program it takes a defaulted values (project). It also includes resize icons. The followings steps are required to create an application in visual basic 6.0:-

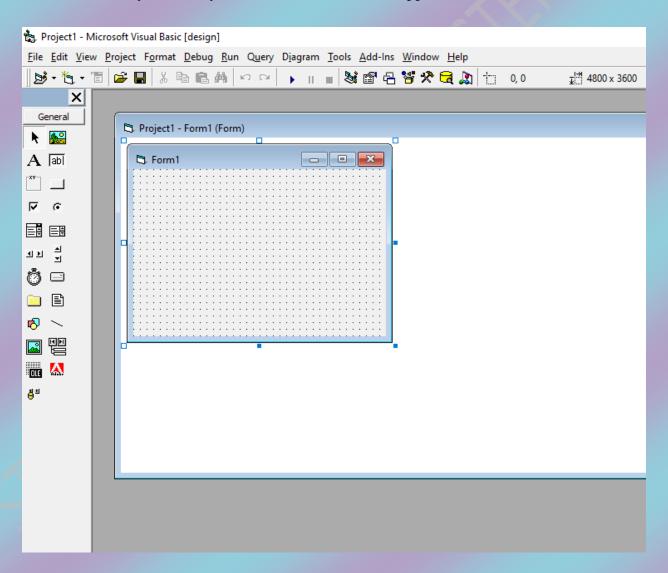
- 1. Select type of project new or existing. A form automatically aprears in the form design. The basic for any application's interface is the form that user should create. User can add other forms to the project(to add another form selected menu<add form).
- 2. To add object (controls) to the form use the toolbox.
- 3. Set the properties for the object through properties window.
- 4. Write Code. The visual basic code consists of statements, and declaration. The code for an application can be written on the code editor window. In this window user can view and edit quickly any of the code.
- 5. Run the application. To run the application, click the start button on the toolbar, or press F5.
- 6. Stop. To stop running the application and return to visual basic program click on stop button on tool bar.
- 7. Check if there is an error, return to step 3, otherwise continue.
- 8. Save project.
- 9. Exit

DEFINE THE FOLLOWING PARAMITERS

Forms

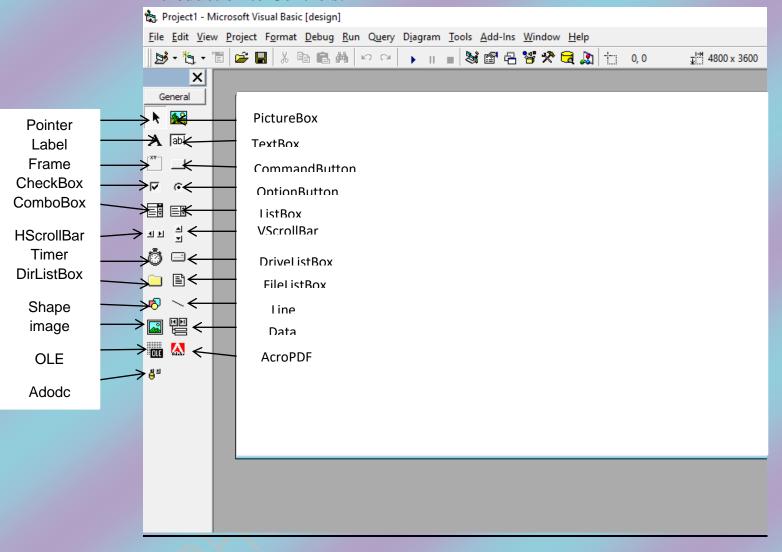
Introduction to form

Visual basic from is the container for all the controls that make up the user interface. Every window you see in a running visual basic application is a form, thus the terms from and window describes the same entity. Visual studio creates a default form for you when you create a window Form application.



Controls

Introduction to Controls:-



Controls:-

What This Tool Does....

