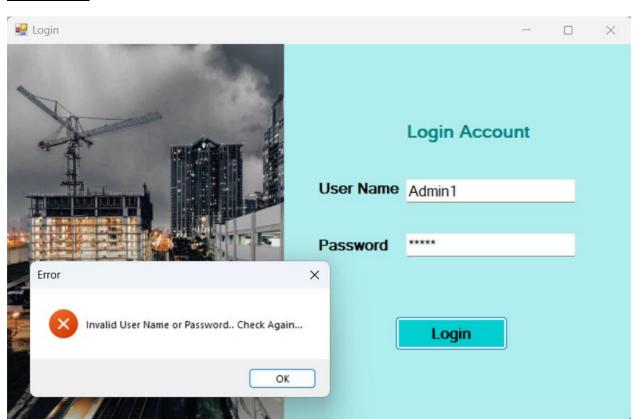
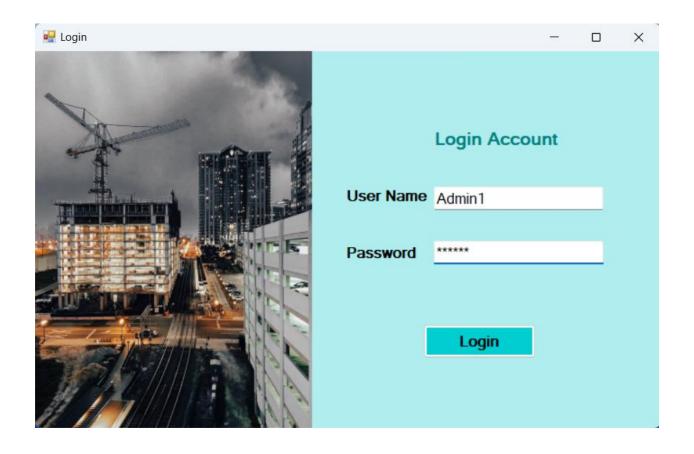


Design of each form in the application &code implementation

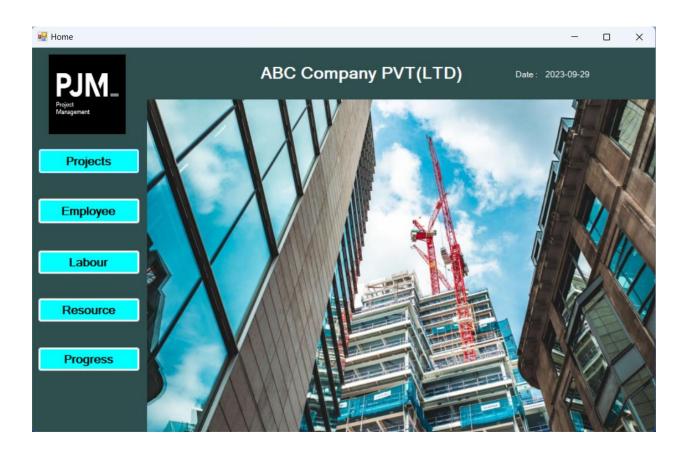
Login Page





```
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 ProjectManagementSystem
    public partial class Login : Form
        public Login()
            InitializeComponent();
        private void btnLogin_Click(object sender, EventArgs e)
            if (textUser.Text == "Admin1" && textPassword.Text == "admin1") {
                Home h1 = new Home();
                this.Hide();
                h1.ShowDialog();
                this.Close();
```

Dashboard

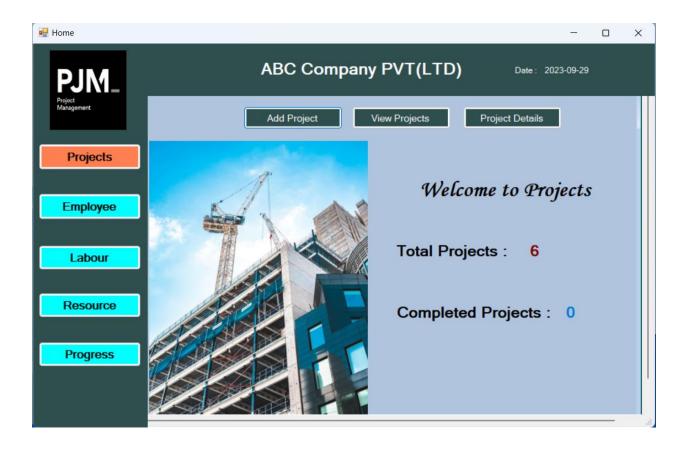


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class Home : Form
        public Home()
            InitializeComponent();
        }
        private void button2_Click(object sender, EventArgs e)
            button1.BackColor = Color.Cyan;
            button2.BackColor = Color.Coral;
            button3.BackColor = Color.Cyan;
            button4.BackColor = Color.Cyan;
            button5.BackColor = Color.Cyan;
            pictureBox2.Visible = false;
            Employees e1 = new Employees();
            e1.MdiParent = this;
            e1.Dock = DockStyle.Fill;
            e1.Show();
        }
        private void button1_Click(object sender, EventArgs e)
            button1.BackColor = Color.Coral;
            button2.BackColor = Color.Cyan;
            button3.BackColor = Color.Cyan;
            button4.BackColor = Color.Cyan;
            button5.BackColor = Color.Cyan;
            pictureBox2.Visible = false;
            Projects p1 = new Projects();
            p1.MdiParent = this;
            p1.Dock = DockStyle.Fill;
            p1.Show();
        }
        private void panel3_Paint(object sender, PaintEventArgs e)
        }
        private void Home_Load(object sender, EventArgs e)
            date.Text = DateTime.Now.ToString("yyyy-MM-dd");
```

