

Smt. Chandaben Mohanbhai Patel Institute of
Computer Applications

BSc.IT SEMESTER 5

CA602 APPLICATION DEVELOPMENT USING .NET FRAMEWORK

CASE STUDY TOPIC – INVENTORY MANAGEMENT SYSTEM

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Inventory Management

Inventory management refers to the process of ordering, storing, using, and selling a company's inventory. This includes the management of raw materials, components, and finished products, as well as warehousing and processing of such items.



Database: Inventory_database.mdf

Table Name: User_detail

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Username	varchar(50)	It stores the username which the admin is required to input
Password	varchar(50)	It stores the username which the admin is required to input
Firstname	varchar(50)	First name of the admin
Lastname	varchar(50)	Last name of the admin
Email	varchar(50)	Email of the admin

Table Name: Units

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
unit	varchar(50)	Stores unit like Kg, grams, etc.

Table Name: Dealer_info

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Dealer_name	varchar(50)	Stores the dealers' names
Dealer_company_name	varchar(50)	Stores dealers' company's names
Contact	varchar(50)	Stores contact number of dealer
Address	varchar(MAX)	Stores address of dealer
City	varchar(50)	Stores dealers' city

Table Name: Product_name

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Product_name	varchar(50)	Stores the names of product that the owner sells

Unit	varchar(50)	Stores the unit (from Units table) of the product
------	-------------	---

Table Name: Purchase_master

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Product_name	varchar(50)	Stores the product name(from Product_name table) bought from the dealer
Product_qty	varchar(50)	Stores the quantity of product bought
Product_unit	varchar(50)	Stores the unit (from Product_name table)
Product_price	varchar(50)	Stores the price of product per unit
Product_total	varchar(50)	Stores the total price base on the qty and price per unit
Purchase_date	varchar(50)	Stores the date on which it was purchased from the dealer
Purchase_partyname	varchar(50)	Stores the name of the dealer(from Dealer_info table) from whom product was bought
Purchase_type	varchar(50)	Stores the payment method(Cash, UPI, debit card, etc.)
Expiry_date	varchar(50)	Stores the expiry date of the product purchased
Profit	varchar(50)	Stores the profit gained from the purchase

Table Name: Stock

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Product_name	varchar(50)	Stores the name of product (from Product_name table) in stock
Product_qty	int	Stores the quantity of product that is available in stock (updates every time when the products are purchased from dealer or sold to consumer)

Product_unit	varchar(50)	Stores the unit (from Product_name table) of product
--------------	-------------	--

Table Name: Order_user

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
First_name	varchar(50)	Stores the first name of the consumer
Last_name	varchar(50)	Stores the last name of the consumer
Bill_type	varchar(50)	Stores the payment method used by the consumer
Purchase_date	varchar(50)	Stores the date on which the consumer bought the product(s)

Table Name: Order_Item

Column Name	Data type	Purpose
Id	int	Id of the row (Primary key) auto incremented
Order_id	varchar(50)	Stores the Id from Order_user table
Product	varchar(50)	Stores product name bought by consumer
Price	varchar(50)	Stores the price (from Purchase_master table) of the product per unit
Quantity	varchar(50)	Stores the quantity (from Stock table) of product bought by consumer
Total	varchar(50)	Stores the total price to paid for that product bought

Code:**Program.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Login_Form());
        }
    }
}
```

```
}
```

Login_form.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    public partial class Login_Form : Form
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Documents\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");

        public Login_Form()
        {

            InitializeComponent();
        }
    }
}
```

```
        details_fetch();  
        textBox1.Text = null;  
        textBox2.Text = null;  
    }
```

```
void details_fetch()  
{  
    String q = "select Username,Password from User_detail";  
    SqlCommand cmd = new SqlCommand(q, con);  
    con.Open();  
    SqlDataReader sdr = cmd.ExecuteReader();  
    while (sdr.Read())  
    {  
        name = sdr[0].ToString();  
        pw = sdr[1].ToString();  
    }  
    con.Close();  
}  
String name,pw;  
private void button1_Click(object sender, EventArgs e)  
{  
  
    if(textBox1.Text!="" && textBox2.Text!="")  
    {
```



```
if (textBox1.Text != name && textBox2.Text != pw)
{
    MessageBox.Show("Username and Password Invalid");
    textBox1.Clear();
    textBox2.Clear();
}
else if (textBox1.Text!=name)
{
    MessageBox.Show("Username Invalid");
    textBox1.Clear();
}
else if(textBox2.Text != pw)
{
    MessageBox.Show("Password Invalid");
    textBox2.Clear();
}
else
{
    this.Hide();
    Home h = new Home();
    h.Show();
}
}
```

else

```
        {  
            MessageBox.Show("Enter credentials");  
        }  
    }  
}  
}
```

Home.cs

```
using System;  
using System.Collections.Generic;  
using System.ComponentModel;  
using System.Data;  
using System.Drawing;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
using System.Windows.Forms;  
  
namespace ADNF_casestudy  
{  
    public partial class Home : Form  
    {  
        private int childFormNumber = 0;  
        public Home()
```

```
{  
    InitializeComponent();  
}
```

```
private void ShowNewForm(object sender, EventArgs e)  
{  
    Form childForm = new Form();  
    childForm.MdiParent = this;  
    childForm.Text = "Window " + childFormNumber++;  
    childForm.Show();  
}
```

```
private void OpenFile(object sender, EventArgs e)  
{  
    OpenFileDialog openFileDialog = new OpenFileDialog();  
    openFileDialog.InitialDirectory =  
Environment.GetFolderPath(Environment.SpecialFolder.Personal);  
    openFileDialog.Filter = "Text Files (*.txt) | *.txt | All Files (*.*) | *.*";  
    if (openFileDialog.ShowDialog(this) == DialogResult.OK)  
    {  
        string FileName = openFileDialog.FileName;  
    }  
}
```

```
private void SaveAsToolStripMenuItem_Click(object sender, EventArgs e)
```

```

    {
        SaveFileDialog saveFileDialog = new SaveFileDialog();
        saveFileDialog.InitialDirectory =
Environment.GetFolderPath(Environment.SpecialFolder.Personal);
        saveFileDialog.Filter = "Text Files (*.txt) | *.txt | All Files (*.*) | *.*";
        if (saveFileDialog.ShowDialog(this) == DialogResult.OK)
        {
            string FileName = saveFileDialog.FileName;
        }
    }

    private void ExitToolStripMenuItem_Click(object sender, EventArgs e)
    {
        this.Close();
    }

    private void CutToolStripMenuItem_Click(object sender, EventArgs e)
    {
    }

    private void CopyToolStripMenuItem_Click(object sender, EventArgs e)
    {
    }

    private void PasteToolStripMenuItem_Click(object sender, EventArgs e)

```

```
{  
}
```

```
private void ToolBarToolStripMenuItem_Click(object sender, EventArgs e)  
{  
    //toolStrip.Visible = toolBarToolStripMenuItem.Checked;  
}
```

```
private void StatusBarToolStripMenuItem_Click(object sender, EventArgs e)  
{  
    //statusStrip.Visible = statusBarToolStripMenuItem.Checked;  
}
```

```
private void CascadeToolStripMenuItem_Click(object sender, EventArgs e)  
{  
    LayoutMdi(MdiLayout.Cascade);  
}
```

```
private void TileVerticalToolStripMenuItem_Click(object sender, EventArgs e)  
{  
    LayoutMdi(MdiLayout.TileVertical);  
}
```

```
private void TileHorizontalToolStripMenuItem_Click(object sender, EventArgs  
e)
```

```
{  
    LayoutMdi(MdiLayout.TileHorizontal);  
}
```

```
private void ArrangelconsToolStripMenuItem_Click(object sender, EventArgs  
e)
```

```
{  
    LayoutMdi(MdiLayout.Arrangelcons);  
}
```

```
private void CloseAllToolStripMenuItem_Click(object sender, EventArgs e)
```

```
{  
    foreach (Form childForm in MdiChildren)  
    {  
        childForm.Close();  
    }  
}
```

```
private void addNewUnitsToolStripMenuItem_Click(object sender, EventArgs  
e)
```

```
{  
    Unit un = new Unit();  
    un.Show();  
}
```

```
private void aboutUserToolStripMenuItem_Click(object sender, EventArgs e)
{
    User_info us = new User_info();
    us.Show();
}
```

```
private void addProductsToolStripMenuItem_Click(object sender, EventArgs
e)
{
    Modify_Products ap = new Modify_Products();
    ap.Show();
}
```

```
private void modifyDealersToolStripMenuItem_Click(object sender,
EventArgs e)
{
    Dealer_info di = new Dealer_info();
    di.Show();
}
```

```
private void purchaseProductsToolStripMenuItem_Click(object sender,
EventArgs e)
{
    Purchase_product pur = new Purchase_product();
    pur.Show();
}
```

```
}
```

```
private void salesProductsToolStripMenuItem_Click(object sender, EventArgs e)
```

```
{
```

```
    Sales sale = new Sales();
```

```
    sale.Show();
```

```
}
```

```
private void purchaseReportToolStripMenuItem_Click(object sender, EventArgs e)
```

```
{
```

```
    Purchase_report pr = new Purchase_report();
```

```
    pr.Show();
```

```
}
```

```
private void stocksReportToolStripMenuItem_Click(object sender, EventArgs e)
```

```
{
```

```
    Stock_report sr = new Stock_report();
```

```
    sr.Show();
```

```
}
```

```
private void orderDetailReportToolStripMenuItem_Click(object sender, EventArgs e)
```

```
{
```



```
        Order_detail_report odr = new Order_detail_report();  
        odr.Show();  
    }  
}  
}
```

User_info.cs

```
using System;  
using System.Collections.Generic;  
using System.ComponentModel;  
using System.Data;  
using System.Data.SqlClient;  
using System.Drawing;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
using System.Windows.Forms;  
  
namespace ADNF_casestudy  
{  
    public partial class User_info : Form  
    {  
        public User_info()  
        {  

```

```

        InitializeComponent();
    }

    SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");

    private void User_info_Load(object sender, EventArgs e)
    {
        String q1 = "select Firstname,Lastname,Email from User_Detail";

        SqlCommand cmd1 = new SqlCommand(q1, con);

        con.Open();

        SqlDataReader sdr1 = cmd1.ExecuteReader();

        while (sdr1.Read())
        {
            label4.Text = sdr1[0].ToString();
            label5.Text = sdr1[1].ToString();
            label6.Text = sdr1[2].ToString();
        }

        con.Close();
    }
}

```

```
}
```

Modify_Products.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    public partial class Modify_Products : Form
    {
        public Modify_Products()
        {
            InitializeComponent();
            fill_cbox();
            display();
        }
    }
}
```

```
}
```

```
SqlConnection con = new SqlConnection(@"Data  
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Documents\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");
```