- 1.Pointer-Selects objects
- 2.Picture box-Draws a box to display graphics
- 3.Label-Draws a box to display text
- 4.Text box-Draws a box that can display text and let the user type in text
- 5.Frame-Groups two or more objects together
- 6.Command button-Draws a command button
- 7. Check box-Draws a check box
- 8. Option (or radio) button-Draws a radio button

- 9. Combo box-Draws a combo box
- 10.List box-Draws a list box
- 11. Horizontal scroll bar-Draws a horizontal scroll bar
- 12. Vertical scroll bar-Draws a vertical scroll bar
- 13. Timer-Places a timer on a form
- 14.Drive list box-Draws a drive list box that displays all the disk drives available
- 15.Directory list box-Draws a directory list box that displays a directory on a particular disk drive
- 16. File list box-Draws a file list box that displays files in a specific directory
- 17. Shape-Draws a geometric shape such as a circle or a square
- 18.Line-Draws a line
- 19.Image box-Draws a box to display graphics
- 20.Data control-Draws a control to link a program to a database file
- 21.OLE-Draws a box to insert an OLE object
- 22. Adodc- Control data connectivity

Features of Visual Basic

- ✓ VB introduces the concept of Event Driven programming Model.
- ✓ It has built in Database Handling Features of VB.
- ✓ It incorporated the concepts of objects.
- ✓ It has useful Error Handling Features.
- ✓ It has Front End Application Developer.
- ✓ It also known as RAD (Rapid Application Development).

Advantages

- ➤ The structure of the Basic programming language is very simple, particularly as to the executable code.
- ➤ VB is not only a language but primarily an integrated, interactive development environment ("IDE").
- The VB-IDE has been highly optimized to support rapid application development ("RAD"). It is particularly easy to develop graphical user interfaces and to connect them to handler functions provided by the application.
- ➤ The graphical user interface of the VB-IDE provides intuitively appealing views for the management of the program structure in the large and the various types of entities (classes, modules, procedures, forms, ...).

- > VB provides a comprehensive interactive and context-sensitive online help system.
- ➤ When editing program texts the "IntelliSense" technology informs you in a little popup window about the types of constructs that may be entered at the current cursor location.

DATABASE USED IN THIS PROJECT:-

INTRODUCTION TO MICROSOFT SQL SERVER MANAGEMENT STUDIO:-

What is SQL Server?

- It is a software, developed by Microsoft, which is implemented from the specification of RDBMS.
- It is also an ORDBMS.
- It is platform dependent.
- It is both GUI and command based software.
- It supports SQL (SEQUEL) language which is an IBM product, non-procedural, common database and case insensitive language.

SQL Server Components

SQL Server works in client-server architecture, hence it supports two types of components – (a) Workstation and (b) Server.

- Workstation components are installed in every device/SQL Server operator's machine. These are just interfaces to interact with Server components. Example: SSMS, SSCM, Profiler, BIDS, SQLEM etc.
- Server components are installed in centralized server. These are services.
 Example: SQL Server, SQL Server Agent, SSIS, SSAS, SSRS, SQL browser,
 SQL Server full text search etc.

Installation Steps

Step 1 – Download the Evaluation Edition from http://www.microsoft.com/download/en/details.aspx

Once the software is downloaded, the following files will be available based on your download (32 or 64 bit) option.

ENU\x86\SQLFULL_x86_ENU_Core.box

ENU\x86\SQLFULL_x86_ENU_Install.exe

ENU\x86\SQLFULL_x86_ENU_Lang.box

OR

ENU\x86\SQLFULL_x64_ENU_Core.box ENU\x86\SQLFULL_x64_ENU_Install.exe ENU\x86\SQLFULL_x64_ENU_Lang.box Note - X86 (32 bit) and X64 (64 bit)

Step 2 – Double-click the "SQLFULL_x86_ENU_Install.exe" or "SQLFULL_x64_ENU_Install.exe", it will extract the required files for installation in the "SQLFULL_x86_ENU" or "SQLFULL_x86_ENU" folder respectively.

Step 3 – Click the "SQLFULL_x86_ENU" or "SQLFULL_x64_ENU_Install.exe" folder and double-click "SETUP" application.

Step 4 – Once we click on 'setup' application, you have to go through the instruction given by system.

SQL Server Management Studio

SQL Server Management Studio is a workstation component\client tool that will be installed if we select workstation component in installation steps. This allows you to connect to and manage your SQL Server from a graphical interface instead of having to use the command line.

In order to connect to a remote instance of an SQL Server, you will need this or similar software. It is used by Administrators, Developers, Testers, etc.

The following methods are used to open SQL Server Management Studio.