```
private void button5_Click(object sender, EventArgs e)
            button1.BackColor = Color.Cyan;
            button2.BackColor = Color.Cyan;
            button3.BackColor = Color.Cyan;
            button4.BackColor = Color.Cyan;
            button5.BackColor = Color.Coral;
            pictureBox2.Visible = false;
            Progress p2 = new Progress();
            p2.MdiParent = this;
            p2.Dock = DockStyle.Fill;
            p2.Show();
        }
        public void timer5_Tick(object sender, EventArgs e)
            // Update the label with the current date and time
        private void panel2_Paint(object sender, PaintEventArgs e)
        private void button3_Click(object sender, EventArgs e)
            button1.BackColor = Color.Cyan;
            button2.BackColor = Color.Cyan;
            button3.BackColor = Color.Coral;
            button4.BackColor = Color.Cyan;
            button5.BackColor = Color.Cyan;
            pictureBox2.Visible = false;
            Labour l1 = new Labour();
            l1.MdiParent = this;
            l1.Dock = DockStyle.Fill;
            l1.Show();
        }
        private void button4_Click(object sender, EventArgs e)
            button1.BackColor = Color.Cyan;
            button2.BackColor = Color.Cyan;
            button3.BackColor = Color.Cyan;
            button4.BackColor = Color.Coral;
            button5.BackColor = Color.Cyan;
            pictureBox2.Visible = false;
            Resources r1 = new Resources();
            r1.MdiParent = this;
            r1.Dock = DockStyle.Fill;
            r1.Show();
        }
    }
}
```

}

Projects Page



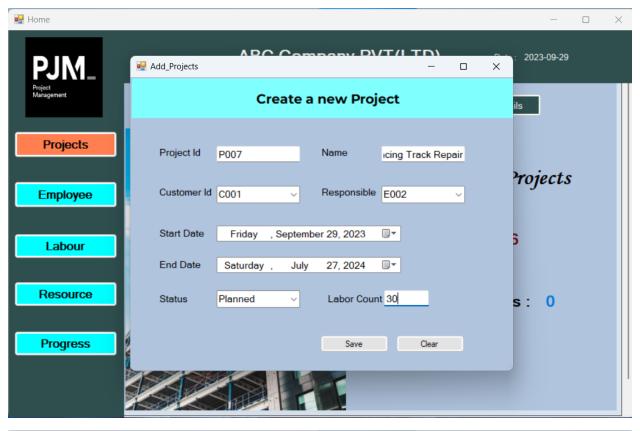
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

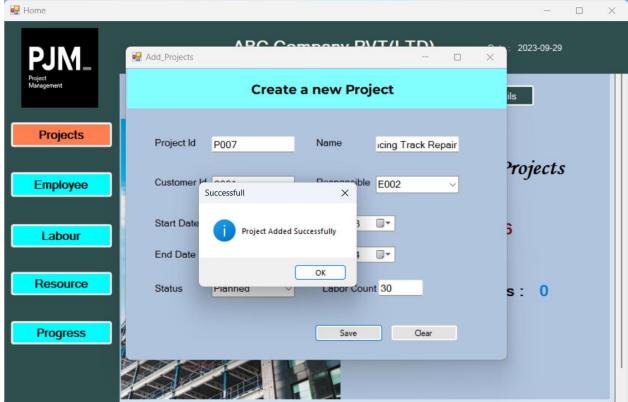
namespace ProjectManagementSystem
{
    public partial class Projects : Form
    {
        public Projects()
        {
             InitializeComponent();
        }
        private void label1_Click(object sender, EventArgs e)
```

```
}
        private void viewProjectsToolStripMenuItem_Click(object sender, EventArgs e)
        private void newToolStripMenuItem_Click(object sender, EventArgs e)
        }
        private void addNewToolStripMenuItem_Click(object sender, EventArgs e)
        private void projCount_Click(object sender, EventArgs e)
        }
        private void label2_Click(object sender, EventArgs e)
        private void Projects_Load(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select Count(ProjectId) From
Projects", conn);
            int projectCount = (int)cmd1.ExecuteScalar();
            total.Text = projectCount.ToString();
            SqlCommand cmd2 = new SqlCommand("Select Count(ProjectId) From Projects
Where (Status = 'Completed' or Status = 'Closed')", conn);
            int CompleteCount = (int)cmd2.ExecuteScalar();
            complete.Text = CompleteCount.ToString();
            conn.Close();
        }
        private void label3_Click(object sender, EventArgs e)
        private void exitToolStripMenuItem_Click(object sender, EventArgs e)
            Home h1 = new Home();
            this.Hide();
            h1.ShowDialog();
            this.Close();
        }
```

```
private void viewAllProjectsToolStripMenuItem_Click(object sender, EventArgs
e)
        {
        }
        private void serchProjectToolStripMenuItem_Click(object sender, EventArgs e)
        }
        private void searchToolStripMenuItem_Click(object sender, EventArgs e)
        }
        private void searchProjectsToolStripMenuItem_Click(object sender, EventArgs
e)
        {
        }
        private void button1_Click(object sender, EventArgs e)
            Add_Projects ap1 = new Add_Projects();
            ap1.ShowDialog();
        private void button2_Click(object sender, EventArgs e)
            View_Projects vp = new View_Projects();
            vp.ShowDialog();
        }
        private void button3_Click(object sender, EventArgs e)
            Search_Project sp = new Search_Project();
            sp.ShowDialog();
        }
    }
}
```

Add Project Form

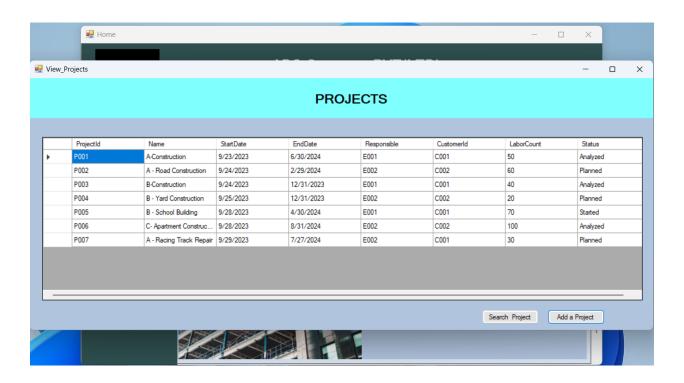




```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class Add_Projects : Form
        public Add_Projects()
            InitializeComponent();
        private void button2_Click(object sender, EventArgs e)
            Projects p1 = new Projects();
            this.Hide();
            p1.ShowDialog();
            this.Close();
        }
        private void button1_Click(object sender, EventArgs e)
            SglConnection conn = new SglConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Insert into Projects values
(@ProjectId,@Name,@StartDate,@EndDate,@Responsible,@CustomerId,@LaborCount,@Status)"
, conn);
            cmd.Parameters.AddWithValue("@ProjectId", txtId.Text);
            cmd.Parameters.AddWithValue("@Name", txtName.Text);
            cmd.Parameters.AddWithValue("@StartDate", DateTime.Parse(date1.Text));
            cmd.Parameters.AddWithValue("@EndDate", DateTime.Parse(date2.Text));
            cmd.Parameters.AddWithValue("@Responsible", resBox.Text);
            cmd.Parameters.AddWithValue("@CustomerId", customerBox.Text);
            cmd.Parameters.AddWithValue("@LaborCount", int.Parse(txtLabor.Text));
            cmd.Parameters.AddWithValue("@Status", statusBox.Text);
            cmd.ExecuteNonQuery();
            conn.Close();
            MessageBox.Show("Project Added Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Clear();
            txtName.Clear();
            date1.Text = DateTime.Now.ToString();
            date2.Text = DateTime.Now.ToString();
            resBox.Text = "";
            customerBox.Text = "";
            txtLabor.Clear();
```

```
statusBox.Text = "";
        }
        private void button3_Click(object sender, EventArgs e)
            txtId.Clear();
            txtName.Clear();
            date1.Text = DateTime.Now.ToString();
            date2.Text = DateTime.Now.ToString();
            resBox.Text = "";
            customerBox.Text = "";
            txtLabor.Clear();
            statusBox.Text = "";
        }
        private void Add_Projects_Load(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select EmployeeId From EmpTemp Where
Role = 'Manager'", conn);
            List<string> EmpIds = new List<string>();
            using (SqlDataReader reader1 = cmd1.ExecuteReader())
                while (reader1.Read())
                    string empId = reader1["EmployeeId"].ToString(); // Assuming
ProjectId is a string
                    EmpIds.Add(empId);
            }
            // Convert the list to an array if needed
            string[] empIdsArray = EmpIds.ToArray();
            // Populate a ListBox or another control with the array
            resBox.Items.AddRange(empIdsArray);
            SqlCommand cmd2 = new SqlCommand("Select CustomerId From Customer",
conn);
            List<string> custIds = new List<string>();
            using (SqlDataReader reader2 = cmd2.ExecuteReader())
                while (reader2.Read())
                    string custId = reader2["CustomerId"].ToString(); // Assuming
ProjectId is a string
                    custIds.Add(custId);
            }
            // Convert the list to an array if needed
            string[] custIdsArray = custIds.ToArray();
```