```
public static bool Validations(String str)
```

```
{
```

```
    //Only alphabets are allowed here
```

```
    bool output = true;
```

```
    String regex1 = "[^a-zA-Z ]+";
```

```
    Regex rgex1 = new Regex(regex1);
```

```
    if (str == null)
```

```
    {
```

```
        output = false;
```

```
        return output;
```

```
    }
```

```
    MatchCollection matchedAuthors1 = rgex1.Matches(str);
```

```
    if (matchedAuthors1.Count != 0)
```

```
    {
```

```
        output = false;
```

```
        return output;
```

```
    }
```

```
    else
```

```

        {
            return output;
        }
    }

void fill_cbox()
{
    String q = "select unit from Units";
    SqlCommand cmd = new SqlCommand(q, con);
    con.Open();
    SqlDataReader sdr = cmd.ExecuteReader();
    while (sdr.Read())
    {
        comboBox1.Items.Add(sdr[0].ToString());
        comboBox2.Items.Add(sdr[0].ToString());

    }
    con.Close();
}

public void display()
{
    String q = "select * from Product_name";
    SqlDataAdapter sda = new SqlDataAdapter(q, con);
    DataSet ds = new DataSet();

```

```

        sda.Fill(ds);
        dataGridView1.DataSource = ds.Tables[0];
    }

private void insert_btn_Click(object sender, EventArgs e)
{
    if(textBox1.Text != "" && comboBox1.Text != "")
    {
        if (Validations(textBox1.Text))
        {
            String q = "insert into Product_name values(@product,@unit)";
            SqlCommand cmd = new SqlCommand(q, con);
            cmd.Parameters.AddWithValue("@product", textBox1.Text);
            cmd.Parameters.AddWithValue("@unit", comboBox1.SelectedItem);
            con.Open();
            cmd.ExecuteNonQuery();
            con.Close();
            MessageBox.Show("Data inserted");
            textBox1.Clear();
            comboBox1.ResetText();
            display();
        }
        else

```

```

        {
            MessageBox.Show("Enter Product name properly");
            textBox1.Clear();
        }
    }
    else
    {
        MessageBox.Show("Enter all product details");
    }

}

int i;

private void dataGridView1_CellClick(object sender,
DataGridViewCellEventArgs e)
{
    i = Convert.ToInt32(dataGridView1.SelectedCells[0].Value.ToString());

    String q1 = "select * from Product_name where id = '"+i+"'";
    SqlDataAdapter sda1 = new SqlDataAdapter(q1, con);
    DataTable dt1 = new DataTable();
    sda1.Fill(dt1);
    foreach (DataRow dr1 in dt1.Rows)
    {

```

```
        textBox2.Text = dr1["Product_name"].ToString();
        comboBox2.SelectedItem = dr1["Unit"].ToString();
    }
}
```

```
private void update_btn_Click(object sender, EventArgs e)
{
    if(textBox2.Text != "" && comboBox2.Text != "")
    {
        if (Validations(textBox2.Text))
        {
            String q = "update Product_name set Product_name = @product,Unit
= @unit where id = '" + i + "'";

            SqlCommand cmd = new SqlCommand(q, con);
            cmd.Parameters.AddWithValue("@product", textBox2.Text);
            cmd.Parameters.AddWithValue("@unit", comboBox2.SelectedItem);
            con.Open();
            cmd.ExecuteNonQuery();
            con.Close();
            MessageBox.Show("Data updated");
            textBox2.Clear();
            comboBox2.ResetText();
            display();
        }
        else
```



```
        {
            MessageBox.Show("Enter Product name properly");
            textBox2.Clear();
        }
    }
    else
    {
        MessageBox.Show("Enter all product details");
    }
}
}
}
```

Purchase_product.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
```

```
using System.Windows.Forms;
```

```
namespace ADNF_casestudy
```

```
{
```

```
    public partial class Purchase_product : Form
```

```
    {
```

```
        public Purchase_product()
```

```
        {
```

```
            InitializeComponent();
```

```
            fill_cb1();
```

```
        }
```

```
        SqlConnection con = new SqlConnection(@"Data  
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Documents\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");
```

```
        public void fill_cb1()
```

```
        {
```

```
            String q1 = "select Product_name from Product_name";
```

```
            String q2 = "select Dealer_name from Dealer_info";
```

```
            SqlCommand cmd1 = new SqlCommand(q1, con);
```

```
            SqlCommand cmd2 = new SqlCommand(q2, con);
```

```
            con.Open();
```

```
            SqlDataReader sdr1 = cmd1.ExecuteReader();
```

```
            while (sdr1.Read())
```

```
            {
```

```

        comboBox1.Items.Add(sdr1[0].ToString());
    }

    con.Close();

    con.Open();
    SqlDataReader sdr2 = cmd2.ExecuteReader();

    while (sdr2.Read())
    {
        comboBox2.Items.Add(sdr2[0].ToString());
    }

    con.Close();
}

private void pur_item_btn_Click(object sender, EventArgs e)
{
    if(textBox1.Text!="" && textBox2.Text != "" && textBox3.Text != "" &&
    textBox4.Text != "" && comboBox1.Text != "" && comboBox2.Text != "" &&
    comboBox3.Text != "")
    {
        if(Validations2(textBox1.Text) && Validations2(textBox2.Text) &&
        Validations2(textBox3.Text) && Validations2(textBox4.Text))
        {
            int i = 0;

```

```

decimal qty = Convert.ToDecimal(textBox1.Text);
String q = "select Product_qty from stock where Product_name=@pn";
SqlCommand cmd = new SqlCommand(q, con);
cmd.Parameters.AddWithValue("@pn", comboBox1.SelectedItem);
con.Open();
SqlDataReader sdr = cmd.ExecuteReader();
while (sdr.Read())
{
    i++;
    qty = Convert.ToDecimal((sdr[0]));
}
con.Close();

if (i == 0)
{
    String q1 = "insert into Purchase_master
values(@pro_n,@pro_q,@pro_u,@pro_p,@pro_t,@pur_d,@pur_p,@pur_t,@exp
_d,@profit)";

    SqlCommand cmd1 = new SqlCommand(q1, con);
    cmd1.Parameters.AddWithValue("@pro_n",
comboBox1.SelectedItem);

    cmd1.Parameters.AddWithValue("@pro_q", textBox1.Text);
    cmd1.Parameters.AddWithValue("@pro_u", label10.Text);
    cmd1.Parameters.AddWithValue("@pro_p", textBox2.Text);
    cmd1.Parameters.AddWithValue("@pro_t", textBox3.Text);

```

```
        cmd1.Parameters.AddWithValue("@pur_d",
dateTimePicker1.Value.ToString("dd-MM-yyyy"));

        cmd1.Parameters.AddWithValue("@pur_p",
comboBox2.SelectedItem);

        cmd1.Parameters.AddWithValue("@pur_t",
comboBox3.SelectedItem);

        cmd1.Parameters.AddWithValue("@exp_d",
dateTimePicker2.Value.ToString("dd-MM-yyyy"));

        cmd1.Parameters.AddWithValue("@profit", textBox4.Text);


        con.Open();
        cmd1.ExecuteNonQuery();
        con.Close();


        String q2 = "insert into Stock values(@pro_n,@pro_q,@pro_u)";
        SqlCommand cmd2 = new SqlCommand(q2, con);

        cmd2.Parameters.AddWithValue("@pro_n",
comboBox1.SelectedItem);

        cmd2.Parameters.AddWithValue("@pro_q", textBox1.Text);
        cmd2.Parameters.AddWithValue("@pro_u", label10.Text);


        con.Open();
        cmd2.ExecuteNonQuery();
        con.Close();

        MessageBox.Show("Data inserted");
    }
```

```
else
{
    String q3 = "insert into Purchase_master
values(@pro_n,@pro_q,@pro_u,@pro_p,@pro_t,@pur_d,@pur_p,@pur_t,@exp
_d,@profit)";

    SqlCommand cmd3 = new SqlCommand(q3, con);

    cmd3.Parameters.AddWithValue("@pro_n",
comboBox1.SelectedItem);

    cmd3.Parameters.AddWithValue("@pro_q", textBox1.Text);
    cmd3.Parameters.AddWithValue("@pro_u", label10.Text);
    cmd3.Parameters.AddWithValue("@pro_p", textBox2.Text);
    cmd3.Parameters.AddWithValue("@pro_t", textBox3.Text);

    cmd3.Parameters.AddWithValue("@pur_d",
dateTimePicker1.Value.ToString("dd-MM-yyyy"));

    cmd3.Parameters.AddWithValue("@pur_p",
comboBox2.SelectedItem);

    cmd3.Parameters.AddWithValue("@pur_t",
comboBox3.SelectedItem);

    cmd3.Parameters.AddWithValue("@exp_d",
dateTimePicker2.Value.ToString("dd-MM-yyyy"));

    cmd3.Parameters.AddWithValue("@profit", textBox4.Text);

    con.Open();
    cmd3.ExecuteNonQuery();
    con.Close();
}
```

```
String q4 = "update Stock set Product_qty=" + (qty +  
Convert.ToDecimal(textBox1.Text)) + " where Product_name=@pro_n";  
  
SqlCommand cmd4 = new SqlCommand(q4, con);  
  
cmd4.Parameters.AddWithValue("@pro_n",  
comboBox1.SelectedItem);  
  
cmd4.Parameters.AddWithValue("@pro_q", textBox1.Text);  
  
  
con.Open();  
cmd4.ExecuteNonQuery();  
con.Close();  
MessageBox.Show("Data inserted");  
textBox1.Clear();  
textBox2.Clear();  
textBox3.Clear();  
textBox4.Clear();  
comboBox1.ResetText();  
comboBox2.ResetText();  
comboBox3.ResetText();  
dateTimePicker1.ResetText();  
dateTimePicker2.ResetText();  
}  
}  
else  
{  
    MessageBox.Show("Enter proper data ");
```

```
    }  
}  
else  
{  
    MessageBox.Show("Enter all data ");  
}  
  
}
```

```
public static bool Validations2(String str)  
{  
    //Only numbers are allowed here  
    bool output = true;  
  
    String regex2 = "[^0-9.]+";  
  
    Regex rgex2 = new Regex(regex2);  
    if (str == null)  
    {  
        output = false;  
        return output;  
    }  
  
    MatchCollection matchedAuthors2 = rgex2.Matches(str);
```



```
if (matchedAuthors2.Count != 0)
{
    output = false;
    return output;
}
else
{
    return output;
}
}
```

```
private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
{
    String q = "select Unit from Product_name where
Product_name=@p_name";
    SqlCommand cmd = new SqlCommand(q, con);
    cmd.Parameters.AddWithValue("@p_name", comboBox1.SelectedItem);
    con.Open();
    SqlDataReader sdr = cmd.ExecuteReader();
    while (sdr.Read())
    {
        label10.Text = (sdr[0]).ToString();
    }
    con.Close();
}
```

```

    }

    private void textBox2_Leave(object sender, EventArgs e)
    {
        if (Validations2(textBox1.Text) && Validations2(textBox2.Text))
        {

            textBox3.Text = (Convert.ToDecimal(textBox1.Text) *
Convert.ToDecimal(textBox2.Text)).ToString();

        }
        else
        {
            MessageBox.Show("Enter Product details properly");
            textBox1.Clear();
            textBox2.Clear();
        }
    }
}
}

```

Sales.cs

```

using System;

using System.Collections.Generic;