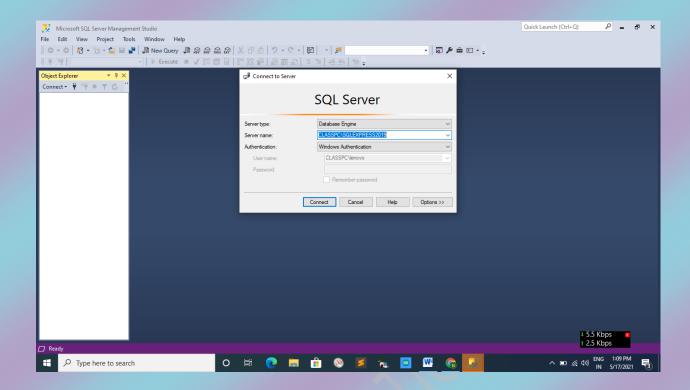
First Method

Start → All Programs → MS SQL Server 2018 → SQL Server Management Studio

Second Method

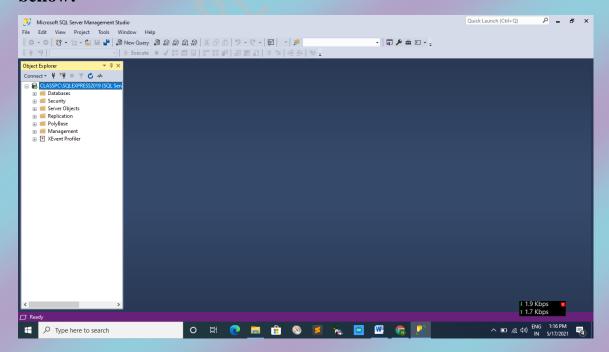
In windows new version search Microsoft sql server management studio.

SQL Server Management Studio will be open up as shown in the following snapshot in either of the above method.

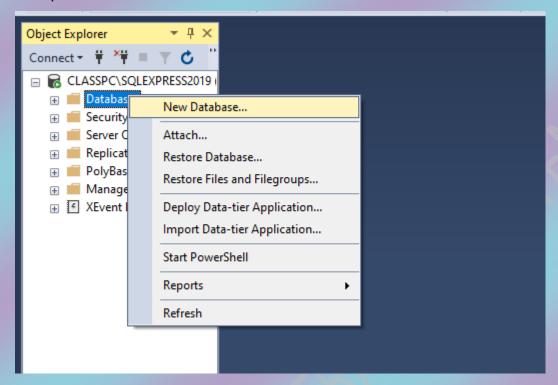


How to create a database in Microsoft sql management studio:-

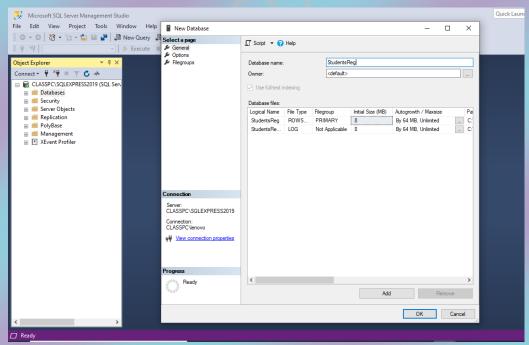
After the start of the application you can see the following screen like shown bellow:-



To create a database right click on the 'database' option, After clicking you can see the option like:-



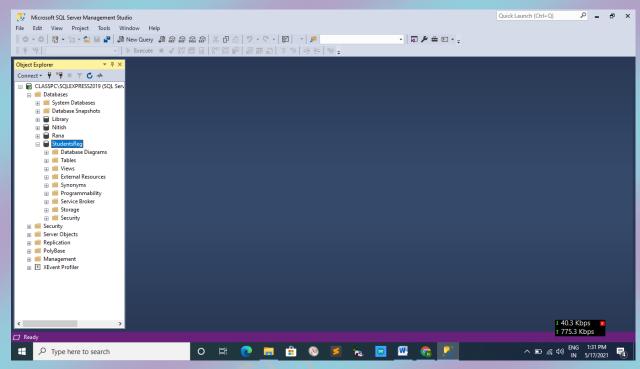
Now click on New Database..., you can see following screen after that:-



