

C.K TEDAM UNIVERSITY OF TECHNOLOGY AND APPLIED SCIENCES

SCHOOL OF COMPUTING AND INFORMATION SCIENCES



A REPORT ON FRESH FARM APPLICATION AND DATABASE

A PROJECT REPORT

SUBMITTED BY

GROUP FORTY-SEVEN (47) MEMBERS

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GROUP 47 MEMBERS

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BRIEF DESCRIPTION

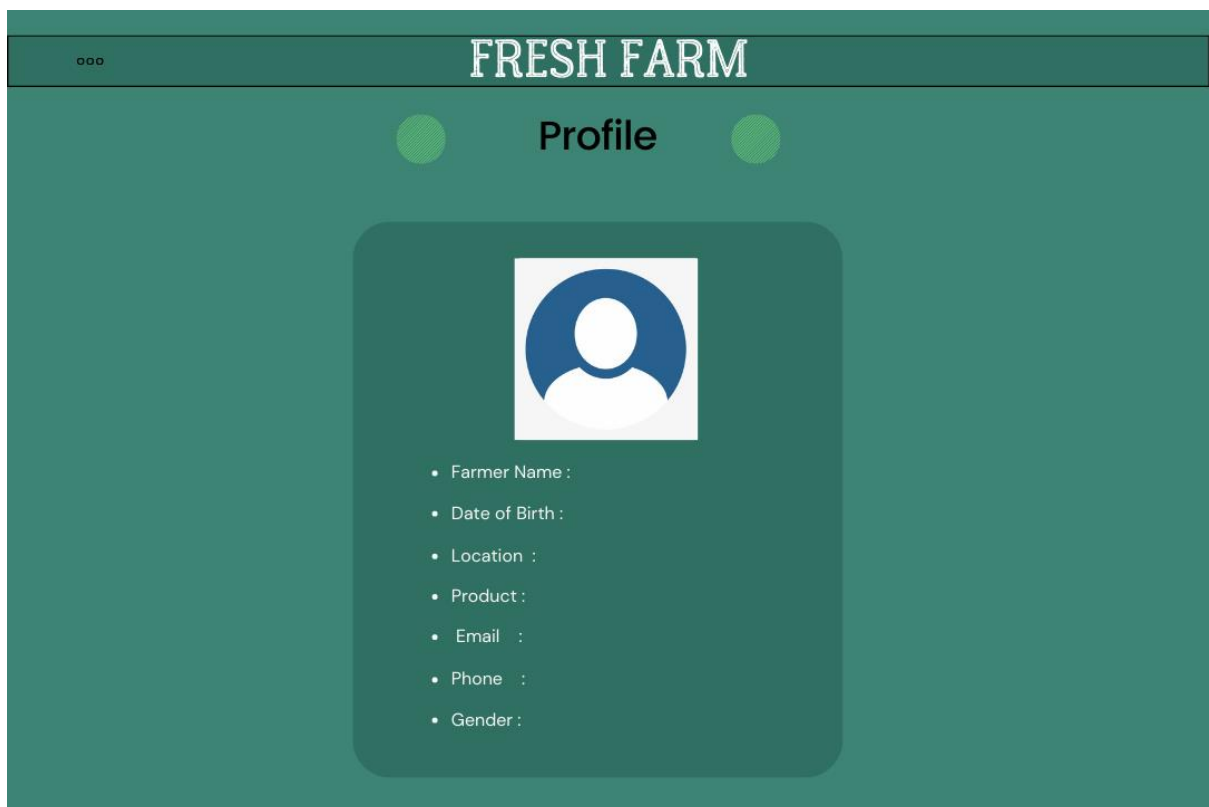
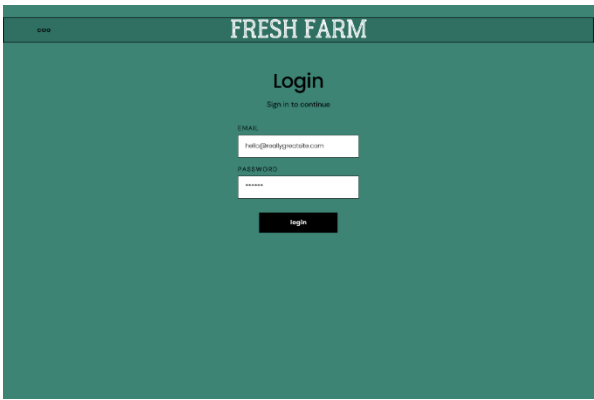