View Project Form

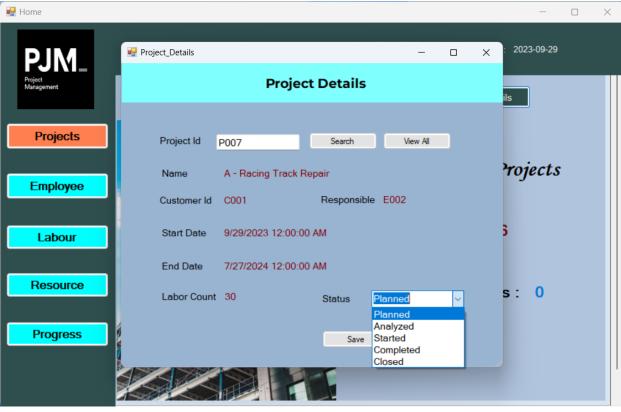


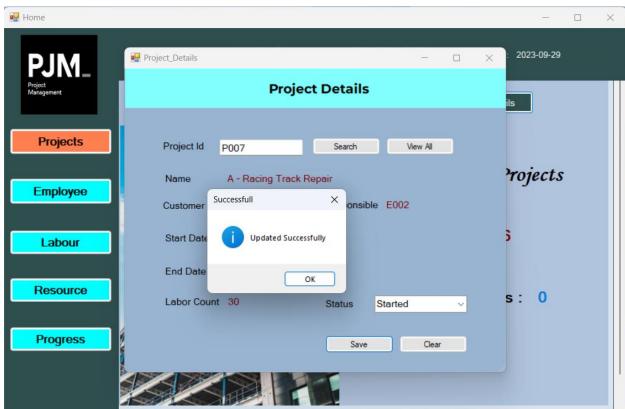
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ProjectManagementSystem
{
   public partial class View_Projects : Form
```

```
{
        public View_Projects()
            InitializeComponent();
        private void button1_Click(object sender, EventArgs e)
            Add_Projects ap1 = new Add_Projects();
            ap1.ShowDialog();
        }
        private void button2_Click(object sender, EventArgs e)
            Projects p1 = new Projects();
            this.Hide();
            p1.ShowDialog();
            this.Close();
        }
        private void label1_Click(object sender, EventArgs e)
        }
        private void View_Projects_Load(object sender, EventArgs e)
            this.sqlDataAdapter1.Fill(this.projectsSet1.Projects);
        private void button2_Click_1(object sender, EventArgs e)
            Search_Project sp1 = new Search_Project();
            sp1.ShowDialog();
        }
    }
}
```

Project Details Form





```
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;
using System.Data.OleDb;
using System.Data.SqlClient;
namespace ProjectManagementSystem
   public partial class Search_Project : Form
        public Search_Project()
            InitializeComponent();
        private void button2_Click(object sender, EventArgs e)
            Home h1 = new Home();
            this.Hide();
            h1.ShowDialog();
            this.Close();
        }
        private void button1_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from Projects where
ProjectId=@id", conn);
            cmd.Parameters.AddWithValue("id", txtId.Text);
            SqlDataReader reader1;
            reader1 = cmd.ExecuteReader();
            if(reader1.Read())
                txtName.Text = reader1["Name"].ToString();
                Responsible.Text = reader1["Responsible"].ToString();
                CustomerId.Text = reader1["CustomerId"].ToString();
                StartDate.Text = reader1["StartDate"].ToString();
                EndDate.Text = reader1["EndDate"].ToString();
                LaborCount.Text = reader1["LaborCount"].ToString();
                statusBox.Text = reader1["Status"].ToString();
            }
            else
                MessageBox.Show("Invalid Project ID Check Again..", "Data Not
Found", MessageBoxButtons.OK, MessageBoxIcon.Error);
        }
        private void button3_Click(object sender, EventArgs e)
```