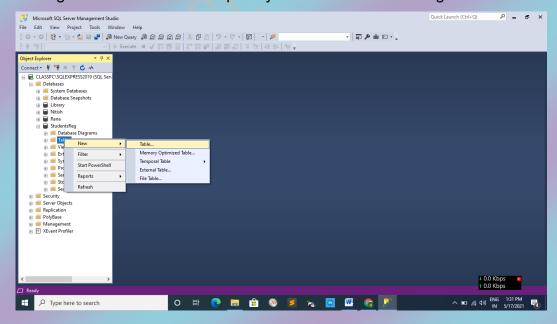
Now type the database name and click ok to save -

STEPS TO CREATE A TABLE:-

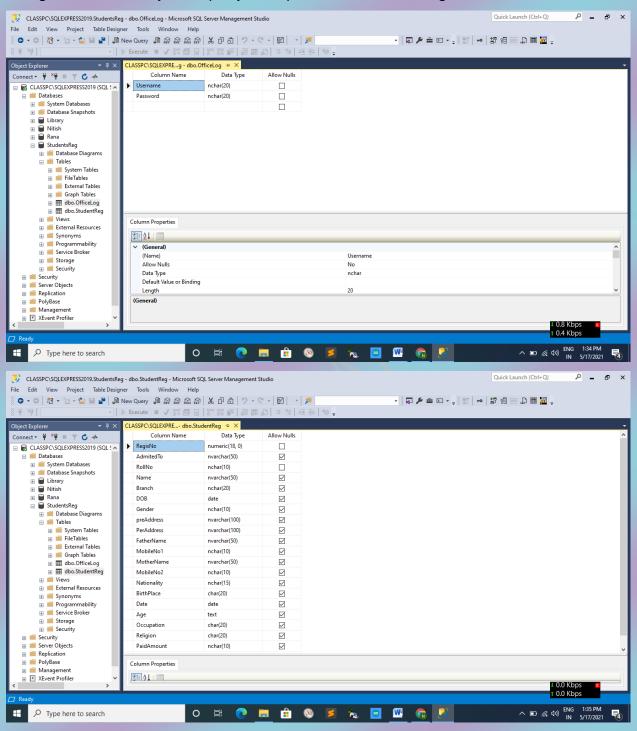
After creating the database, double click on the database that you have created or click on the '+' sign, you can see the following window on screen:-



Now right click on the "table" option you can see the following screen:-

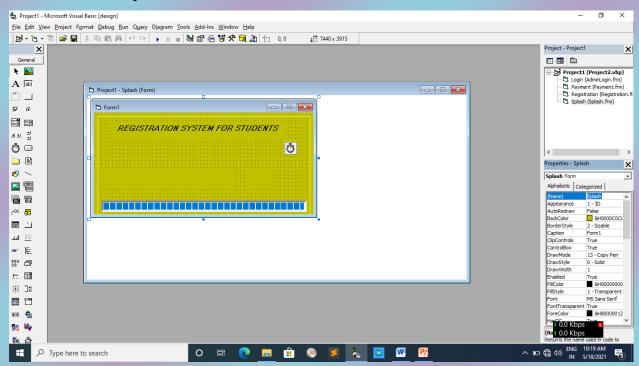


Design the table that you as per you requirement like following:-



FORM DESIGNING AND CODDING FOR DATABASE CONNECTIVITY:-

1. First form – Splash screen



Code inside this form:-

Private Sub Form Load()

Timer1.Enabled = True

Me.Left = (Screen.Width - Me.Width) / 5

Me.Top = (Screen.Height - Me.Height) / 5

End Sub

Private Sub Timer1_Timer()

ProgressBar1.Value = ProgressBar1.Value + 5

lblstatus.Caption = "Loading....please wait.."

lblstat.Caption = ProgressBar1.Value & "%"