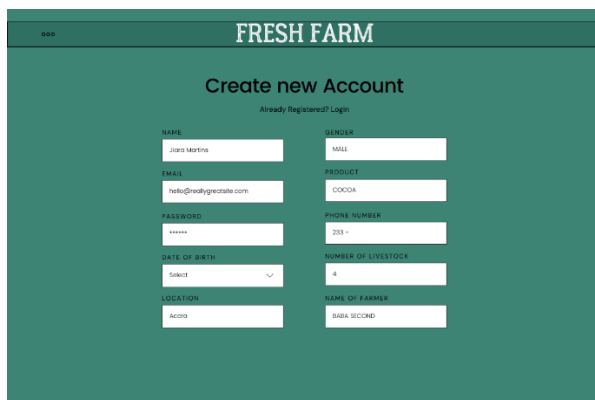
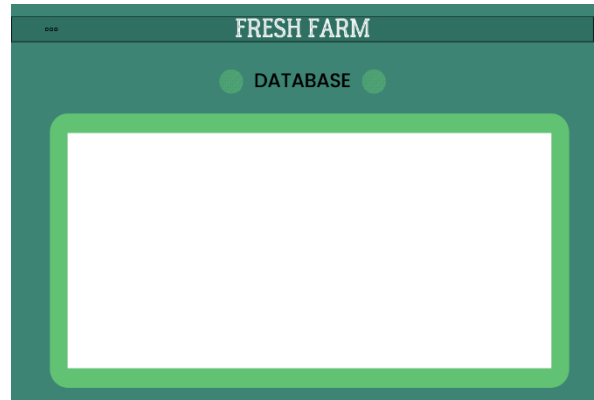
This report gives a detailed explanation about the creation of a Visual Basic Application with five forms and the creation of MySQL database to store farmers data. The Application is called **Fresh Farm** and the database is called “**myconnector**” and it has one entity called “Applicant”. Some of the tools used in the project were MySQL server, Visual Studio 2019 and Canva for the design.