```
{
            txtId.Clear();
            txtName.Text = "";
            Responsible.Text = "";
            CustomerId.Text = "";
            StartDate.Text = "";
            EndDate.Text = "";
LaborCount.Text = "";
            statusBox.Text = "";
        }
        private void button2_Click_1(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("update Projects set Status=@Status
Where ProjectId=@id ", conn);
            cmd.Parameters.AddWithValue("id", txtId.Text);
            cmd.Parameters.AddWithValue("@Status", statusBox.Text);
            cmd.ExecuteNonQuery();
            conn.Close();
            MessageBox.Show("Updated Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Clear();
            txtName.Text = "";
            Responsible.Text = "";
            CustomerId.Text = "";
            StartDate.Text = "";
            EndDate.Text = "";
            LaborCount.Text = "";
            statusBox.Text = "";
        }
        private void button4_Click(object sender, EventArgs e)
            View_Projects vp1 = new View_Projects();
            this.Hide();
            vp1.ShowDialog();
            this.Close();
        }
    }
}
```

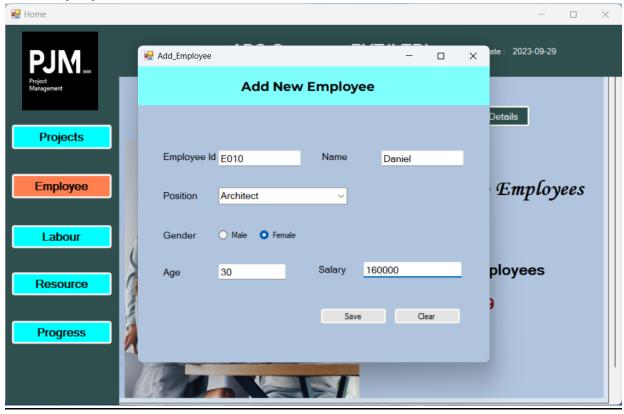
Employee Page

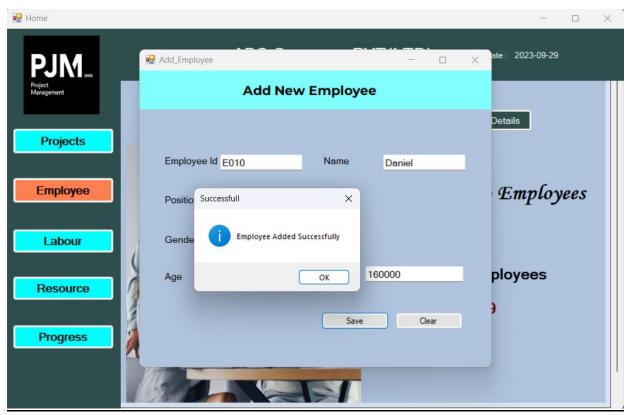


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
   public partial class Employees : Form
        public Employees()
            InitializeComponent();
        private void Employees_Load(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
```

```
conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select Count(EmployeeId) From
EmpTemp", conn);
            int empCount = (int)cmd1.ExecuteScalar();
            total.Text = empCount.ToString();
            conn.Close();
        }
        private void button1_Click(object sender, EventArgs e)
            Add_Employee ae1 = new Add_Employee();
            ae1.ShowDialog();
        }
        private void button3_Click(object sender, EventArgs e)
            Employee_Details ed1 = new Employee_Details();
            ed1.ShowDialog();
        }
        private void button2_Click(object sender, EventArgs e)
            View_Employees ve1 = new View_Employees();
            ve1.ShowDialog();
        }
    }
}
```

Add Employee Form

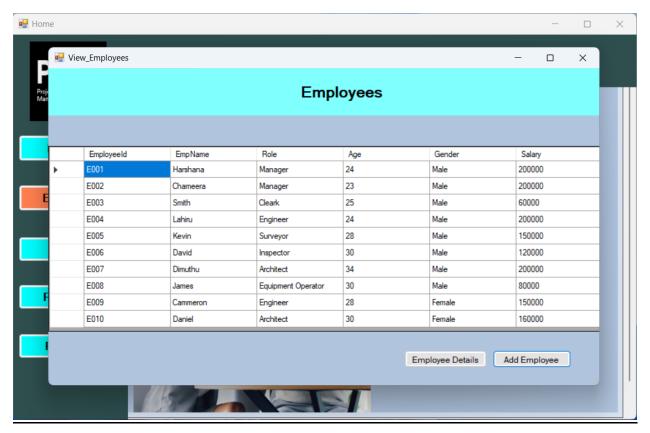




```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class Add_Employee : Form
        public Add_Employee()
            InitializeComponent();
        private void Add_Employee_Load(object sender, EventArgs e)
        private void button3_Click(object sender, EventArgs e)
            txtId.Clear();
            txtName.Clear();
            roleBox.Text = "";
            radioButton1.Checked = false;
            radioButton2.Checked = false;
            age.Clear();
            empSalary.Clear();
        }
        private void button1_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Insert into EmpTemp values
(@EmployeeId,@EmpName,@Role,@Age,@Gender,@Salary)", conn);
            cmd.Parameters.AddWithValue("@EmployeeId", txtId.Text);
            cmd.Parameters.AddWithValue("@EmpName", txtName.Text);
            cmd.Parameters.AddWithValue("@Role", roleBox.Text);
cmd.Parameters.AddWithValue("@Age", int.Parse(age.Text));
            if (radioButton1.Checked)
            {
                 cmd.Parameters.AddWithValue("@Gender", "Male");
            }
            if (radioButton2.Checked)
                 cmd.Parameters.AddWithValue("@Gender", "Female");
            cmd.Parameters.AddWithValue("@Salary", int.Parse(empSalary.Text));
            cmd.ExecuteNonQuery();
```

```
conn.Close();
            MessageBox.Show("Employee Added Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Clear();
            txtName.Clear();
            roleBox.Text = "";
            radioButton1.Checked = false;
            radioButton2.Checked = false;
            age.Clear();
            empSalary.Clear();
            this.Refresh();
        }
        private void txtLabor_TextChanged(object sender, EventArgs e)
       }
    }
}
```

View Employee Form

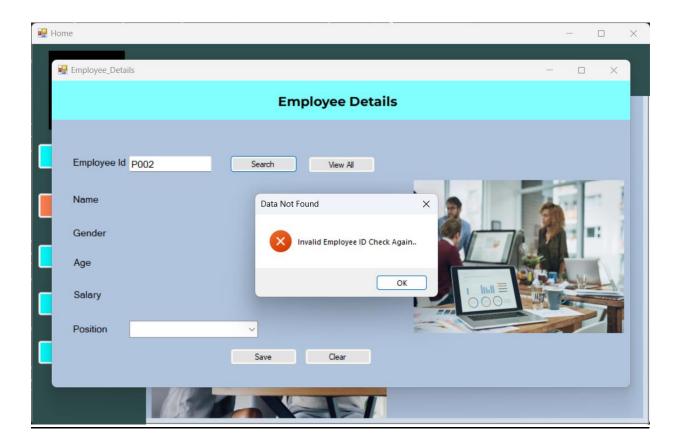


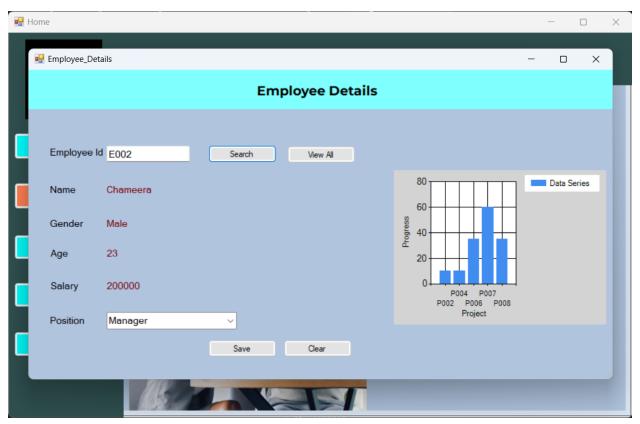
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class View_Employees : Form
        public View_Employees()
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
            Add_Employee ae1 = new Add_Employee();
            ae1.ShowDialog();
        }
```

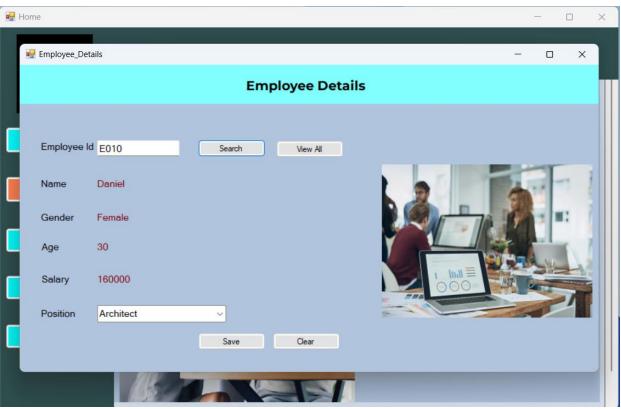
```
private void button2_Click(object sender, EventArgs e)
{
    Employee_Details ed1 = new Employee_Details();
    ed1.ShowDialog();
}