If ProgressBar1.Value = ProgressBar1.Max Then

Timer1. Enabled = False

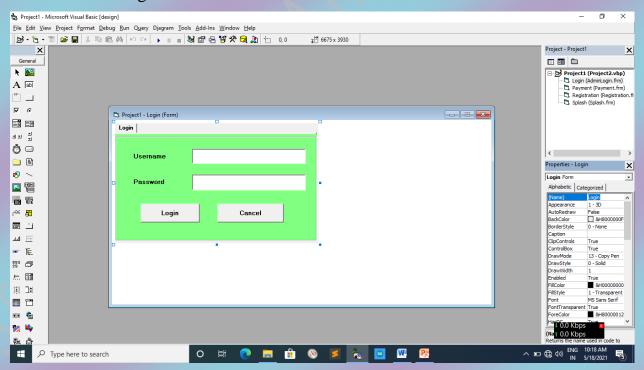
Unload Me

Login.Show

End If

End Sub

2. Second form-Login



Code inside this form:-

Dim cn As New ADODB.Connection

Dim rs As New ADODB.Recordset Private Sub cmdCancel_Click() Unload Me End Sub Private Sub cmdLogin_Click() On Error Resume Next rs.MoveFirst rs.Find ("Username="" & txtUsername1 & """) If Not rs.EOF Then If rs("Password="" & txtPassword1 & """) Then MsgBox "Well Done..Login Successful" Registration.Show Else MsgBox "Login Failed...Please login with correct password" End If Else MsgBox "Login Failed...Please login with correct username" Frame1. Visible = False

End If

End Sub

Private Sub Form_Load()

Frame1. Visible = True

Me.Left = (Screen.Width - Me.Width) / 5

Me.Top = (Screen.Height - Me.Height) / 5

cn.Open "Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=StudentsReg;Data Source=CLASSPC\SQLEXPRESS2019"

rs.Open "OfficeLog", cn, adOpenDynamic, adLockOptimistic

End Sub

Private Sub TabStrip1_Click()

If TabStrip1.Tabs(1).Selected = True Then

Frame1. Visible = True

End If

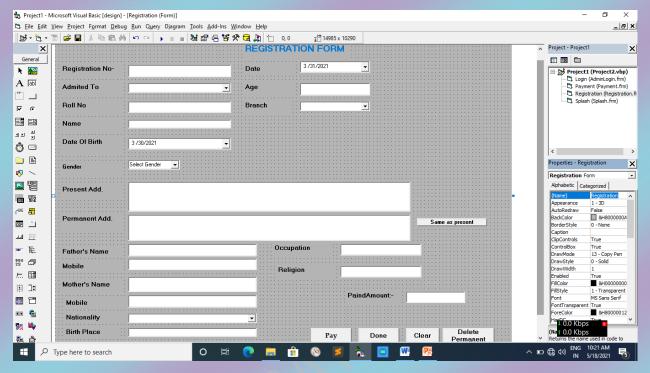
End Sub

Here "txtUsername1" is the name of TextBox used for username Here "txtPassword1" is the name of TextBox used for Password

In this form we enter a valid username and password so that we can access the further form. If the entered username and password are not valid or accessible then we will not have the permission to go further. In this form it will fetch the data from the database and check/compare it to the data that is entered by user and then after it will give or denied the permission.

*You can see the working of it in working part

3. Third form- Registration



Code inside this form:-

```
Dim cn As New ADODB. Connection
```

Dim rs As New ADODB.Recordset

_

Private Sub Clear_Click(Index As Integer)

cboAdmitedTo.ListIndex = -1

txtRoll = ""

txtName = ""

cboBranch = -1

cboGender.ListIndex = -1

txtPreAdd = ""

txtPerAdd = ""

```
txtFather = ""
txtMob1 = ""
txtMother = ""
txtMob2 = ""
cboNationality = -1
txtBPlace = ""
txtAge = ""
txtOccup = ""
txtReligion = ""
End Sub
Private Sub cmdDone_Click()
rs.AddNew
rs("AdmitedTo") = cboAdmitedTo
rs("RollNo") = txtRoll
rs("Name") = txtName
rs("Branch") = cboBranch
rs("DOB") = DPDOB
rs("Gender") = cboGender
rs("preAddress") = txtPreAdd
rs("perAddress") = txtPerAdd
rs("FatherName") = txtFather
rs("MobileNo1") = txtMob1
```

```
rs("MotherName") = txtMother
```

End Sub

Private Sub cmdPay_Click()