INTRODUCTION

This report gives a detailed explanation about the creation of the Fresh Farm Application and the “myconnector” Database. It also shows how the application was linked to the database. Visual Studio 2019 and VB.NET are the tools used to create the Fresh Farm Application. The Fresh Farm Application is a Beautifully designed app with five form and a green theme. The Application consist of Buttons, RichTextBoxs, Labels, a combo box, a DateTimePicker and a DataGridView. The forms are linked with the “. Show()” and “.Hide()” method. The tools used to create “myconnector” Database are MySQL Workbench 8.0 and MySQL server. The database has one entity or table called “farmer”. The attributes that hold the Farmers information in the table are Farmer id, Farmer Name, Email, Passwords, Location, Date of Birth, User Type, Gender, phone, Farm Name, Livestock No and Product.

PLANNING AND DESIGN

Canva was used to design all the five forms in the app. Canva is a graphic design platform, used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use. below are the forms GUI.



IMPLEMENTATION

The Fresh Farm Application registers farmers and log in farmers who are already signed up.

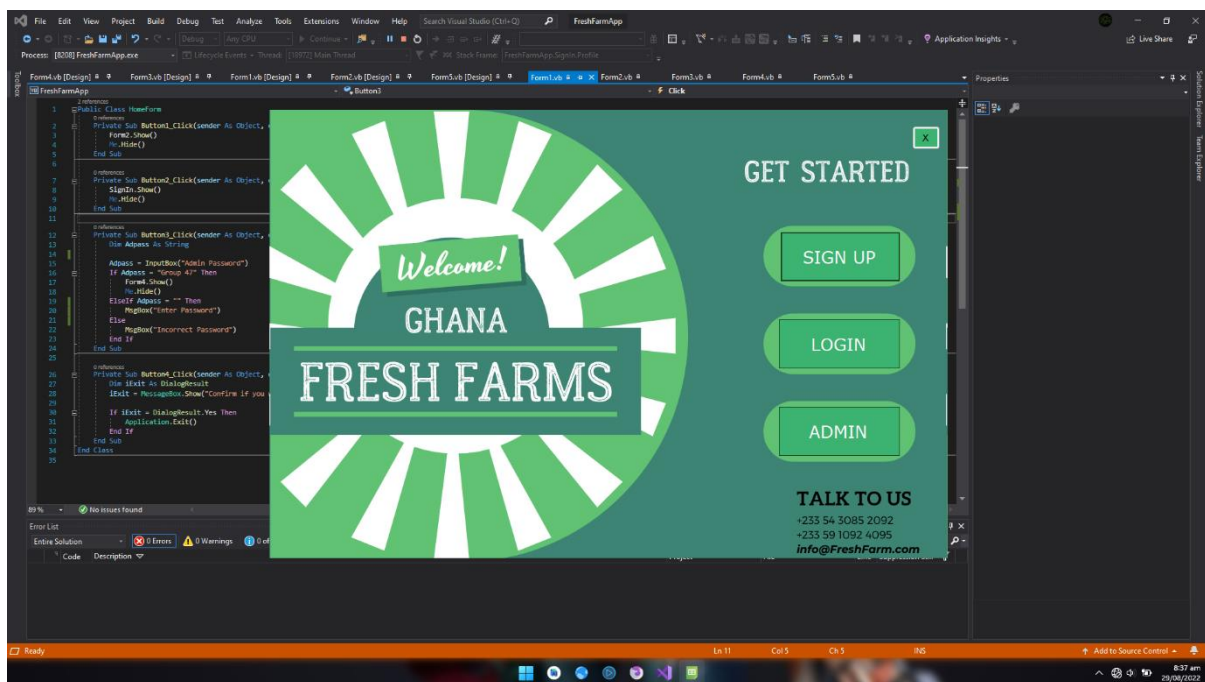
After the farmer signs in, the application displays their profile with all relevant information.

On the first form the admin button opens the fourth form (Database view form) after the admin password which is “Group 47”, has been typed.

Form1

This is the first form to display when the application starts running. It has four buttons.

Button 1 displays the sign-up form using “Form2.Show”, Button 2 displays the login form using “Form3.Show”, Button 3 displays the Database view form using “Form4.Show” and Button 4 exits the application.



```
Public Class HomeForm
```

```
    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
```

```
        Form2.Show()
```

```
        Me.Hide()
```

```
    End Sub
```

```
    Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
```

```
        SignIn.Show()
```

```
        Me.Hide()
```

```
    End Sub
```

```
    Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click
```

```
        Dim Adpass As String
```

```
        Adpass = InputBox("Admin Password")
```

```
        If Adpass = "Group 47" Then
```

```
            Form4.Show()
```

```
            Me.Hide()
```

```
        Elself Adpass = "" Then
```

```
            MsgBox("Enter Password")
```

```
        Else
```

```
            MsgBox("Incorrect Password")
```

```
        End If
```

```
    End Sub
```

```
    Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click
```

```
        Dim iExit As DialogResult
```

```
        iExit = MessageBox.Show("Confirm if you want to exit", " Fresh Farm ", MessageBoxButtons.YesNo, MessageBoxIcon.Question)
```

```
        If iExit = DialogResult.Yes Then
```

```
            Application.Exit()
```

```
        End If
```