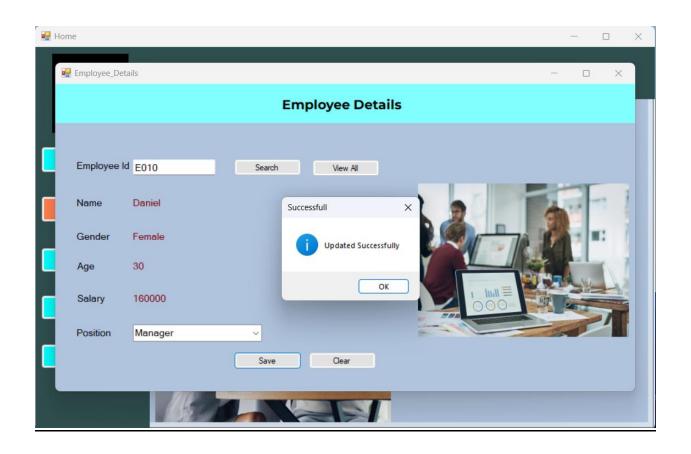
private void View_Employees_Load(object sender, EventArgs e)
{
    this.sqlDataAdapter1.Fill(this.employeeSet.EmpTemp);
}
}
```

Employee Details Form









```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Runtime.InteropServices.ComTypes;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Windows.Forms.DataVisualization.Charting;
using System.Xml.Linq;
namespace ProjectManagementSystem
   public partial class Employee_Details : Form
        public Employee_Details()
            InitializeComponent();
        private void button2_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
```

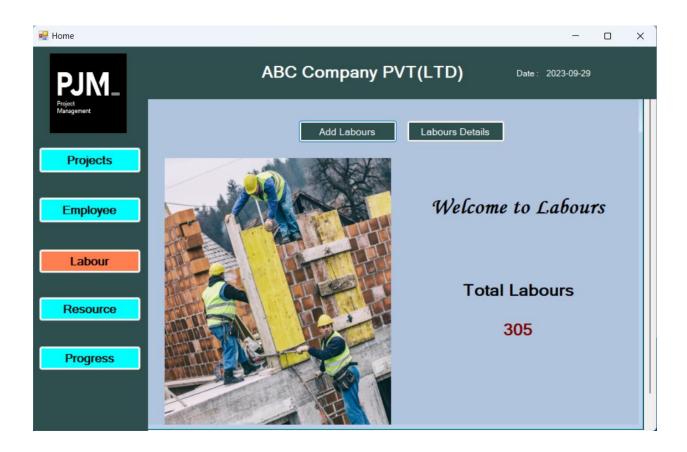
```
conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from EmpTemp where
EmployeeId=@id", conn);
            cmd.Parameters.AddWithValue("id", txtId.Text);
            SqlDataReader reader1;
            reader1 = cmd.ExecuteReader();
            if (reader1.Read())
            {
                empName.Text = reader1["EmpName"].ToString();
                roleBox.Text = reader1["Role"].ToString();
                empAge.Text = reader1["Age"].ToString();
                empGender.Text = reader1["Gender"].ToString();
                Salary.Text = reader1["Salary"].ToString();
            }
            else
                MessageBox.Show("Invalid Employee ID Check Again..", "Data Not
Found", MessageBoxButtons.OK, MessageBoxIcon.Error);
            reader1.Close();
            conn.Close();
            if (roleBox.Text == "Manager")
                pictureBox1.Visible = false;
                // Create a series
                Series series = new Series("Data Series");
                series.ChartType = SeriesChartType.Column;
                chart1.Series.Add(series);
                // Connect to the database
                string connectionString = "Data Source=localhost\\SQLEXPRESS;Initial
Catalog=PMSDB; Integrated Security=True";
                using (SqlConnection connection = new
SqlConnection(connectionString))
                    connection.Open();
                    SqlCommand cmd1 = new SqlCommand("SELECT ProjectId, Status FROM
Projects Where Responsible=@eId", connection);
                    cmd1.Parameters.AddWithValue("eId", txtId.Text);
                    // Read data from the database and add data points to the series
                    SqlDataReader reader2 = cmd1.ExecuteReader();
                    while (reader2.Read())
                        string Id = reader2["ProjectId"].ToString();
                        int value = 0;
                        switch (reader2["Status"].ToString())
                            case "Planned":
                                value = 10;
                                break;
                            case "Analyzed":
                                value = 35;
                                break;
                            case "Started":
```

```
value = 60;
                                break;
                            case "Completed":
                                value = 80;
                                break;
                            case "Closed":
                                value = 100;
                                break;
                                // Handle other statuses as needed
                        }
                        // Add data points based on the "Name" column value
                        series.Points.AddXY(Id, value);
                        // Label the X-axis directly
                        chart1.ChartAreas[0].AxisX.Title = "Project";
                        // Label the Y-axis directly
                        chart1.ChartAreas[0].AxisY.Title = "Progress";
                        // Refresh the chart to display the changes
                        chart1.Refresh();
                    }
                }
            }
            else
            {
                pictureBox1.Visible = true;
            }
        }
        private void button1_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("update EmpTemp set Role=@Role Where
EmployeeId=@id ", conn);
            cmd.Parameters.AddWithValue("id", txtId.Text);
            cmd.Parameters.AddWithValue("@Role", roleBox.Text);
            cmd.ExecuteNonQuery();
            conn.Close();
            MessageBox.Show("Updated Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Clear();
            empName.Text = "";
            empAge.Text = "";
            empGender.Text = "";
            roleBox.Text = "";
            Salary.Text = "";
            pictureBox1.Visible = true;
        }
```