```

```
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    public partial class Sales : Form
    {
        public Sales()
        {
            InitializeComponent();

            SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");

            DataTable dt = new DataTable();

            decimal tot = 0;

            private void Sales_Load(object sender, EventArgs e)
            {
```

```
dt.Clear();  
dt.Columns.Add("Product");  
dt.Columns.Add("Price");  
dt.Columns.Add("Quantity");  
dt.Columns.Add("Total");  
}
```

```
private void textBox4_KeyUp(object sender, KeyEventArgs e)  
{  
    listBox1.Visible = true;  
  
    listBox1.Items.Clear();  
    String q = "select Product_name from Stock where Product_name like ('"+  
textBox4.Text + "%')";  
    SqlCommand cmd = new SqlCommand(q,con);  
    con.Open();  
    SqlDataReader sdr = cmd.ExecuteReader();  
    while (sdr.Read())  
    {  
        listBox1.Items.Add(sdr[0].ToString());  
    }  
    con.Close();  
}
```

```
private void textBox4_KeyDown(object sender, KeyEventArgs e)
```

```
{  
    if(e.KeyCode==Keys.Down)  
    {  
        listBox1.Focus();  
        listBox1.SelectedIndex = 0;  
    }  
}
```

```
}
```

```
private void listBox1_KeyDown(object sender, KeyEventArgs e)  
{  
    try  
    {  
        if(e.KeyCode == Keys.Down)  
        {  
            this.listBox1.SelectedItem = this.listBox1.SelectedIndex + 1;  
        }  
        if(e.KeyCode == Keys.Up)  
        {  
            this.listBox1.SelectedItem = this.listBox1.SelectedIndex - 1;  
        }  
        if(e.KeyCode == Keys.Enter)  
        {  
            textBox4.Text = listBox1.SelectedItem.ToString();  
        }  
    }  
}
```

```
        listBox1.Visible = false;
        textBox3.Focus();
    }
}
catch(Exception ex)
{

}
}
```

```
private void textBox3_Enter(object sender, EventArgs e)
{
    String q = "select top 1 Product_price from Purchase_master where
Product_name=@pn order by Id desc";
    SqlCommand cmd = new SqlCommand(q, con);
    cmd.Parameters.AddWithValue("@pn", textBox4.Text);
    con.Open();
    SqlDataReader sdr = cmd.ExecuteReader();
    while (sdr.Read())
    {
        textBox3.Text= (sdr[0].ToString());
    }
    con.Close();
}
```

```
private void textBox5_Leave(object sender, EventArgs e)
{
    try
    {
        textBox6.Text = (Convert.ToDecimal(textBox3.Text) *
Convert.ToDecimal(textBox5.Text)).ToString();
    }
    catch(Exception ex)
    {

    }
}
```

```
public static bool Validations(String str)
{
    //Only alphabets are allowed here
    bool output = true;
    String regex1 = "[^a-zA-Z ]+";

    Regex rgex1 = new Regex(regex1);

    if (str == null)
    {
        output = false;
        return output;
    }
}
```

```
    }  
    MatchCollection matchedAuthors1 = rgex1.Matches(str);  
  
    if (matchedAuthors1.Count != 0)  
    {  
        output = false;  
        return output;  
    }  
    else  
    {  
        return output;  
    }  
}
```

```
public static bool Validations2(String str)  
{  
    //Only numbers are allowed here  
    bool output = true;  
  
    String regex2 = "[^0-9.]+";  
  
    Regex rgex2 = new Regex(regex2);  
    if (str == null)  
    {
```



```
        output = false;
        return output;
    }
```

```
MatchCollection matchedAuthors2 = rgex2.Matches(str);
```

```
if (matchedAuthors2.Count != 0)
{
    output = false;
    return output;
}
else
{
    return output;
}
}
```

```
private void add_btn_Click(object sender, EventArgs e)
{
    if(textBox1.Text != "" && textBox2.Text != "" && textBox3.Text != "" &&
    textBox4.Text != "" && textBox5.Text != "" && textBox6.Text != "" &&
    comboBox1.Text != "" )
    {
        if(Validations(textBox1.Text) && Validations(textBox2.Text) &&
        Validations(textBox4.Text) && Validations2(textBox3.Text) &&
        Validations2(textBox5.Text) && Validations2(textBox6.Text))
```

```

    {
        decimal stock = 0;
        String q = "select Product_qty from Stock where Product_name =
@pn";

        SqlCommand cmd = new SqlCommand(q, con);
        cmd.Parameters.AddWithValue("@pn", textBox4.Text);
        con.Open();
        SqlDataReader sdr = cmd.ExecuteReader();
        while (sdr.Read())
        {
            stock = Convert.ToDecimal(sdr[0].ToString());
        }
        con.Close();

        if (Convert.ToDecimal(textBox5.Text) > stock)
        {
            MessageBox.Show("This much stock is not available");
        }
        else
        {
            DataRow dr = dt.NewRow();
            dr["Product"] = textBox4.Text;
            dr["Price"] = textBox3.Text;
            dr["Quantity"] = textBox5.Text;
            dr["Total"] = textBox6.Text;

```

```
        dt.Rows.Add(dr);
        dataGridView1.DataSource = dt;

        tot = tot + Convert.ToDecimal(dr["Total"].ToString());
        label10.Text = tot.ToString();

    }
    textBox3.Clear();
    textBox4.Clear();
    textBox5.Clear();
    textBox6.Clear();
}
else
{
    MessageBox.Show("Enter proper data");
}
}
else
{
    MessageBox.Show("Enter all the data");
}
}
```

```

private void del_btn_Click(object sender, EventArgs e)
{
    try
    {
        tot = 0;

dt.Rows.RemoveAt(Convert.ToInt32(dataGridView1.CurrentCell.RowIndex.ToString()));

        foreach(DataRow dr1 in dt.Rows)
        {
            tot = tot + Convert.ToDecimal(dr1["Total"].ToString());
            label10.Text = tot.ToString();
        }
    }
    catch(Exception ex)
    {

    }
}

private void sav_print_btn_Click(object sender, EventArgs e)
{
    if (textBox1.Text != "" && textBox2.Text != "" && comboBox1.Text != "")
    {
        string orderid = "";
        String q = "insert into Order_user values(@fn,@ln,@bt,@pd)";
    }
}

```

```
SqlCommand cmd = new SqlCommand(q, con);  
cmd.Parameters.AddWithValue("@fn", textBox1.Text);  
cmd.Parameters.AddWithValue("@ln", textBox2.Text);  
cmd.Parameters.AddWithValue("@bt", comboBox1.SelectedItem);  
cmd.Parameters.AddWithValue("@pd",  
dateTimePicker1.Value.ToString("dd/MM/yyyy"));
```

```
con.Open();  
cmd.ExecuteNonQuery();  
con.Close();
```

```
String q1 = "select top 1 * from Order_user order by Id desc";  
SqlCommand cmd1 = new SqlCommand(q1, con);  
//cmd1.Parameters.AddWithValue("@pn", textBox4.Text);  
con.Open();  
SqlDataReader sdr = cmd1.ExecuteReader();  
while (sdr.Read())  
{  
    orderid = sdr[0].ToString();  
}  
con.Close();
```

```
foreach (DataRow dr in dt.Rows)  
{
```

```
decimal qty = 0;
string pname = "";
String q2 = "insert into Order_item
values(@oid,@prod,@price,@qty,@tot)";
SqlCommand cmd2 = new SqlCommand(q2, con);
cmd2.Parameters.AddWithValue("@oid", orderid.ToString());
cmd2.Parameters.AddWithValue("@prod", dr["Product"].ToString());
cmd2.Parameters.AddWithValue("@price", dr["Price"].ToString());
cmd2.Parameters.AddWithValue("@qty", dr["Quantity"].ToString());
cmd2.Parameters.AddWithValue("@tot", dr["Total"].ToString());

con.Open();
cmd2.ExecuteNonQuery();
con.Close();

qty = Convert.ToDecimal(dr["Quantity"]);
pname = dr["Product"].ToString();

String q3 = "update Stock set Product_qty=Product_qty-" + qty + "
where Product_name = '" + pname.ToString() + "'";
SqlCommand cmd3 = new SqlCommand(q3, con);

con.Open();
cmd3.ExecuteNonQuery();
con.Close();
```

```
    }  
    textBox1.Clear();  
    textBox2.Clear();  
    textBox3.Clear();  
    textBox4.Clear();  
    textBox5.Clear();  
    textBox6.Clear();  
    label10.Text = "";  
  
    dt.Clear();  
    dataGridView1.DataSource = dt;  
  
    MessageBox.Show("Data inserted");  
}  
else  
{  
    MessageBox.Show("Enter all data properly");  
}  
}  
  
}  
}
```

Unit.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    public partial class Unit : Form
    {
        public Unit()
        {
            InitializeComponent();
            display();
        }

        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");
```



```
public static bool Validations(String str)
{
    //Only alphabets are allowed here
    bool output = true;
    String regex1 = "[^a-zA-Z ]+";

    Regex rgex1 = new Regex(regex1);
    if (str == null)
    {
        output = false;
        return output;
    }
    MatchCollection matchedAuthors1 = rgex1.Matches(str);

    if (matchedAuthors1.Count != 0)
    {
        output = false;
        return output;
    }
    else
    {
        return output;
    }
}
```

```
private void add_unit_btn_Click(object sender, EventArgs e)
{
    if (textBox1.Text != "")
    {
        if (Validations(textBox1.Text))
        {
            int count = 0;
            String q1 = "select * from Units where unit = '" + textBox1.Text + "'";
            SqlDataAdapter sda1 = new SqlDataAdapter(q1, con);
            DataTable ds1 = new DataTable();
            sda1.Fill(ds1);
            count = Convert.ToInt32(ds1.Rows.Count.ToString());

            if (count == 0)
            {
                String q = "insert into Units values(@unit)";
                SqlCommand cmd = new SqlCommand(q, con);
                cmd.Parameters.AddWithValue("@unit", textBox1.Text);
                con.Open();
                cmd.ExecuteNonQuery();
                con.Close();
                MessageBox.Show("Data inserted");
                display();
            }
        }
    }
}
```