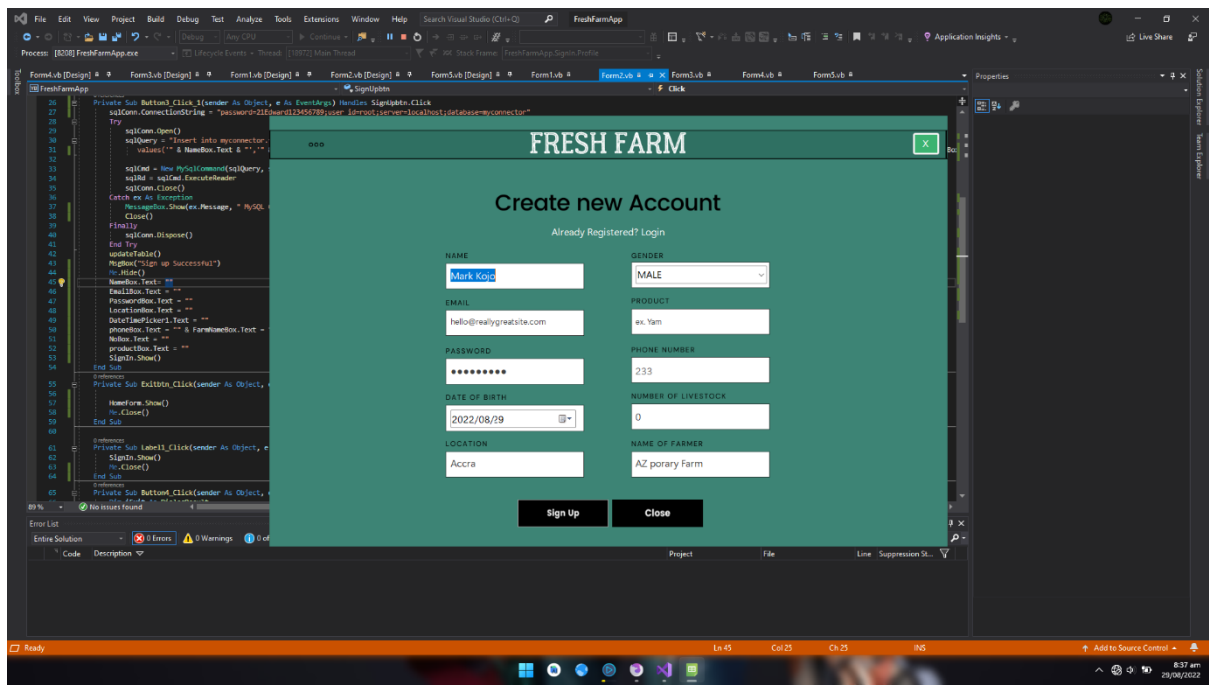
```
    End Sub
```

```
End Class
```

Form2

This is the sign-up form which registers a farmer by collecting farmer information and saving it in the database with a click of the sign-up button, then it displays the login form. The login label also displays the login form. The close button returns you back to the home form. To connect the database to the form, you first import “`MySql.Data.MySqlClient`” .