```
private void button3_Click(object sender, EventArgs e)
{
    txtId.Clear();
    empName.Text = "";
    empAge.Text = "";
    empGender.Text = "";
    roleBox.Text = "";
    Salary.Text = "";
    pictureBox1.Visible = true;
}

private void button4_Click(object sender, EventArgs e)
{
    View_Employees ve1 = new View_Employees();
    ve1.ShowDialog();
}
}
```

Labour Page

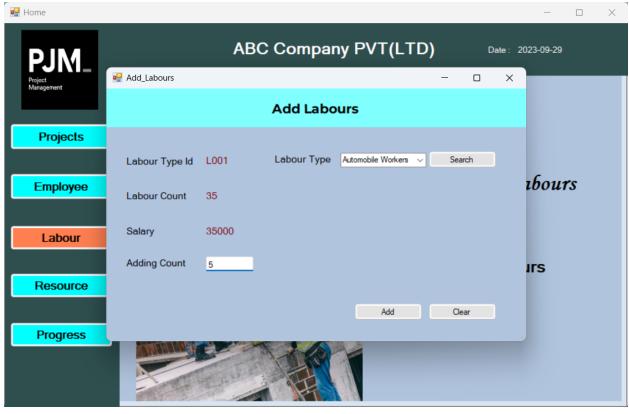


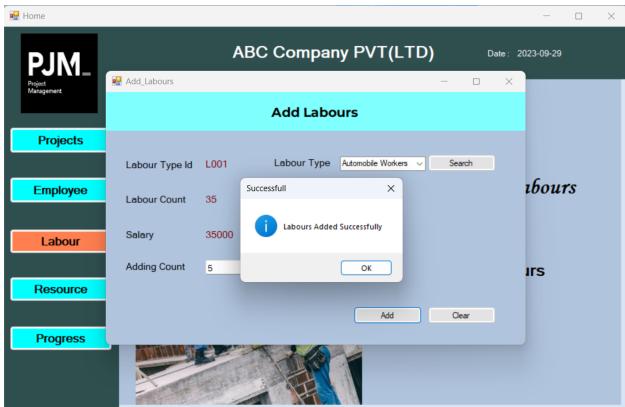
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text;
using System.Windows.Forms;

namespace ProjectManagementSystem
{
    public partial class Labour : Form
    {
        public Labour()
        {
            InitializeComponent();
        }
        private void Labour_Load(object sender, EventArgs e)
    }
}
```

```
SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select SUM(Count) From Labours",
conn);
            int lbrCount = (int)cmd1.ExecuteScalar();
            total.Text = lbrCount.ToString();
            conn.Close();
        }
        private void button1_Click(object sender, EventArgs e)
            Add_Labours ae1 = new Add_Labours();
            ae1.ShowDialog();
        private void button2_Click(object sender, EventArgs e)
            Labour_Details ld1 = new Labour_Details();
            ld1.ShowDialog();
        }
    }
}
```

Add Labours Form

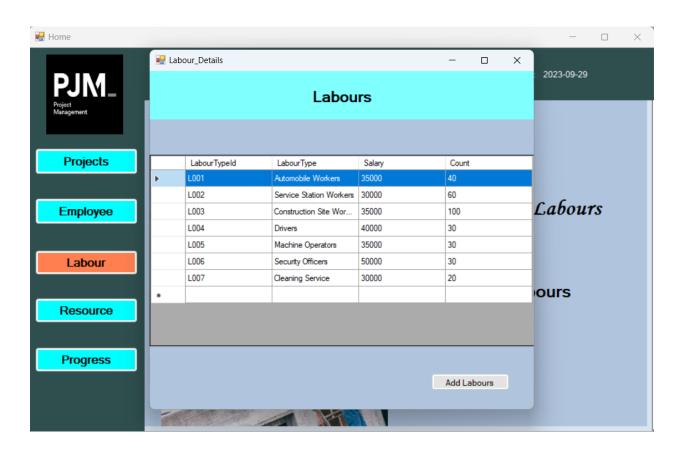




```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Runtime.InteropServices.ComTypes;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Xml.Ling;
namespace ProjectManagementSystem
    public partial class Add_Labours : Form
        public Add_Labours()
            InitializeComponent();
        }
        private void Add_Labours_Load(object sender, EventArgs e)
            if(txtId.Text == "")
                textCountBox.Visible = false;
            }
            else
            {
                textCountBox.Visible = true;
            }
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select LabourType From Labours",
conn);
            List<string> LabourTypes = new List<string>();
            using (SqlDataReader reader1 = cmd1.ExecuteReader())
            {
                while (reader1.Read())
                    string labourType = reader1["LabourType"].ToString();
                    LabourTypes.Add(labourType);
                }
            }
            string[] labourTypeArray = LabourTypes.ToArray();
            comboBox1.Items.AddRange(labourTypeArray);
            conn.Close();
        }
        private void button3_Click(object sender, EventArgs e)
```

```
txtId.Text = "";
            txtCount.Text = "";
            txtSalary.Text = "":
            comboBox1.Text = "";
            textCountBox.Clear();
        }
        private void button1_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from Labours where
LabourType=@type", conn);
            cmd.Parameters.AddWithValue("type", comboBox1.Text);
            SqlDataReader reader1;
            reader1 = cmd.ExecuteReader();
            if (reader1.Read())
            {
                txtId.Text = reader1["LabourTypeId"].ToString();
                txtSalary.Text = reader1["Salary"].ToString();
                txtCount.Text = reader1["Count"].ToString();
            }
            else
                MessageBox.Show("Invalid Labour Check Again..", "Data Not Found",
MessageBoxButtons.OK, MessageBoxIcon.Error);
            if (txtId.Text == String.Empty)
                textCountBox.Visible = false;
            }
            else
                textCountBox.Visible = true;
        }
        private void button2_Click(object sender, EventArgs e)
            SglConnection conn = new SglConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("UPDATE Labours SET Count=@Count WHERE
LabourTypeId=@id", conn);
            cmd.Parameters.AddWithValue("@id", txtId.Text);
            cmd.Parameters.AddWithValue("@Count", int.Parse(txtCount.Text) +
int.Parse(textCountBox.Text));
            cmd.ExecuteNonQuery();
            conn.Close();
            MessageBox.Show("Labours Added Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Text = "";
            txtCount.Text = "";
```

Labours Details Form



```
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 ProjectManagementSystem
{
    public partial class Labour_Details : Form
```