```
        textBox1.Clear();
    }
    else
    {
        MessageBox.Show("The unit already exists in database");
        textBox1.Clear();
    }
}
else
{
    MessageBox.Show("Enter a proper unit");
    textBox1.Clear();
}
}
else
{
    MessageBox.Show("Enter unit");
}
}

public void display()
{
    String q = "select * from Units";
```

```
        SqlDataAdapter sda = new SqlDataAdapter(q, con);
        DataSet ds = new DataSet();
        sda.Fill(ds);
        dataGridView1.DataSource = ds.Tables[0];
    }
    int id;
    private void del_unit_btn_Click(object sender, EventArgs e)
    {
        id = Convert.ToInt32(dataGridView1.SelectedCells[0].Value.ToString());
        String q = "delete from Units where Id = '"+id+"'";
        SqlCommand cmd = new SqlCommand(q, con);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        MessageBox.Show("Data deleted");
        display();
        textBox1.Clear();
    }
}
}
```

Dealer_info.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ADNF_casestudy
{
    public partial class Dealer_info : Form
    {
        public Dealer_info()
        {
            InitializeComponent();
            display();
        }

        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");
```

```
public static bool Validations(String str)
{
    //Only alphabets are allowed here
    bool output = true;
    String regex1 = "[^a-zA-Z ]+";

    Regex rgex1 = new Regex(regex1);

    if (str == null)
    {
        output = false;
        return output;
    }
    MatchCollection matchedAuthors1 = rgex1.Matches(str);

    if (matchedAuthors1.Count != 0)
    {
        output = false;
        return output;
    }
    else
    {
        return output;
    }
}
```

```
    }  
}  
  
public static bool Validations2(String str)  
{  
    //Only numbers are allowed here  
    bool output = true;  
  
    String regex2 = "[^0-9]+";  
  
    Regex rgex2 = new Regex(regex2);  
    if (str == null)  
    {  
        output = false;  
        return output;  
    }  
  
    MatchCollection matchedAuthors2 = rgex2.Matches(str);  
  
    if (matchedAuthors2.Count != 0)  
    {  
        output = false;  
        return output;  
    }  
}
```

```

else
{
    return output;
}
}

private void insert_btn_Click(object sender, EventArgs e)
{
    if(textBox1.Text!="" && textBox2.Text != "" && textBox3.Text != "" &&
textBox4.Text != "" && textBox5.Text != "")
    {
        if (Validations(textBox1.Text) && Validations2(textBox3.Text) &&
Validations(textBox5.Text))
        {
            String q = "insert into Dealer_info
values(@dn,@dc,@contact,@address,@city)";

            SqlCommand cmd = new SqlCommand(q, con);
            cmd.Parameters.AddWithValue("@dn", textBox1.Text);
            cmd.Parameters.AddWithValue("@dc", textBox2.Text);
            cmd.Parameters.AddWithValue("@contact", textBox3.Text);
            cmd.Parameters.AddWithValue("@address", textBox4.Text);
            cmd.Parameters.AddWithValue("@city", textBox5.Text);
            con.Open();
            cmd.ExecuteNonQuery();
            con.Close();
            MessageBox.Show("Data inserted");

```



```
        display();
        textBox1.Clear();
        textBox2.Clear();
        textBox3.Clear();
        textBox4.Clear();
        textBox5.Clear();
    }
    else
    {
        MessageBox.Show("Enter dealer details properly");
        textBox1.Clear();
        textBox3.Clear();
        textBox5.Clear();
    }
}
else
{
    MessageBox.Show("Enter all the dealer details");
}

}

public void display()
```

```

{
    String q = "select * from Dealer_info";
    SqlDataAdapter sda = new SqlDataAdapter(q, con);
    DataSet ds = new DataSet();
    sda.Fill(ds);
    dataGridView1.DataSource = ds.Tables[0];
}

int id;

private void delete_btn_Click(object sender, EventArgs e)
{
    id = Convert.ToInt32(dataGridView1.SelectedCells[0].Value.ToString());
    String q = "delete from Dealer_info where Id = " + id + "";
    SqlCommand cmd = new SqlCommand(q, con);
    con.Open();
    cmd.ExecuteNonQuery();
    con.Close();
    display();
}

private void update_sel_btn_Click(object sender, EventArgs e)
{
    id = Convert.ToInt32(dataGridView1.SelectedCells[0].Value.ToString());
    panel2.Visible = true;
}

```

```

String q = "select * from Dealer_info where id=" + id + "";
SqlDataAdapter sda = new SqlDataAdapter(q, con);
DataTable dt = new DataTable();

sda.Fill(dt);
foreach (DataRow dr in dt.Rows)
{
    textBox6.Text = dr["Dealer_name"].ToString();
    textBox7.Text = dr["Dealer_company_name"].ToString();
    textBox8.Text = dr["Contact"].ToString();
    textBox9.Text = dr["Address"].ToString();
    textBox10.Text = dr["City"].ToString();
}
}

private void update_btn_Click(object sender, EventArgs e)
{
    if (textBox6.Text != "" && textBox7.Text != "" && textBox8.Text != "" &&
    textBox9.Text != "" && textBox10.Text != "")
    {

        if (Validations(textBox6.Text) && Validations2(textBox8.Text) &&
        Validations(textBox10.Text))
        {

```

```
String q = "update dealer_info set  
Dealer_name=@dn,Dealer_company_name=@dc,Contact=@contact,Address=@a  
ddress,City=@city where id=" + id + "";
```

```
SqlCommand cmd = new SqlCommand(q, con);  
cmd.Parameters.AddWithValue("@dn", textBox6.Text);  
cmd.Parameters.AddWithValue("@dc", textBox7.Text);  
cmd.Parameters.AddWithValue("@contact", textBox8.Text);  
cmd.Parameters.AddWithValue("@address", textBox9.Text);  
cmd.Parameters.AddWithValue("@city", textBox10.Text);  
con.Open();  
cmd.ExecuteNonQuery();  
con.Close();  
MessageBox.Show("Dealer details updated");  
display();  
textBox6.Clear();  
textBox7.Clear();  
textBox8.Clear();  
textBox9.Clear();  
textBox10.Clear();  
}  
else  
{  
    MessageBox.Show("Enter dealer details properly");  
}
```

```
    }  
    else  
    {  
        MessageBox.Show("Enter all the dealer details");  
    }  
}  
}
```

Purchase_report.cs

```
using System;  
using System.Collections.Generic;  
using System.ComponentModel;  
using System.Data;  
using System.Data.SqlClient;  
using System.Drawing;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
using System.Windows.Forms;  
  
namespace ADNF_casestudy  
{  
    public partial class Purchase_report : Form
```

```

{
    public Purchase_report()
    {
        InitializeComponent();
    }

    SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");

    private void view_all_btn_Click(object sender, EventArgs e)
    {

        decimal i = 0;
        String q = "select * from Purchase_master";
        SqlDataAdapter sda = new SqlDataAdapter(q, con);
        DataSet ds = new DataSet();
        sda.Fill(ds);
        dataGridView1.DataSource = ds.Tables[0];

        String q1 = "select Product_total from Purchase_master";
        SqlCommand cmd = new SqlCommand(q1, con);

        con.Open();
        SqlDataReader sdr = cmd.ExecuteReader();
        while (sdr.Read())

```

```
{  
    i = i + Convert.ToDecimal(sdr[0]);  
}  
con.Close();  
label3.Text = i.ToString();  
}
```

```
private void search_btn_Click(object sender, EventArgs e)  
{  
    string start_date, end_date;  
  
    start_date = dateTimePicker1.Value.ToString("dd/MM/yyyy");  
    end_date = dateTimePicker2.Value.ToString("dd/MM/yyyy");  
    decimal i = 0;  
  
    String q = "select * from Purchase_master where  
Purchase_date>='" + start_date + "' AND Purchase_date<='" + end_date + "'";  
  
    SqlDataAdapter sda = new SqlDataAdapter(q, con);  
  
    DataSet ds = new DataSet();  
  
    sda.Fill(ds);  
  
    dataGridView1.DataSource = ds.Tables[0];  
  
  
    String q1 = "select Product_total from Purchase_master where  
Purchase_date>='" + start_date + "' AND Purchase_date<='" + end_date + "'";  
  
    SqlCommand cmd = new SqlCommand(q1, con);
```

```
        con.Open();  
        SqlDataReader sdr = cmd.ExecuteReader();  
        while (sdr.Read())  
        {  
            i = i + Convert.ToDecimal(sdr[0]);  
        }  
        con.Close();  
        label3.Text = i.ToString();  
    }  
}  
}
```

Stock_report.cs

```
using System;  
using System.Collections.Generic;  
using System.ComponentModel;  
using System.Data;  
using System.Data.SqlClient;  
using System.Drawing;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
using System.Windows.Forms;
```



```

namespace ADNF_casestudy
{
    public partial class Stock_report : Form
    {
        public Stock_report()
        {
            InitializeComponent();

            SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");

            private void Stock_report_Load(object sender, EventArgs e)
            {
                String q = "select * from Stock";
                SqlDataAdapter sda = new SqlDataAdapter(q, con);
                DataSet ds = new DataSet();
                sda.Fill(ds);
                dataGridView1.DataSource = ds.Tables[0];
            }
        }
    }
}

```

Order_detail_report.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
```

```
namespace ADNF_casestudy
```

```
{
```

```
    public partial class Order_detail_report : Form
```

```
    {
```

```
        public Order_detail_report()
```

```
        {
```

```
            InitializeComponent();
```

```
        }
```

```
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Welcome\Docume
nts\Inventory_Database.mdf;Integrated Security=True;Connect Timeout=30");
```

```
private void view_all_btn_Click(object sender, EventArgs e)
{

    decimal i = 0;

    String q = "select * from Order_Item oi left join Order_user ou on
oi.Order_id = ou.Id";

    SqlDataAdapter sda = new SqlDataAdapter(q, con);

    DataSet ds = new DataSet();

    sda.Fill(ds);

    dataGridView1.DataSource = ds.Tables[0];


    String q1 = "select Total from Order_Item oi left join Order_user ou on
oi.Order_id = ou.Id";

    SqlCommand cmd = new SqlCommand(q1, con);

    con.Open();

    SqlDataReader sdr = cmd.ExecuteReader();

    while (sdr.Read())
    {

        i = i + Convert.ToDecimal(sdr[0]);

    }

    con.Close();

    label3.Text = i.ToString();

}
```

```
private void search_btn_Click(object sender, EventArgs e)
{
    if (comboBox1.Text != "")
    {
        decimal i = 0;

        String q = "select * from Order_Item i left join Order_user u on i.Order_id
= u.Id where u.Bill_type = '" + (comboBox1.SelectedItem).ToString() + "'";

        SqlDataAdapter sda = new SqlDataAdapter(q, con);

        DataSet ds = new DataSet();

        sda.Fill(ds);

        dataGridView1.DataSource = ds.Tables[0];

        String q1 = "select Total from Order_Item oi left join Order_user ou on
oi.Order_id = ou.Id";

        SqlCommand cmd = new SqlCommand(q1, con);

        con.Open();

        SqlDataReader sdr = cmd.ExecuteReader();

        while (sdr.Read())
        {
            i = i + Convert.ToDecimal(sdr[0]);
        }

        con.Close();