Then create an instance object. Use “`.ConnectionString()`” to access the server and database, then use “`.Open()`” to send queries to the database and “`.Close()`” to close the connection and then dispose it with “`.Dispose()`”.



```

Imports MySql.Data.MySqlClient

Imports Microsoft.VisualBasic.ApplicationServices

Imports Microsoft.Win32

Public Class Form2

    Dim sqlConn As New MySqlConnection

    Dim sqlCommand As New MySqlCommand

    Dim sqlRd As MySqlDataReader

    Dim sqlDt As New DataTable

    Dim sqlQuery As String

    Private Sub Button3_Click_1(sender As Object, e As EventArgs) Handles SignUpbtn.Click

        sqlConn.ConnectionString = "password=21Edward123456789;user id=root;server=localhost;database=myconnector"

        Try

            sqlConn.Open()

            sqlQuery = "Insert into myconnector.farmer(Farmer_Name, Email, Passwords, Location, Date_of_Birth, User_Type, Gender, phone, FarmName, Livestock_No, Product )"

            values("'" & NameBox.Text & "','" & EmailBox.Text.Trim.ToLower & "','" & PasswordBox.Text & "','" & LocationBox.Text & "','" & DateTimePicker1.Text & "','" & "User" & "','" & ComboBox1.Text & "','" & phoneBox.Text & "','" & FarmNameBox.Text & "','" & NoBox.Text & "','" & productBox.Text & "'")

            sqlCommand = New MySqlCommand(sqlQuery, sqlConn)

            sqlRd = sqlCommand.ExecuteReader

            sqlConn.Close()

            Catch ex As Exception

                MessageBox.Show(ex.Message, "MySQL Commector ", MessageBoxButtons.OK, MessageBoxIcon.Information)

            Me.Close()

            Finally

                sqlConn.Dispose()

            End Try

            updateTable()

            MsgBox("Sign up Successful")

            Me.Hide()

        End Sub

        Private Sub Exitbtn_Click(sender As Object, e As EventArgs) Handles Exitbtn.Click

            HomeForm.Show()

            Me.Close()

        End Sub

        Private Sub Label1_Click(sender As Object, e As EventArgs) Handles Loginbtn.Click

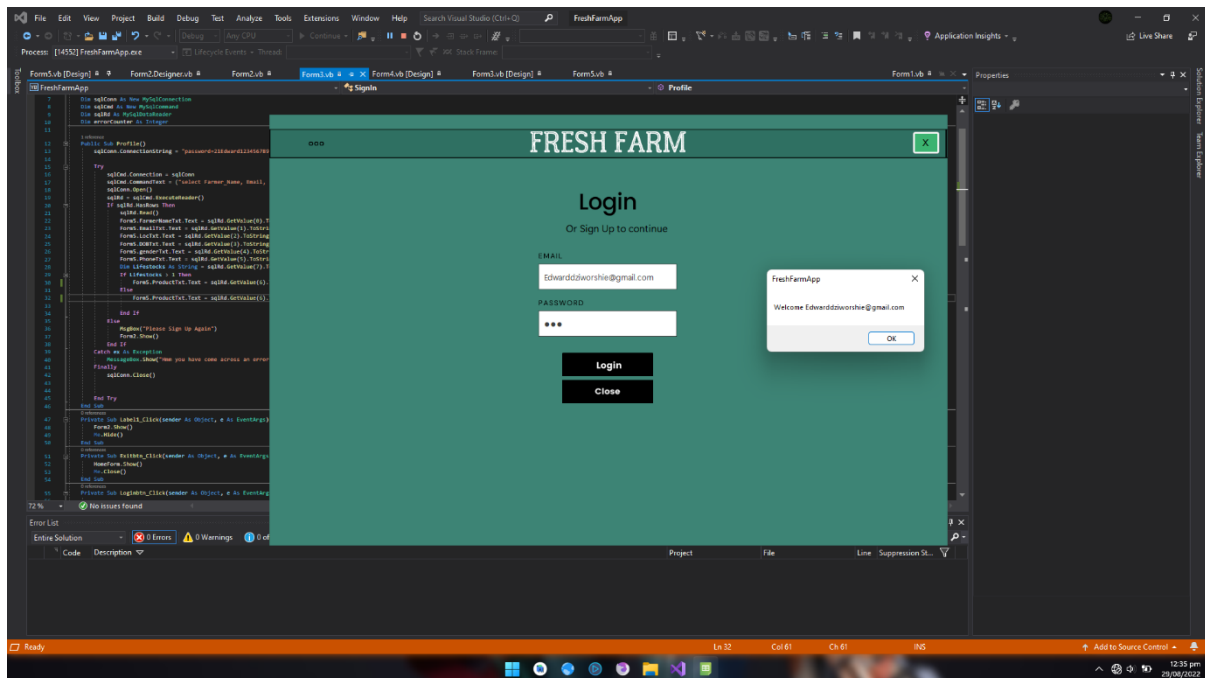
            SignIn.Show()

            Me.Close()

        End Sub
    End Class