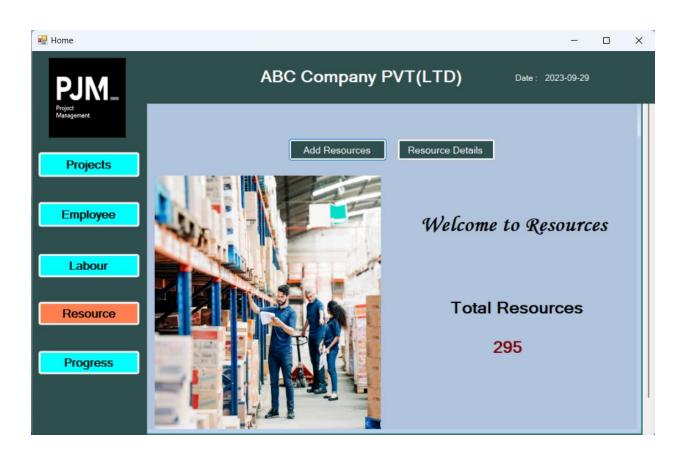
```
{
    public Labour_Details()
    {
        InitializeComponent();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        Add_Labours al1 = new Add_Labours();
        al1.ShowDialog();
    }

    private void Labour_Details_Load(object sender, EventArgs e)
    {
        this.sqlDataAdapter1.Fill(this.laboursSet1.Labours);
    }

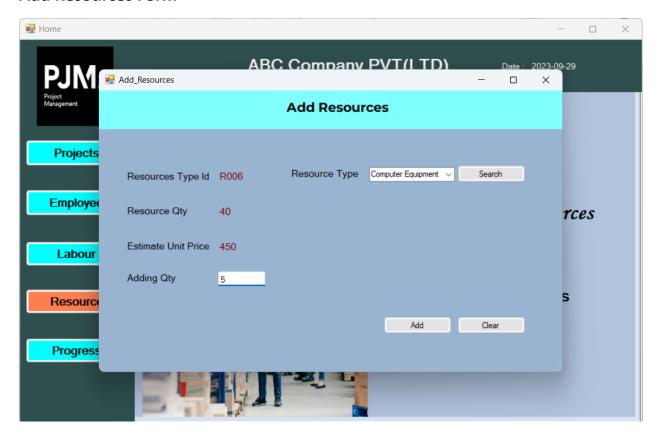
    private void label1_Click(object sender, EventArgs e)
    {
        }
    }
}
```

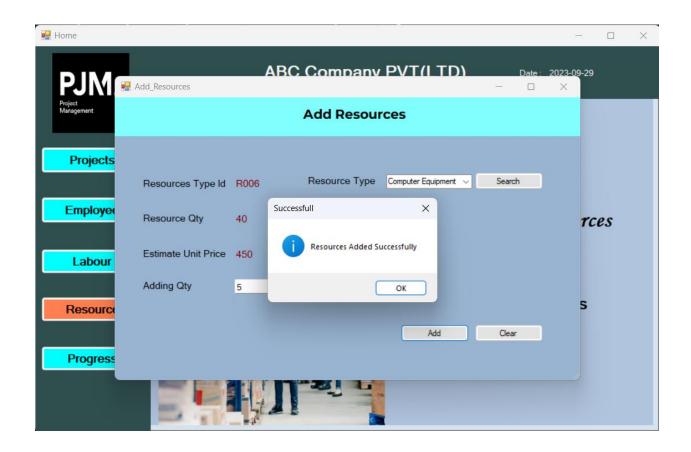
Resource Page



```
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 ProjectManagementSystem
   public partial class Resources : Form
        public Resources()
            InitializeComponent();
        private void button1_Click(object sender, EventArgs e)
            Add_Resources ar1 = new Add_Resources();
            ar1.ShowDialog();
        private void Resources_Load(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select SUM(Qty) From Resources",
conn);
            int rsCount = (int)cmd1.ExecuteScalar();
            total.Text = rsCount.ToString();
            conn.Close();
        }
        private void button2_Click(object sender, EventArgs e)
            Resources_Details rd1 = new Resources_Details();
            rd1.ShowDialog();
        }
   }
}
```

Add Resources Form



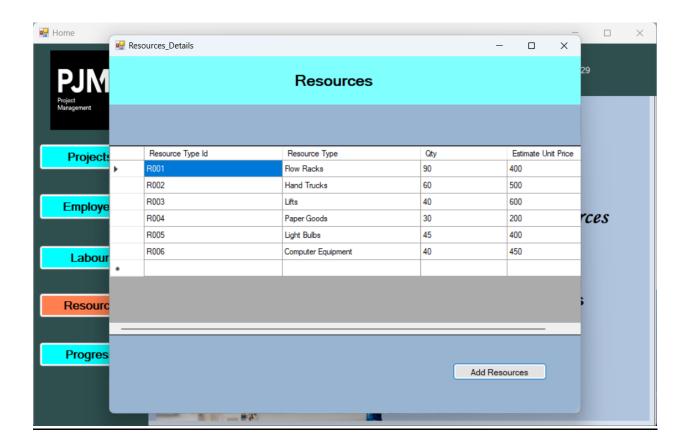


```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class Add_Resources : Form
        public Add_Resources()
            InitializeComponent();
        private void Add_Resources_Load(object sender, EventArgs e)
            if (txtId.Text == "")
            {
                textCountBox.Visible = false;
            }
            else
```

```
{
                textCountBox.Visible = true;
            }
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select ResourceTypeName From
Resources", conn);
            List<string> ResourceTypes = new List<string>();
            using (SqlDataReader reader1 = cmd1.ExecuteReader())
                while (reader1.Read())
                    string ResourceType = reader1["ResourceTypeName"].ToString();
                    ResourceTypes.Add(ResourceType);
            }
            string[] ResourceTypeArray = ResourceTypes.ToArray();
            comboBox1.Items.AddRange(ResourceTypeArray);
            conn.Close();
        }
        private void button1_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from Resources where
ResourceTypeName=@type", conn);
            cmd.Parameters.AddWithValue("type", comboBox1.Text);
            SqlDataReader reader1;
            reader1 = cmd.ExecuteReader();
            if (reader1.Read())
                txtId.Text = reader1["ResourceTypeId"].ToString();
                txtPrice.Text = reader1["UnitPrice"].ToString();
                txtCount.Text = reader1["Qty"].ToString();
            }
            else
                MessageBox.Show("Invalid Resources Check Again..", "Data Not Found",
MessageBoxButtons.OK, MessageBoxIcon.Error);
            if (txtId.Text == String.Empty)
            {
                textCountBox.Visible = false;
            }
            else
            {
                textCountBox.Visible = true;
        }
```

```
private void button2_Click(object sender, EventArgs e)
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("UPDATE Resources SET Qty=@Qty WHERE
ResourceTypeId=@id", conn);
            cmd.Parameters.AddWithValue("@id", txtId.Text);
            cmd.Parameters.AddWithValue("@Qty", int.Parse(txtCount.Text) +
int.Parse(textCountBox.Text));
            cmd.ExecuteNonQuery();
            conn.Close();
            MessageBox.Show("Labours Added Successfully", "Successfull",
MessageBoxButtons.OK, MessageBoxIcon.Information);
            txtId.Text = "";
            txtCount.Text = "";
            txtPrice.Text = "";
            comboBox1.Text = "";
            textCountBox.Clear();
        }
        private void button3_Click(object sender, EventArgs e)
            txtId.Text = "";
            txtCount.Text = "";
            txtPrice.Text = "";
            comboBox1.Text = "";
            textCountBox.Clear();
        }
   }
}
```