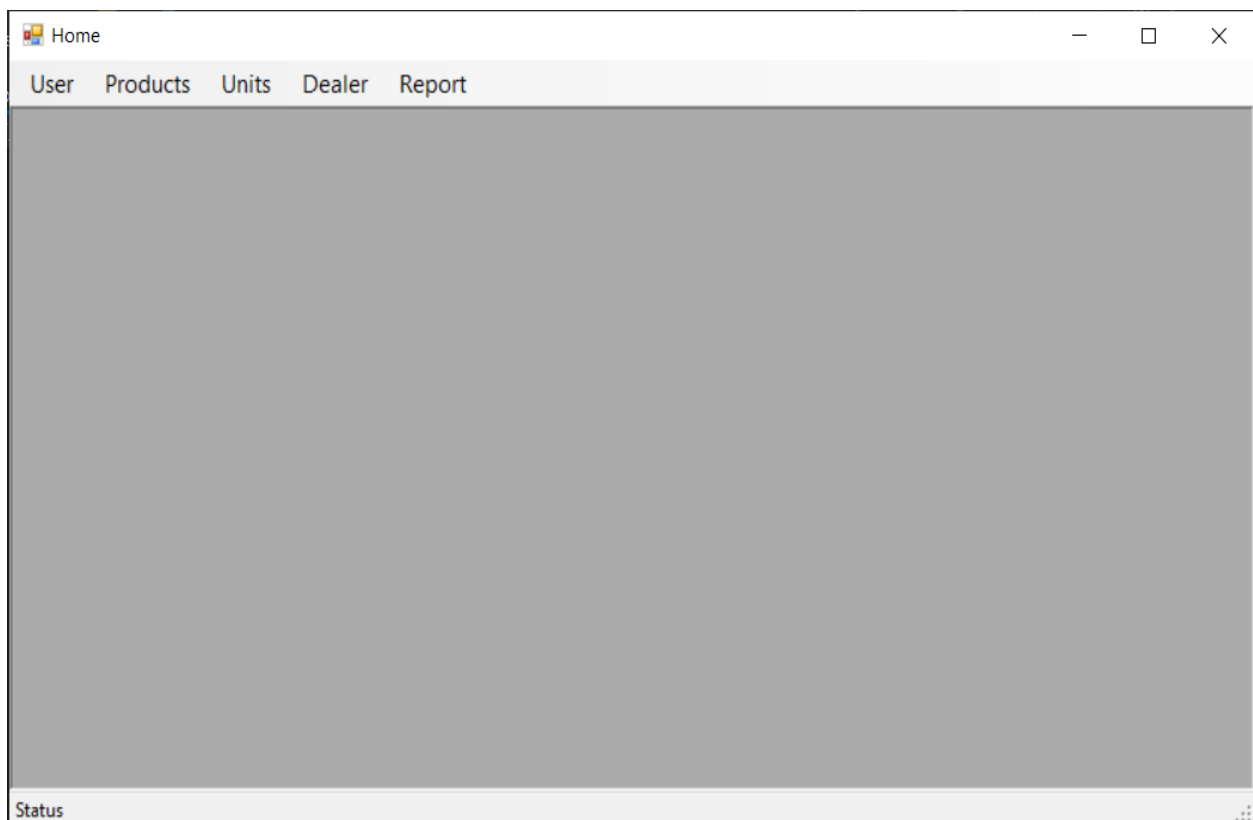
        label3.Text = i.ToString();
    }
}
```