```


Form3



The code that inputs the data into the database is down below

Public Sub Profile()

```
sqlConn.ConnectionString = "password=21Edward123456789;user id=root;server=localhost;database=myconnector"
```

Try

```
sqlCmd.Connection = sqlConn
```

```
sqlCmd.CommandText = ("select Farmer_Name, Email, Location, Date_of_Birth, Gender, phone, FarmName, Livestock_No, Product FROM myconnector.farmer WHERE Email ='" + EmailBox.Text.Trim.ToLower + "'")
```

```
sqlConn.Open()
```

```
sqlRd = sqlCmd.ExecuteReader()
```

```
If sqlRd.HasRows Then
```

```
sqlRd.Read()
```

```
Form5.Namelbl.Text = sqlRd.GetValue(0).ToString()
```

```
Form5.FarmerNameTxt.Text = sqlRd.GetValue(6).ToString()
```

```
Form5.EmailTxt.Text = sqlRd.GetValue(1).ToString()
```

```
Form5.LocTxt.Text = sqlRd.GetValue(2).ToString()
```

```
Form5.DOBTxt.Text = sqlRd.GetValue(3).ToString.Substring(0, 10)
```

```
Form5.genderTxt.Text = sqlRd.GetValue(4).ToString()
```

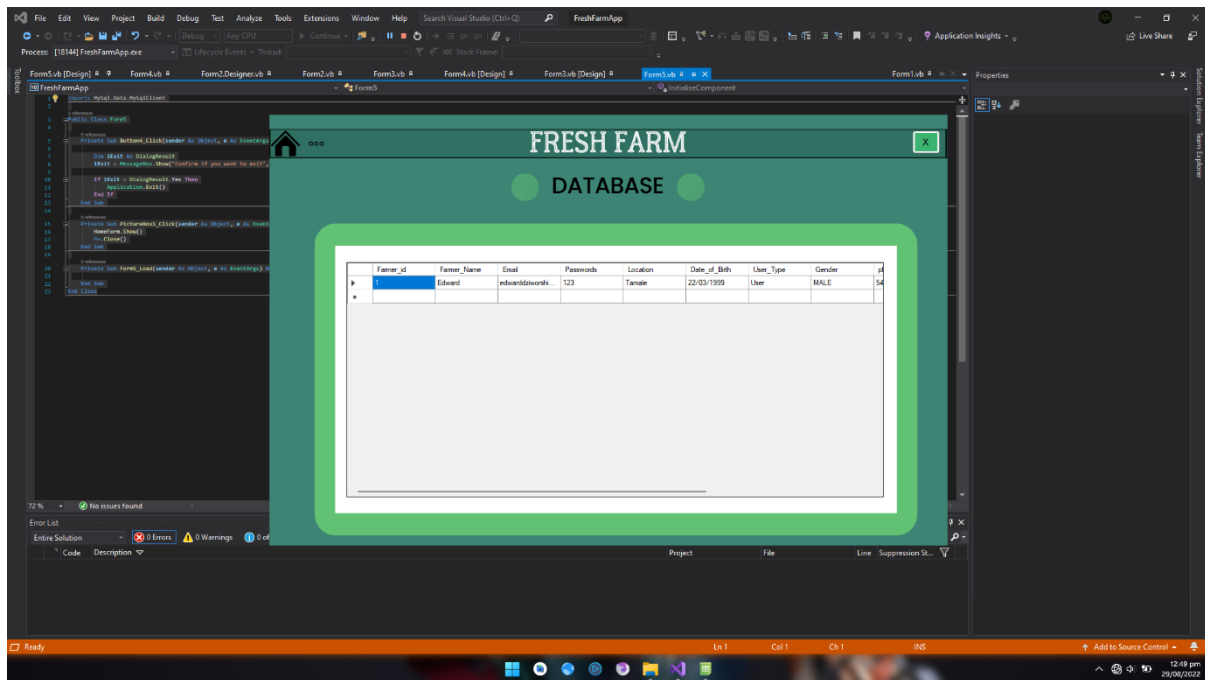
```
Form5.PhoneTxt.Text = sqlRd.GetValue(5).ToString()
```

```
Dim Lifestocks As String = sqlRd.GetValue(7).ToString()
```

```
If Lifestocks > 1 Then
```

```
Form5.ProductTxt.Text = sqlRd.GetValue(8).ToString() & " and Lifestocks"
```