Payment.Show

Registration.Hide

End Sub

Private Sub cmdPrint_Click()

resgistration.Print

End Sub

Private Sub Command2_Click()

txtPerAdd.Text = txtPreAdd

End Sub

Private Sub Form_Load()

cn.Open "Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=StudentsReg;Data Source=CLASSPC\SQLEXPRESS2019"

rs.Open "StudentReg", cn, adOpenDynamic, adLockOptimistic
End Sub

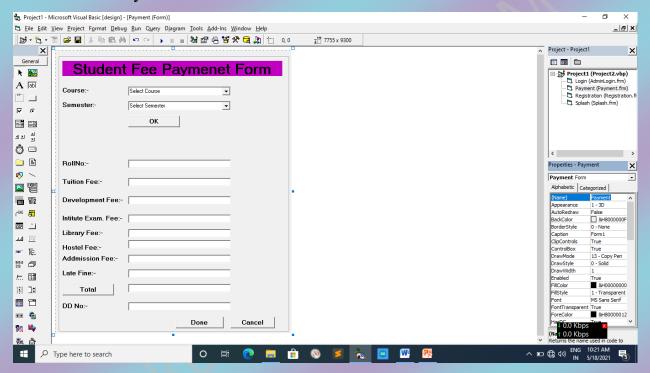
Here:-

cboAdmitedTo is the name of ComboBox used for AdmitedTo txtRoll is the name of textbox used for RollNo txtName is the name of textbox used for Name cboBranch is the name of combobox used for Branch **DPDOB** is the name of date control used for date of birth **cboGender** is the name of combobox used for gender txtPreAdd is the name of textbox used for present address **txtPerAdd** is the name of textbox used for permanent address txtFather is the name of textbox used for father's name txtMob1 is the name of textbox used for mobleNumber **txtMother** is the name of textbox used for mother's name txtMob2 is the name of textbox used for mobleNumber cboNationality is the name of combobox used for nationality txtBPlace is the name of textbox used for birthPlace **DPDate** is the name of date control used for date txtAge is the name of textbox used for age txtOccup is the name of textbox used for occupation

txtReligion is the name of textbox used for Religion

This form is used to register a new student in database, delete any record from the database, clear the entered data in the form. There is a button with name Pay that is for go to Payment page so that user can pay the amount.

4. Fourth form- Payment



Code inside this form:-

Dim cn As New ADODB.Connection

Dim rs As New ADODB.Recordset

Private Sub cmdCancel_Click()

Unload Me

End Sub

Private Sub cmdDone_Click()

rs("PaidAmount") = txtTotal

End Sub

Private Sub cmdOK_Click()

If cboSemester.Text = 1 Then

txtTuition.Text = "25300"

txtDevelop.Text = "1700"

txtIntitute.Text = "1500"

txtHostel.Text = "3500"

txtAdmission.Text = "3000"

txtLate.Text = "0"

txtLibrary.Text = "0"

Else

If cboSemester.Text = 2 Then

txtTuition.Text = "25300"

txtDevelop.Text = "1700"

txtIntitute.Text = "1500"

txtHostel.Text = "3500"

txtAdmission.Text = "0"

txtLate.Text = "0"

txtLibrary.Text = "0"

Else

If cboSemester.Text = 3 Then

txtTuition.Text = "26500"

txtDevelop.Text = "1800"

txtIntitute.Text = "1600"

txtHostel.Text = "3700"

txtAdmission.Text = "0"

txtLate.Text = "0"

txtLibrary.Text = "0"

Else

If cboSemester.Text = 4 Then

txtTuition.Text = "26500"

txtDevelop.Text = "1800"

txtIntitute.Text = "1600"

txtHostel.Text = "3700"

txtAdmission.Text = "0"

txtLate.Text = "0"

txtLibrary.Text = "0"

Else

If cboSemester.Text = 5 Then

txtTuition.Text = "25300"

txtDevelop.Text = "1700"

txtIntitute.Text = "1500"

txtHostel.Text = "3500"

```
txtAdmission.Text = "0"
txtLate.Text = "0"
txtLibrary.Text = "0"
Else
txtTuition.Text = "27800"
txtDevelop.Text = "1900"
txtIntitute.Text = "1700"
txtHostel.Text = "0"
txtAdmission.Text = "0"
txtLate.Text = "0"
txtLibrary.Text = "0"
End If
End If
End If
End If
End If
End Sub
Private Sub cndTotal_Click()
Dim t As Double
t = Val(txtTuition.Text + txtDevelop.Text + txtIntitute.Text
txtLibrary.Text + txtHostel.Text + txtAdmission.Text + txtLate.Text)
txtTotal.Text = Val(t)
```

Private Sub Form_Load()

Me.Left = (Screen.Width - Me.Width) / 4

Me.Top = (Screen.Height - Me.Height) / 4

cn.Open "Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=StudentsReg;Data Source=CLASSPC\SQLEXPRESS2019"

rs.Open "StudentReg", cn, adOpenDynamic, adLockOptimistic

End Sub

This form is use to pay the amount with the DD. There are two combobox 1^{st} is course and 2^{nd} is semester. If we select the semester and course then all the amount that you have to pay will be shown in the respective textboxes as shown bellow in **working** part.