```
    }  
    else  
    {  
        MessageBox.Show("Select Bill type");  
    }  
}  
}
```

Description and Functionalities

User – Admin

- Primarily, the user who will interact with the system will be the administrator of the institution assigned to take care of all data transactions and insertion or update. It will have to go through an authorization process of login
- If the admin doesn't enter a value in any input space in the entire system it will display an error in the message box asking the admin to enter all the data
- If the admin enters numerical data in any input space where only alphabetical data is supposed to be supplied or vice versa then it will show error in the message box asking the admin to enter proper data



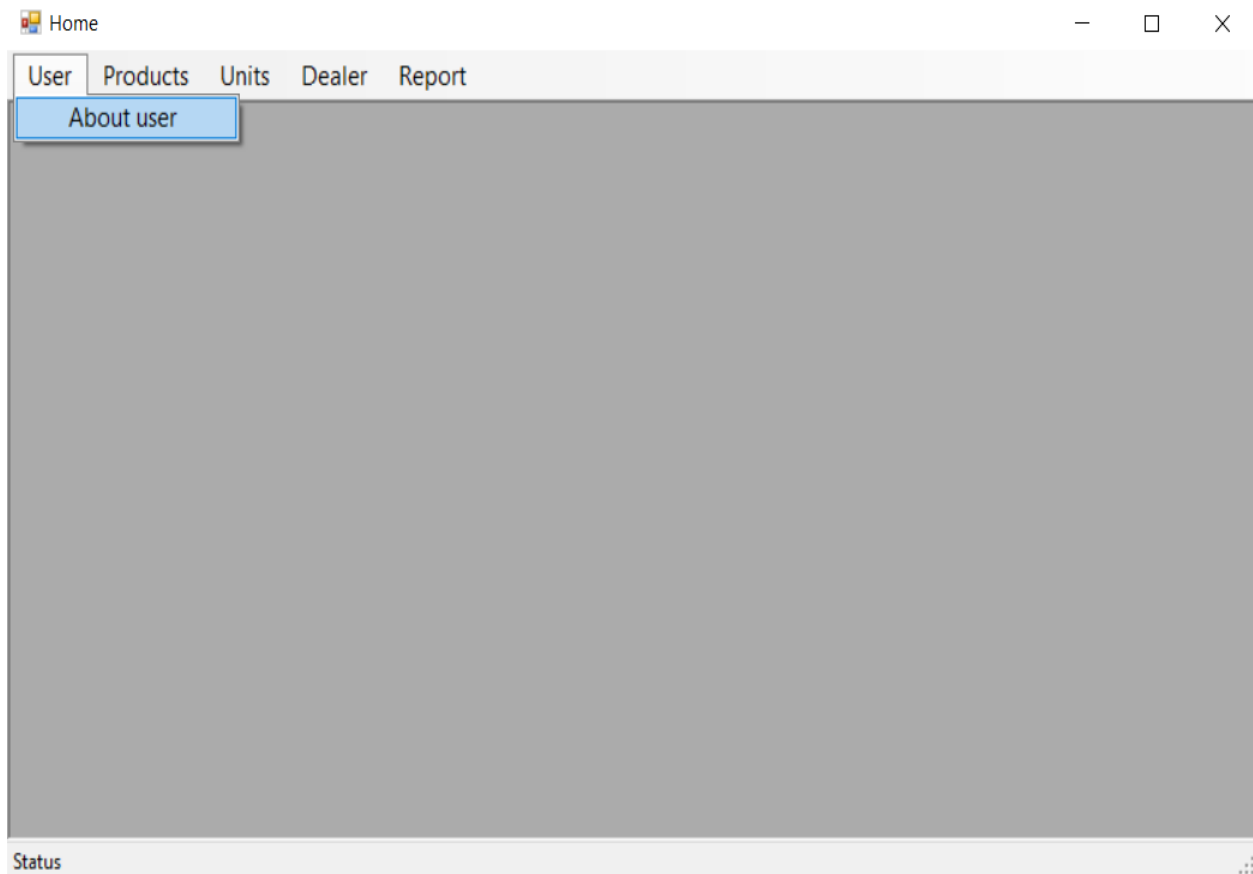
Home page:

- It is an MDI Parent form which is also a windows form
- Though this form, the user can access all the functionalities that this system provides.

Functionality 1:

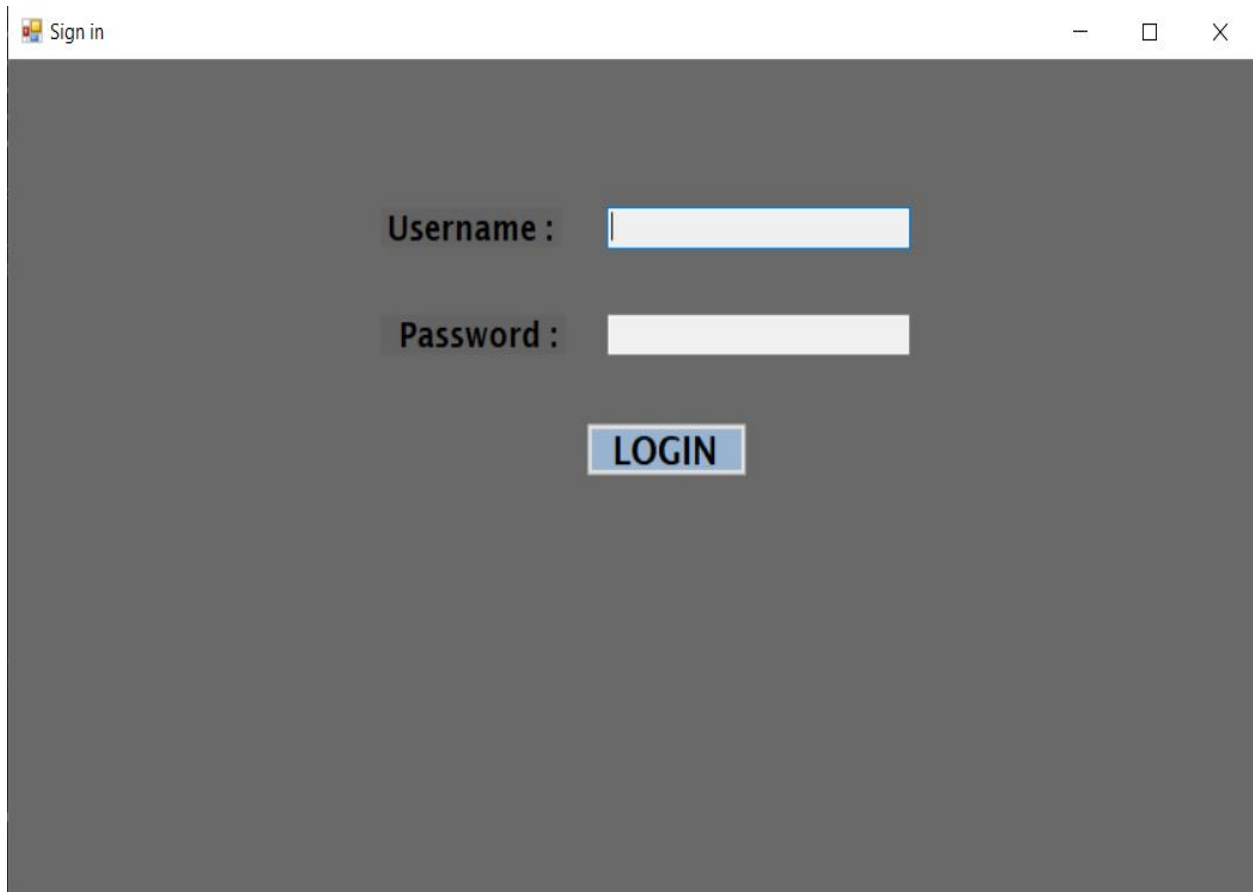
User-> About user

- It displays all the information of the admin that was already stored in “User_detail” table in database



Login form:

- Without being authenticated no user is allowed to view any other interfaces. After being authenticated user is authorized to perform certain work according to his/her profile.
- Admin has to enter correct username and password in order to enter next form.
- Username and password are saved in the database which is fetched and compared to the user input.
- Even one incorrect or empty input will show error message to user.

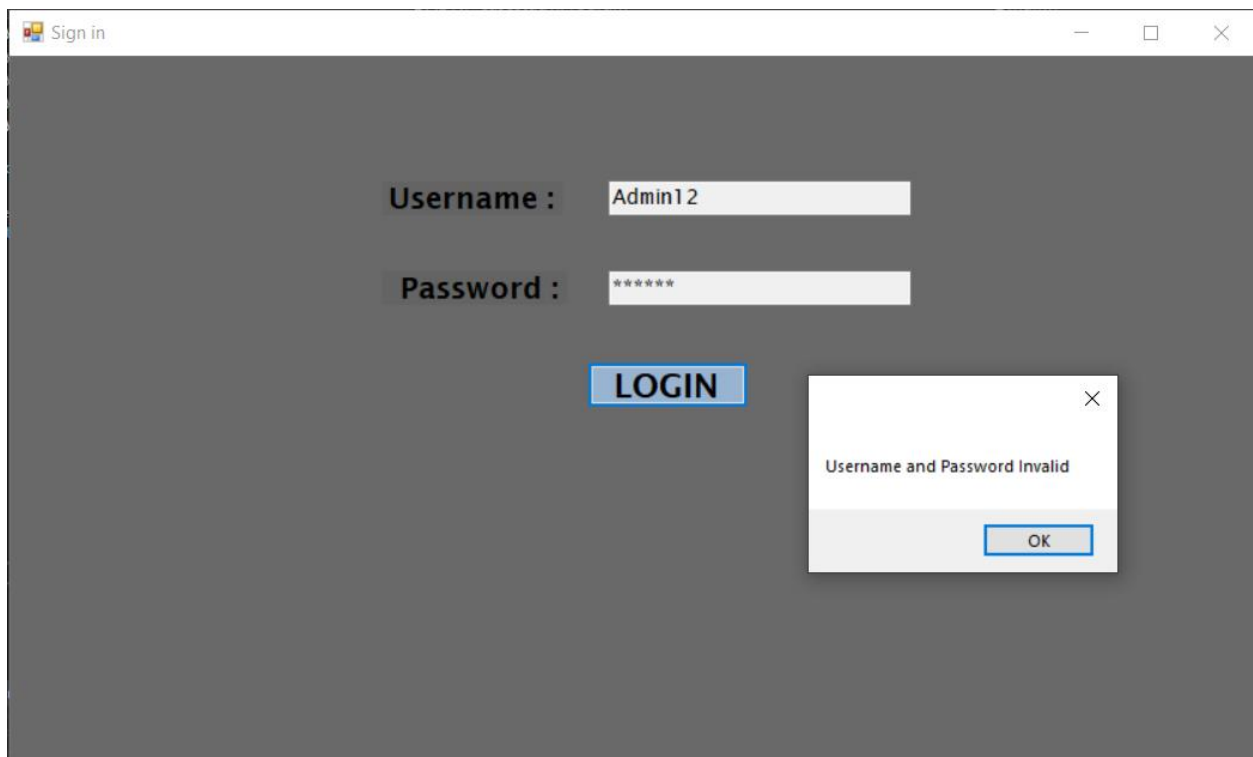
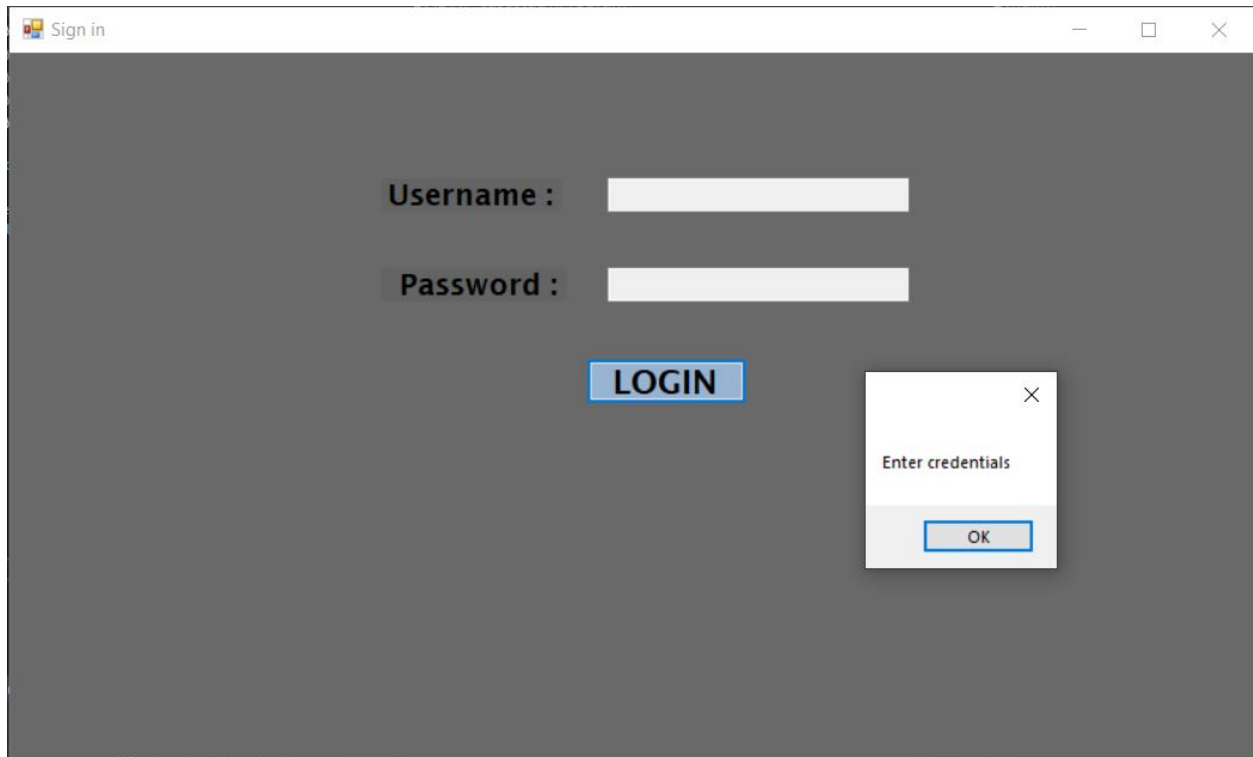


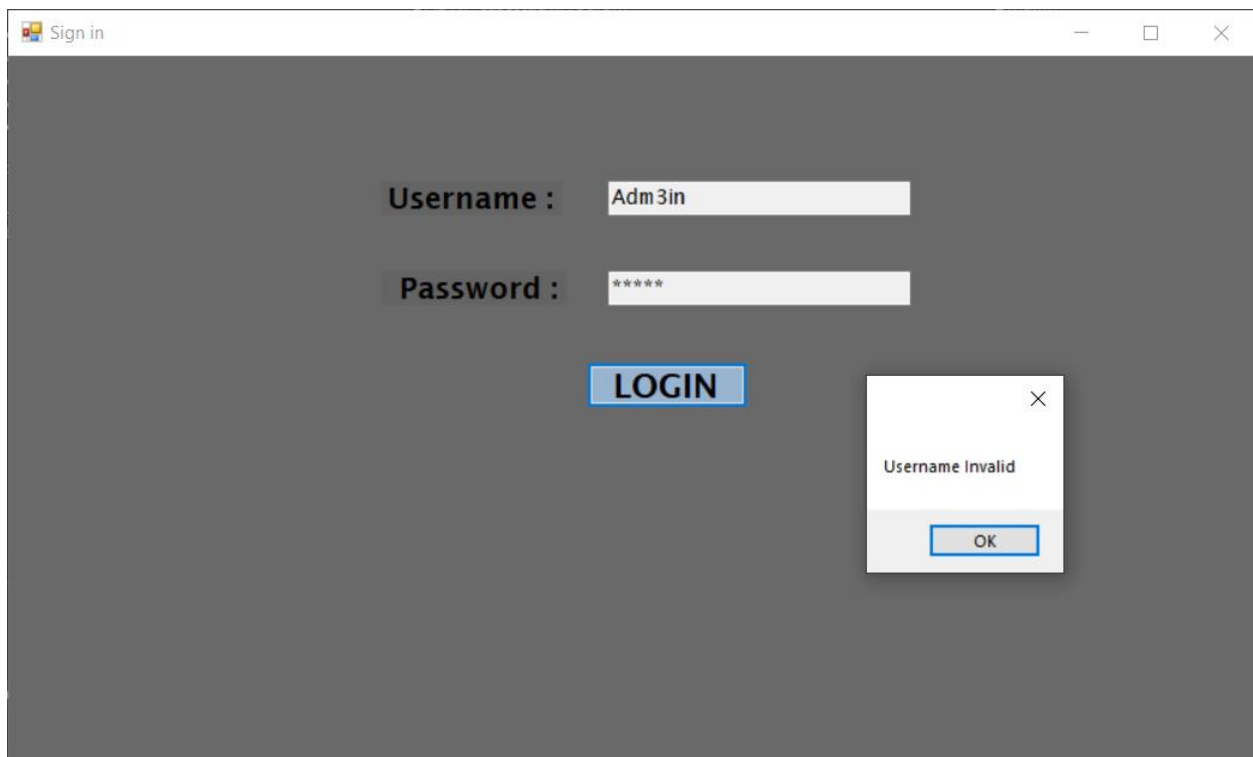
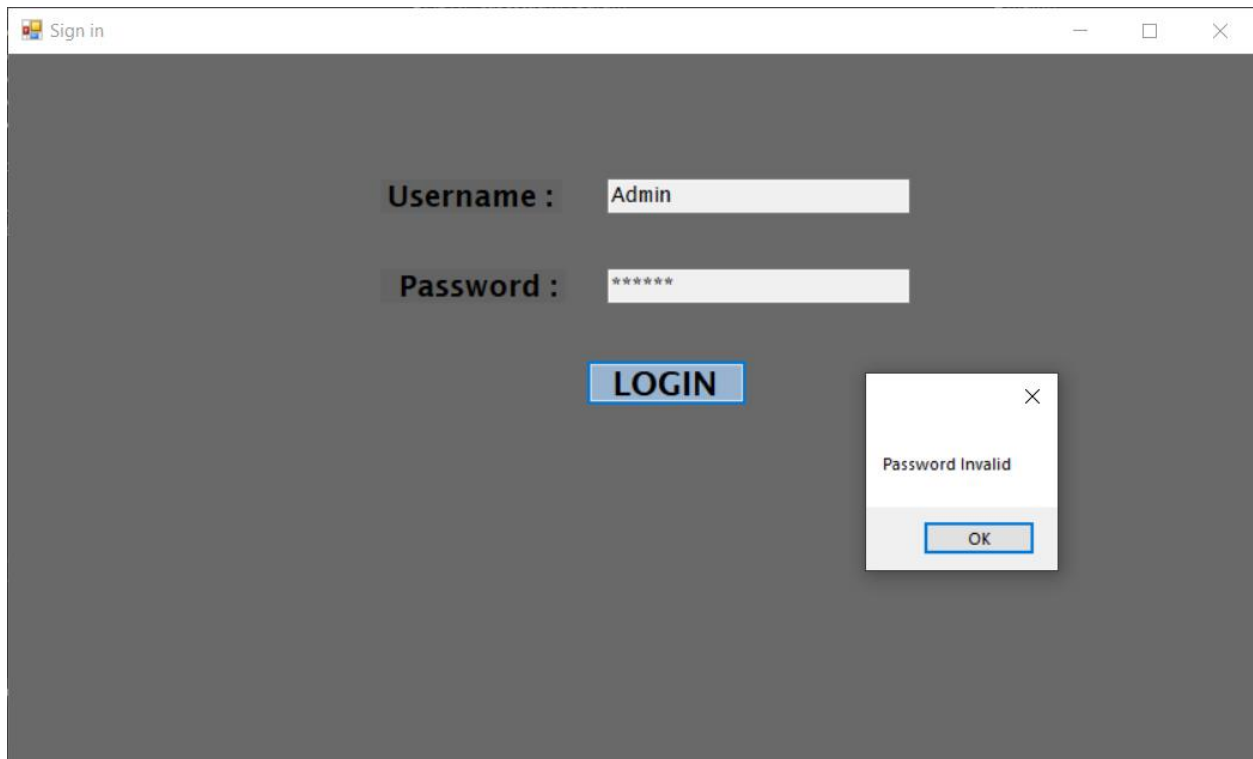
Sign in

Username :

Password :

LOGIN





Functionality 2:

Products-> Modify products

- The user is allowed to insert any new product or update an existing one.
- When this form loads, all the products in the “Product_name” table in database is displayed in the dataGridView
- The user can input the product name and he/she can select the related unit from the combobox which stores all the units from the “Units” table in the database.
- The user can select a row from the datagridview and the data comes up in the textbox automatically and then the admin can make the necessary changes to it and click on update that will update the table and view it in the dataGridView

	Id	Product_name	Unit
▶	1	Wheat	Kg
	2	Rice	Kg
	3	Sunflower oil	Litre
	4	Corn flour	Kg
	5	Peanut	Grams
	6	Chia seeds	Grams
	7	Almonds	Grams
*			

Enter Product Name :

Maida

Select Unit :

Kg

INSERT

Update Product

Product Name :

Select Unit :

UPDATE

Data inserted

OK

	product_name	Unit
	Wheat	Kg
	Rice	Kg
	Sunflower oil	Litre
	Corn flour	Kg
5	Peanut	Grams
6	Chia seeds	Grams
7	Almonds	Grams
*		

Enter Product Name :

Select Unit :

INSERT

Update Product

Product Name :

Almonds

Select Unit :

Kg

UPDATE

Data updated

OK

	product_name	Unit
	Wheat	Kg
	Rice	Kg
	Sunflower oil	Litre
	Corn flour	Kg
5	Peanut	Grams
6	Chia seeds	Grams
7	Almonds	Grams
8	Maida	Kg
*		

Enter Product Name :

Select Unit :

INSERT**Update Product**

Product Name :

Select Unit :

UPDATE

Enter Product name properly

OK

	Product name	Unit
		Kg
		Kg
	ver oil	Litre
	pur	Kg
5	Peanut	Grams
6	Chia seeds	Grams
7	Almonds	Kg
8	Maida	Kg
*		

Functionality 3:

Products-> Purchase products

- This form is used when the admin has to enter the data of the products that he has purchased from the dealer.
- It inserts/updates the data in the “Purchase_master” and “Stock” table in database.
- Admin can :
 - Enter the product name from the combobox which stores all the data from “Product_name” table depending on which, the unit will be displayed on its own.
 - After adding quantity and price, the total cost will be calculated on its own
 - Then add the purchase date from the dateTimePicker.
 - Then choose the dealer’s name from the combobox which stores the dealer names from the table “Dealer_info” table in database
 - Choose the purchase type (cash/upi/debit card etc.) from combobox
 - Enter the expiry date of product using dateTimePicker.
 - Enter the profit gained in the purchase
 - Click on the Purchase button.

Purchase_product

Product Name :

Product Qty : Unit

Product Price :

Product Total :

Purchase Date :

Dealer Name :

Purchase Type

Expiry Date :

Profit % :

Purchase Item

Purchase_product