Form4



This block of code used to update of refresh the form4 's DataGridView

```
Private Sub updateTable()
```

```
    sqlConn.ConnectionString = "password=21Edward123456789;user  
id=root;server=localhost;database=myconnector"
```

```
    sqlConn.Open()
```

```
    sqlCmd.Connection = sqlConn
```

```
    sqlCmd.CommandText = "SELECT * FROM myconnector.farmer;"
```

```
    sqlRd = sqlCmd.ExecuteReader
```

```
    sqlDt.Load(sqlRd)
```

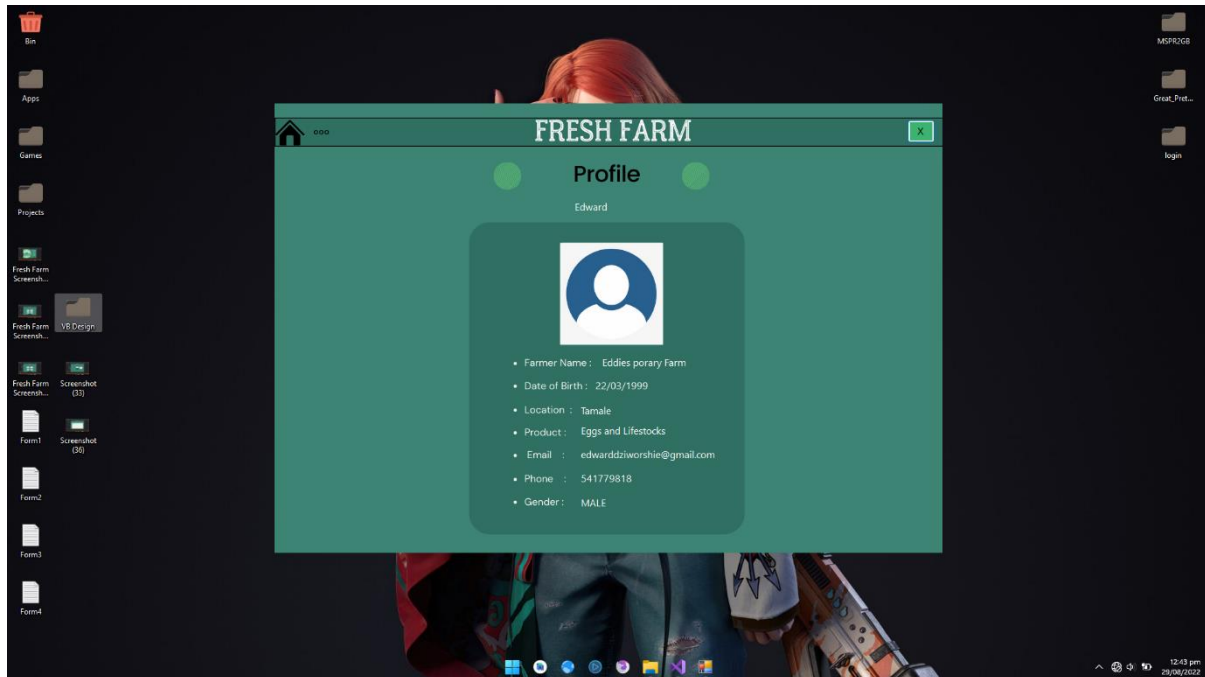
```
    sqlRd.Close()
```

```
    sqlConn.Close()
```

```
    Form4.DataGridView1.DataSource = sqlDt
```

```
End Sub
```