DATABASE CONNECTION:

For database connection we are using a control called "ADODC" that is ADO data control use to connect the visual basic form to a database. As we know that the process of using any control is very easy in visual basic so we just need to select ADODC control and drop it on the form. After that you can change the property of ADODC control as per your choice then after we/you have to write some code under the coding part of this form like:-

in general declaration part we have to declare a variable as

Dim cn As New ADODB. Connection

Dim rs As New ADODB.Recordset

And in form load we have to write code for connection like

cn.Open "Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security Info=False;Initial Catalog=StudentsReg;Data Source=CLASSPC\SQLEXPRESS2019"

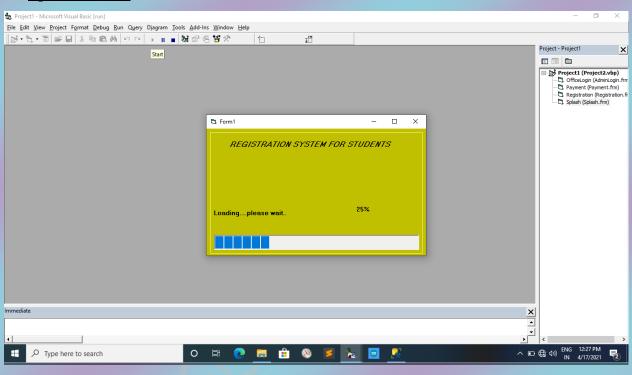
❖ This part of you can get from Connection String

rs.Open "StudentInfo", cn, adOpenDynamic, adLockOptimistic

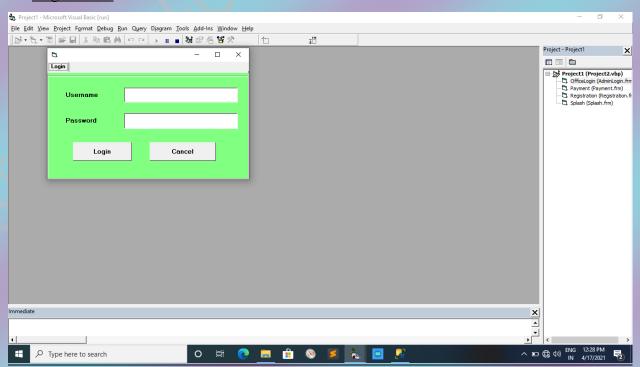
by the help of this code we can connect any database to visual basic form so we can add, delete, update, search and record from/to the database.