Product Name :

Product Qty : Kg

Product Price :

Product Total :

Purchase Date :

Dealer Name :

Purchase Type

Expiry Date :

Profit % :

Purchase Item

Data inserted

OK

Functionality 4:

Products-> Sales products

- This form is used when the admin has to create bill of all products sold to the consumer.
- It enters data in "Order_Item" and "Order_user" and update the product quantity in the "Stock" table.
- Admin can
- Enter the consumer details like first name, last name, choose the bill type (cash, upi, debit card, etc.) and select the bill date from dateTimePicker.
- Enter the first letter and the listbox will display all the Product_name from the "Stock" table that starts with that letter and the admin can select from that list.
- The price field will be auto filled with the Product_price from the Purchase_master table in database depending on the product name selected.
- Enter the product quantity that the consumer wants.
- The total will be auto filled with the product of the quantity and price.
- Click on Add button to add the item to the dataGridView and continue to add all the items that the consumer wants one by one.
- Every time a product is added, the total will keep on updating the total price of all the products.
- Select a row in the dataGridView and delete it by clicking on Delete button.
- After properly creating the table in front end, save the bill by clicking on the SAVE BILL button. This action will insert the consumer details in the "Order_user" table, all the product details in the "Order_Item" table and update the product_qty of the products bought in the "Stock" table.

Sales

First Name :

Last Name :

Bill Type :

Bill Date :

Saturday , November 5, 20. ▾

Product :

Price :

Quantity :

Total :

ADD

Total : 0

DELETE

SAVE BILL

Sales

First Name :

Vrunda

Last Name :

Bhatt

Bill Type :

Credit Card ▾

Bill Date :

Tuesday , November 1, 20. ▾

Product :

c

Price :

Quantity :

Total :

Chia seeds

Com flour

ADD

Total : 0

DELETE

SAVE BILL

Sales

First Name : Vrunda

Last Name : Bhatt

Bill Type : Credit Card

Bill Date : Tuesday , November 1, 20.

Product : Almonds

Price : 10

Quantity : 50

Total : 500

ADD

	Product	Price	Quantity	Total
▶	Chia seeds	6	150	900
*				

Total : 900

DELETE

SAVE BILL

Sales

First Name :

Last Name :

Bill Type : Credit Card

Bill Date : Tuesday , November 1, 20.

Product :

Price :

Quantity :

Total :

ADD

	Product	Price	Quantity	Total
*				

Data inserted

OK

Total :

DELETE

SAVE BILL

Functionality 5:

Units -> Modify units

- Admin can modify the “Units” table in database.
- The already existing units is displayed in the dataGridView when the form loads.
- Click on INSERT button after entering a new unit which will be inserted into the “Units” table and can viewed in the dataGridView
- Click on the delete button after selecting a row from the dataGridView

Unit name :

Add Unit

Delete Unit

Id	unit
1	Kg
3	Litre
4	Grams
8	Millilitre
9	Metre
*	

Unit name :

Cm

Add Unit

Delete Unit

	Id	unit
▶	1	Kg
	3	Litre
	4	Grams
	8	Millilitre
	9	Metre
*		

Data inserted

OK

Unit name :

Add Unit

Delete Unit

	Id	unit
	1	Kg
	3	Litre
	4	Grams
	8	Millilitre
	9	Metre
▶	10	Cm
*		

Data deleted

OK

Functionality 6:

Dealer -> Modify dealers

- Admin can modify the “Dealer_info” table in database
- The already existing Dealer info is displayed in the dataGridView when the form loads.
- Click on INSERT button after entering dealer details which will be inserted into the “Dealer_info” table and can viewed in the dataGridView
- Select a row from the dataGridView and click on Update Selected button which will display a panel with all the details of the dealer selected on which the necessary changes can be made and then updated by clicking on Update button.
- Click on the delete button after selecting a row from the dataGridView

Modify Dealers

Dealer name :

Company name

Contact :

Address :

City :

INSERT

	Id	Dealer_name	Dealer_company_n	Contact
▶	1	Nidhi Khatri	NK	9282383822
	2	Mit Vyas	Vyas	9282383822
	3	Ankit Trivedi	vcd	756763454
*				

UPDATE SELECTED

UPDATE

DELETE

Dealer name :

Company name

Contact :

Address :

City :

INSERT

	Id	Dealer_name	Dealer_company_n	Contact
▶	1	Nidhi Khatri	NK	9282383822
	2	Mit Vyas	Vyas	9282383822
	3	Ankit Trivedi	vcf	756763454
*				

UPDATE SELECTED

UPDATE

DELETE

×

Data inserted

OK

Dealer name :

Company name

Contact :