Form5



TOOLS AND TECHNOLOGIES / APPROACH

1. VB.NET stands for Visual Basic.NET, and it is a computer programming language developed by Microsoft. It was first released in 2002 to replace Visual Basic 6. VB.NET is an object-oriented programming language.
1. MySQL, the most popular Open-Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. The MySQL website (<http://www.mysql.com/>) provides the latest information about MySQL software. MySQL is a database management system. A database is a structured collection of data.
2. Windows 11 is an operating system designed by Microsoft. All the applications run on this software.
3. Visual studio 2019 is a standalone source code editor that runs on Windows, macOS, and Linux. The top pick for JavaScript and web developers, with extensions to support just about any programming language.

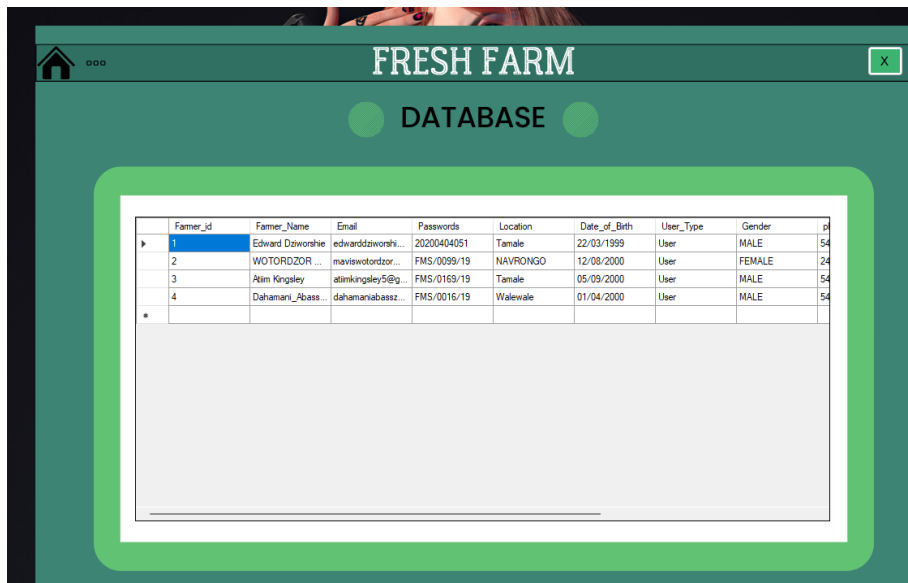
4. MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modeling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more.
5. Canva is a graphic design platform, used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use.

Hardware Requirements to run software

- Processor – Pentium IV or higher version.
- Ram – 2 GB.
- Hard Disk – 126 MB.

CONCLUSION

In conclusion, the Group completed the project successfully and tested the application by inputting some farmer information by using member name as farmer name and Ids as passwords.



The screenshot shows a web application interface with a dark green header bar containing a home icon, the text 'FRESH FARM', and a close button. Below the header, the word 'DATABASE' is centered in white. A table with farmer information is displayed within a light green border. The table has columns for Farmer_id, Farmer_Name, Email, Passwords, Location, Date_of_Birth, User_Type, and Gender. The first row is highlighted in blue. Below the table is a large empty text area.

Farmer_id	Farmer_Name	Email	Passwords	Location	Date_of_Birth	User_Type	Gender
1	Edward Ddvorshie	edwardddvorshi...	20200404051	Tamale	22/03/1999	User	MALE
2	WOTORDZOR ...	maviewotordzor...	FMS/0099/19	NAVRONGO	12/08/2000	User	FEMALE
3	Atim Kingsley	atimkingsley5@g...	FMS/0169/19	Tamale	05/09/2000	User	MALE
4	Dahamani_Abass...	dahamaniabassz...	FMS/0016/19	Walewale	01/04/2000	User	MALE