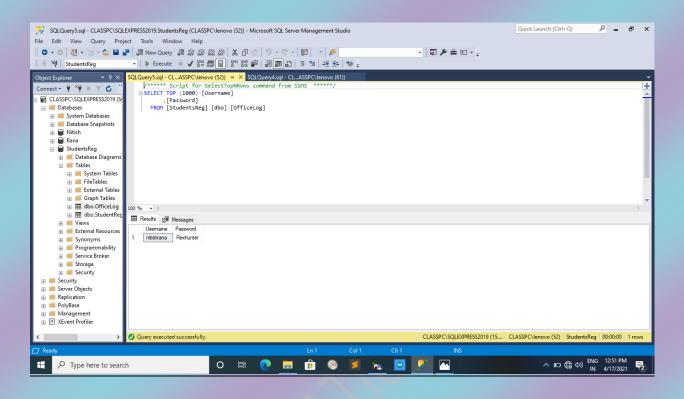
WORKING:-

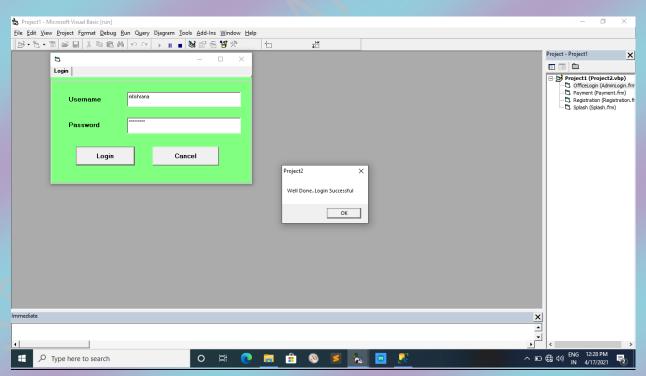
1. Splash screen



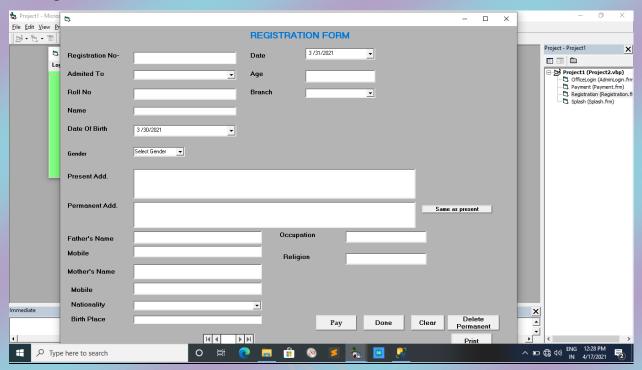
2. Login form

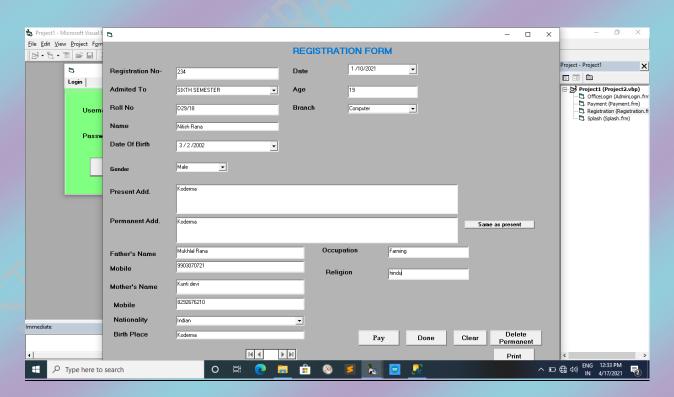




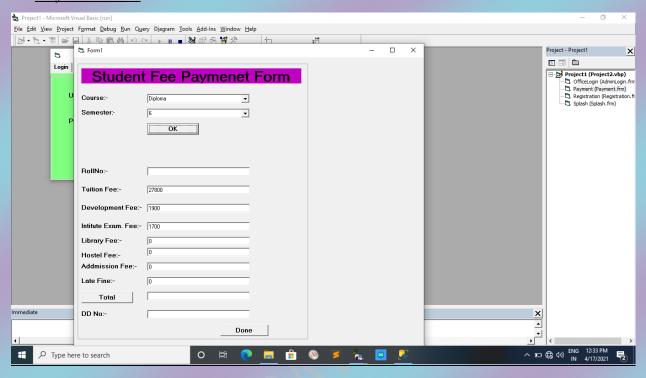


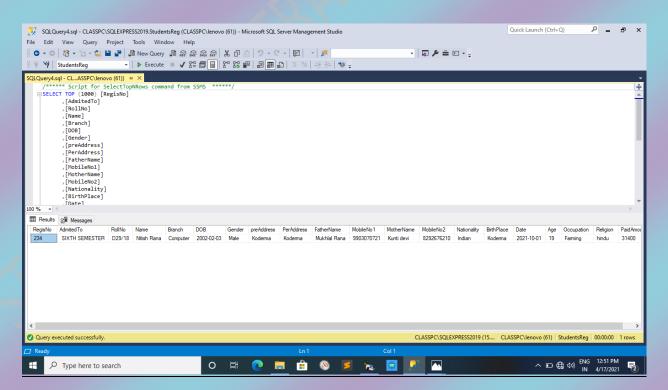
3. Registration form





4. Payment form





CONCLUSION

The replacement for the ordinary student registration systems which depend on paper work for recording book and user's information. This software is developed specifically to cater the flexible feeding requirement of a student and is totally selfcontained and works efficiently. In student registration system minimize waste of time. It provides a simple database and a good level of normalization will make sure that the user is getting various set of reports.

The motive of this project to make the process of register any students in any organization. It will reduce the use of pen and register and anyone can get registered fast as compare to a pen paper work.

REFERENCE

- 1. INTERNET
- 2. TEACHERS
- 3. FRIENDS