Address :

City :

INSERT

	Id	Dealer_name	Dealer_company_n	Contact
	1	Nidhi Khatri	NK	9282383822
	2	Mit Vyas	Vyas	9282383822
▶	3	Ankit Trivedi	vcf	756763454
	5	Shashwat	Shuewf	7894561237
*				

UPDATE SELECTED

UPDATE

DELETE

Dealer name :

Company name

Contact :

Address :

City :

Dealer name :

Company name

Contact :

Address :

City :

INSERT

	Id	Dealer_name	Dealer_company_n	Contact
	1	Nidhi Khatri	NK	9282383822
	2	Mit Vyas	Vyas	9282383822
▶	3	Ankit Trivedi	vcf	756763454
	5	Shashwat	Shuewf	7894561237
*				

Dealer name :

Company name

Contact :

Address :

City :

UPDATE SELECTED

UPDATE

DELETE

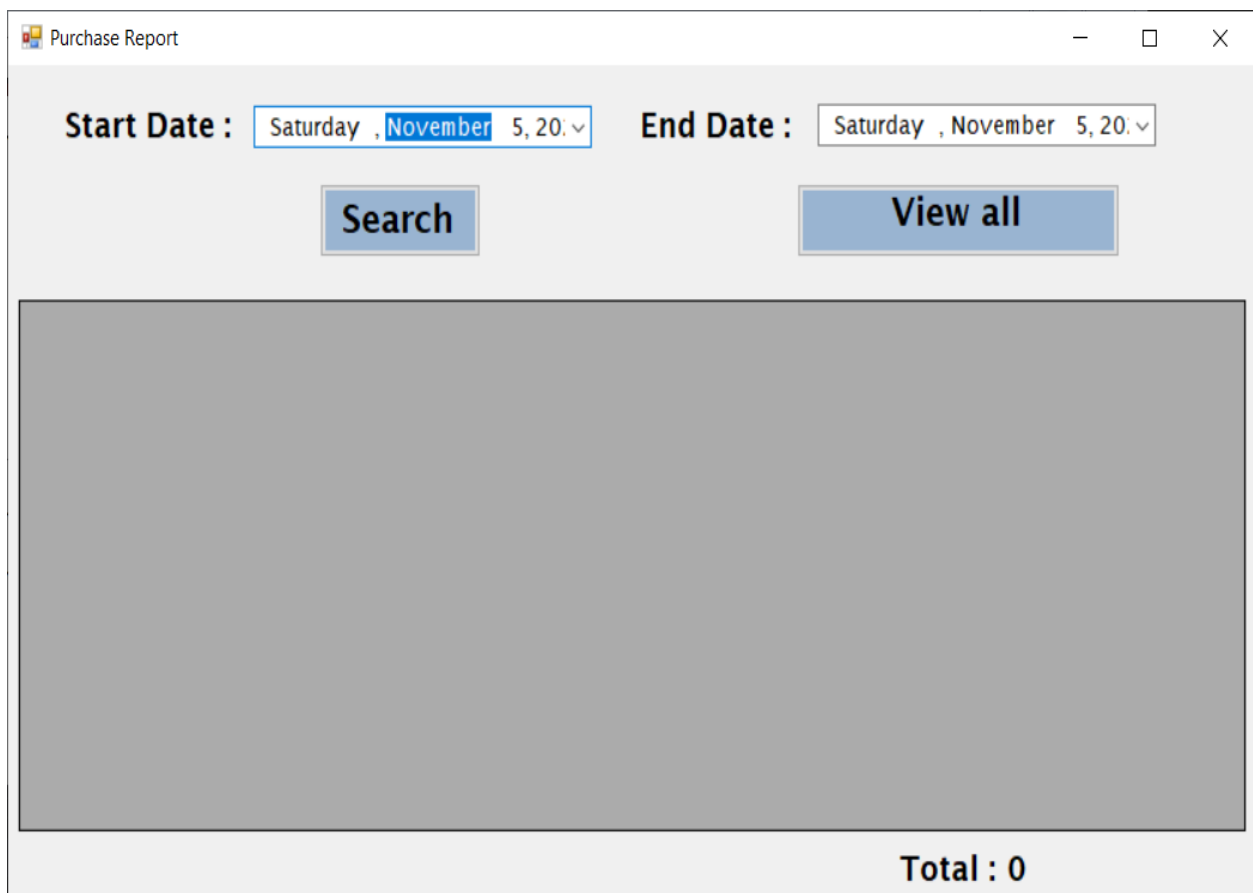
Dealer details updated

OK

Functionality 7:

Report -> Purchase Report

- It shows the report of all the purchases that the institution has made from the dealer from the “Purchase_master” table in database
- Select a start date and end date from the dateTimePicker and then click on Search button which will display all items between those dates.
- View the entire purchase history by clicking on View all purchase button
- The total of all product prices that is displayed in the dataGridView can be viewed under the report



The screenshot shows a Windows application window titled "Purchase Report". The window contains two date pickers labeled "Start Date :" and "End Date :". Both date pickers are set to "Saturday , November 5, 20: ∨". Below the date pickers are two buttons: "Search" and "View all". The main area of the window is a large gray rectangle, likely representing a data grid. At the bottom right of the window, the text "Total : 0" is displayed.

Start Date : Saturday , November 5, 20: ▾

End Date : Saturday , November 5, 20: ▾

Search

View all

	Id	Product_name	Product_qty	Product_unit	Product_price	Product_total	Purchase_date	Purchase
▶	1	Wheat	50	Kg	24	1200	21-10-2022	Nidhi Khatri
	2	Rice	35	Kg	37	1295	30-10-2022	Mit Vyas
	3	Rice	45	Kg	39	1755	09-08-2022	Mit Vyas
	4	Sunflower oil	25	Litre	190	4750	05-07-2022	Nidhi Khatri
	5	Peanut	500	Grams	0.06	30.00	17-08-2022	Nidhi Khatri
	6	Wheat	3	Kg	30	90	31-10-2022	Nidhi Khatri
	7	Rice	23	Kg	35	805	25-10-2022	Mit Vyas
	8	Sunflower oil	5	Litre	100	500	12-06-2022	Nidhi Khatri
	9	Rice	40	Kg	39	1560	03-11-2022	Ankit Trivedi
	10	Almonds	900	Grams	10	9000	01-11-2022	Ankit Trivedi
	11	Almonds	900	Grams	10	9000	01-11-2022	Ankit Trivedi

Total : 39985.00

Start Date : Tuesday , November 1, 20: ▾

End Date : Friday , November 4, 20: ▾

Search

View all

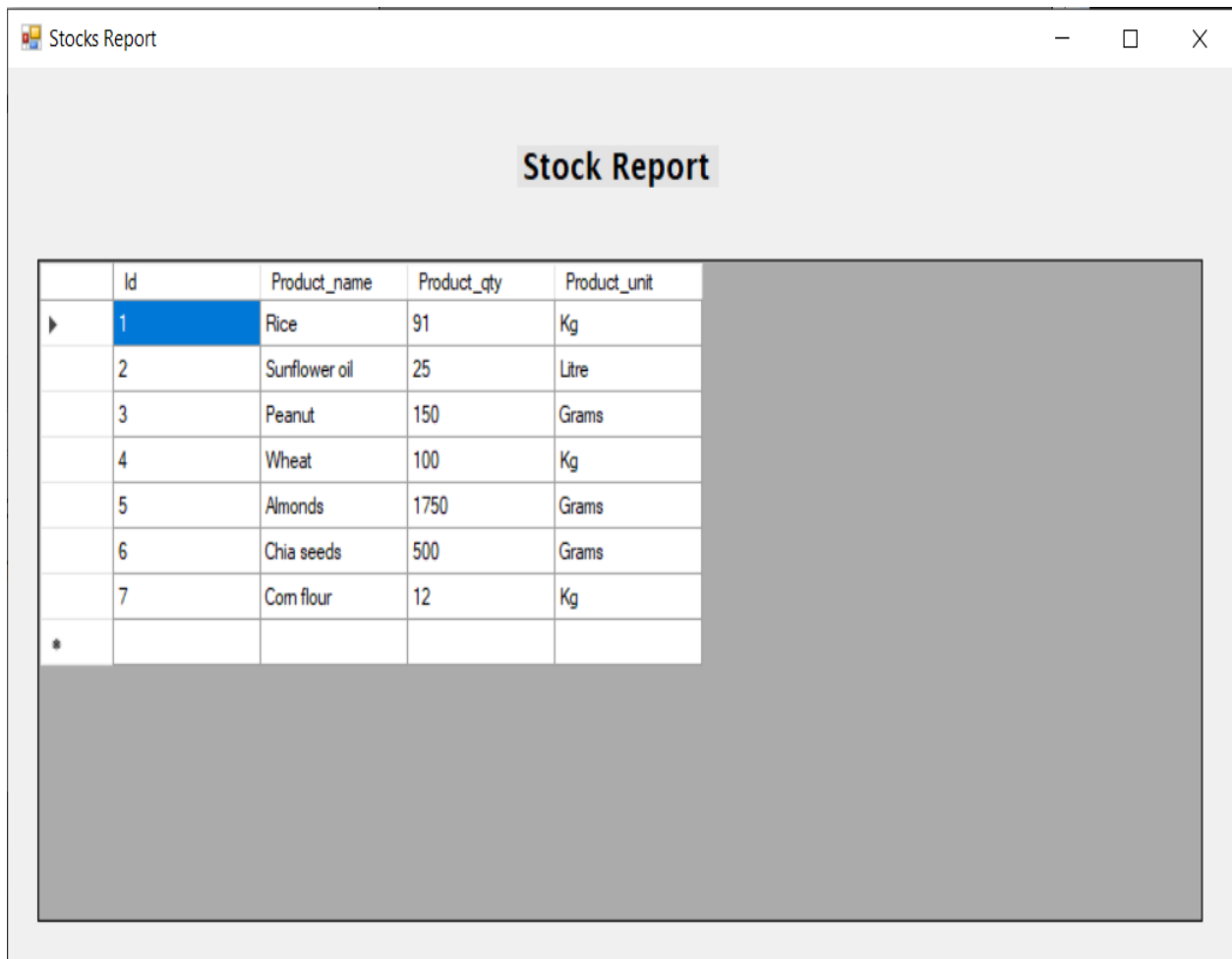
	Id	Product_name	Product_qty	Product_unit	Product_price	Product_total	Purchase_date	Purchase
▶	9	Rice	40	Kg	39	1560	03-11-2022	Ankit Trivedi
	12	Chia seeds	750	Grams	6	4500	04-11-2022	Mit Vyas
	14	Wheat	100	Kg	45	4500	03-11-2022	Nidhi Khatri
*								

Total : 10560

Functionality 8:

Report -> Stocks Report

- It shows the report of all the stocks that is available in the “Stock” table in database



The screenshot shows a window titled "Stocks Report" with standard window controls (minimize, maximize, close). The main content area has a title "Stock Report" and a table with the following data:

	Id	Product_name	Product_qty	Product_unit
▶	1	Rice	91	Kg
	2	Sunflower oil	25	Litre
	3	Peanut	150	Grams
	4	Wheat	100	Kg
	5	Almonds	1750	Grams
	6	Chia seeds	500	Grams
	7	Com flour	12	Kg
•				

Report -> Order Detail Report

- Order_detail_report

Bill Type : Debit Card

View all Orders

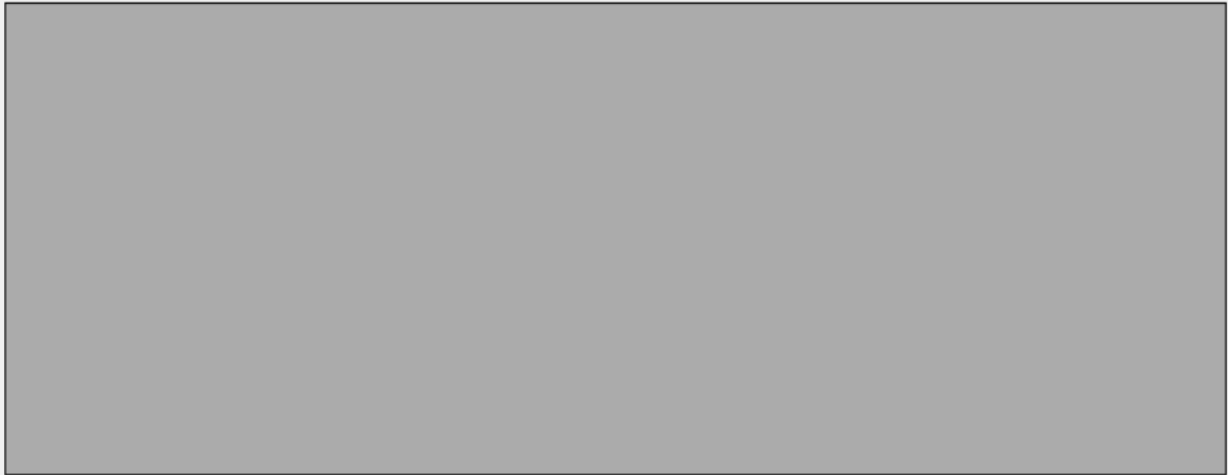
Search

	Product	Price	Quantity	Total	Id1	First_name	Last_name	Bill_type
▶	Sunflower oil	100	2	200	22	Vishnu	Menon	Debit Card
	Peanut	0.06	100	6.00	22	Vishnu	Menon	Debit Card
	Wheat	30	1	30	22	Vishnu	Menon	Debit Card
	Rice	39	25	975	24	Nitu	Shama	Debit Card
	Com flour	50	4.5	225.0	24	Nitu	Shama	Debit Card
	Wheat	30	1.25	37.50	24	Nitu	Shama	Debit Card
*								

<

>

Total : 3798.50

Bill Type : [View all Orders](#)[Search](#)**Total : 0**Bill Type : [View all Orders](#)[Search](#)

	Id	Order_id	Product	Price	Quantity	Total	Id1	First_nam	^
▶	6	21	Rice	35	5	175	21	Anika	
	7	22	Sunflower oil	100	2	200	22	Vishnu	
	8	22	Peanut	0.06	100	6.00	22	Vishnu	
	9	22	Wheat	30	1	30	22	Vishnu	
	10	23	Com flour	50	3	150	23	Anu	
	11	23	Chia seeds	6	100	600	23	Anu	
	12	24	Rice	39	25	975	24	Nitu	
	13	24	Com flour	50	4.5	225.0	24	Nitu	
	14	24	Wheat	30	1.25	37.50	24	Nitu	
	15	25	Chia seeds	6	150	900	25	Vrunda	
	16	25	Almonds	10	50	500	25	Vrunda	▼

Total : 3798.50

THANK YOU