Resources Details Form

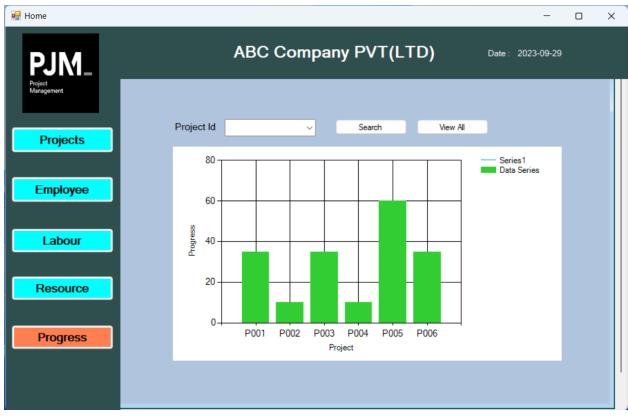


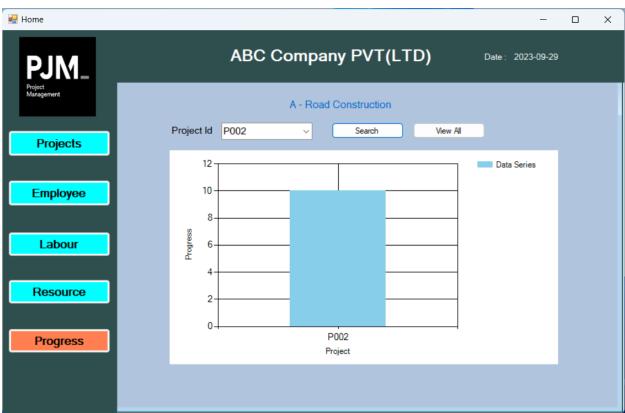
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace ProjectManagementSystem
    public partial class Resources_Details : Form
        public Resources_Details()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
            Add_Resources ar1 = new Add_Resources();
```

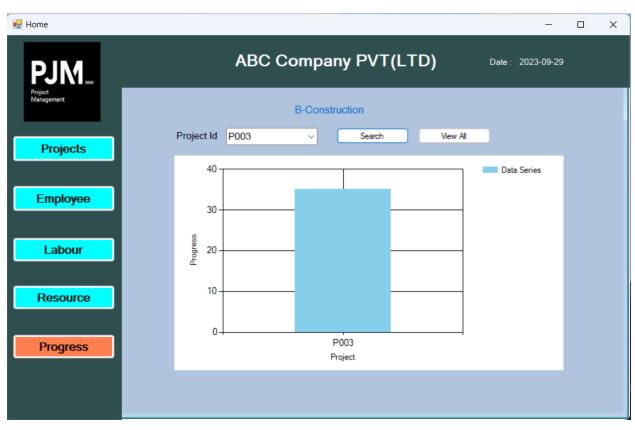
```
ar1.ShowDialog();
}

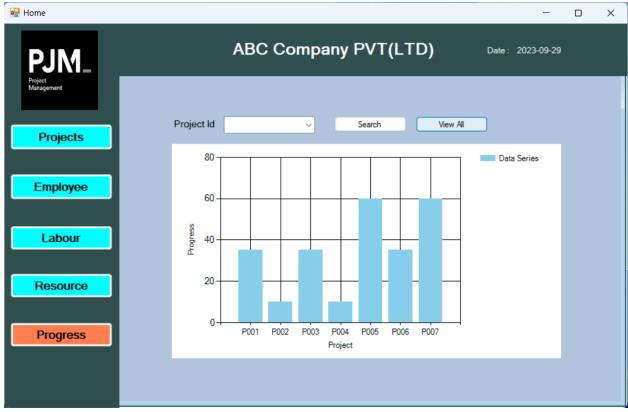
private void Resources_Details_Load(object sender, EventArgs e)
{
    this.sqlDataAdapter1.Fill(this.resourceSet1.Resources);
}
}
```

Progress Page









```
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;
using System.Windows.Forms.DataVisualization.Charting;
using System.Xml.Ling;
using static System.Windows.Forms.AxHost;
using static System.Windows.Forms.VisualStyles.VisualStyleElement;
namespace ProjectManagementSystem
   public partial class Progress : Form
        public Progress()
            InitializeComponent();
        private void button1_Click(object sender, EventArgs e)
            Projects p1 = new Projects();
            this.Hide();
            p1.ShowDialog();
            this.Close();
        }
        private void Progress_Load(object sender, EventArgs e)
            // Create a series
            Series series = new Series("Data Series");
            series.ChartType = SeriesChartType.Column;
            chart1.Series.Add(series);
            // Connect to the database
            string connectionString = "Data Source=localhost\\SQLEXPRESS;Initial
Catalog=PMSDB;Integrated Security=True";
            using (SqlConnection connection = new SqlConnection(connectionString))
                connection.Open();
                SqlCommand cmd = new SqlCommand("SELECT ProjectId, Status FROM
Projects", connection);
                // Read data from the database and add data points to the series
                SqlDataReader reader1 = cmd.ExecuteReader();
                while (reader1.Read())
                    string Id = reader1["ProjectId"].ToString();
                    int value = 0;
                    switch (reader1["Status"].ToString())
```

```
case "Planned":
                            value = 10;
                            break;
                        case "Analyzed":
                            value = 35;
                            break;
                        case "Started":
                            value = 60;
                            break;
                        case "Completed":
                            value = 80;
                            break;
                        case "Closed":
                            value = 100;
                            break;
                            // Handle other statuses as needed
                    }
                    // Add data points based on the "Name" column value
                    series.Points.AddXY(Id, value);
                    // Label the X-axis directly
                    chart1.ChartAreas[0].AxisX.Title = "Project";
                    // Label the Y-axis directly
                    chart1.ChartAreas[0].AxisY.Title = "Progress";
                    // Refresh the chart to display the changes
                    chart1.Refresh();
                reader1.Close();
            }
            SqlConnection conn = new SqlConnection(connectionString);
            conn.Open();
            SqlCommand cmd1 = new SqlCommand("Select ProjectId From Projects",
conn);
            List<string> ProjIds = new List<string>();
            using (SqlDataReader reader1 = cmd1.ExecuteReader())
            {
                while (reader1.Read())
                    string projId = reader1["ProjectId"].ToString(); // Assuming
ProjectId is a string
                    ProjIds.Add(projId);
                }
            }
            // Convert the list to an array if needed
            string[] empIdsArray = ProjIds.ToArray();
            // Populate a ListBox or another control with the array
            comboBox1.Items.AddRange(empIdsArray);
```

```
}
        private void button2_Click(object sender, EventArgs e)
            Series series = new Series("Data Series");
            series.ChartType = SeriesChartType.Column;
            chart1.Series.Clear();
            chart1.Series.Add(series);
            SqlConnection conn = new SqlConnection("Data
Source=localhost\\SQLEXPRESS;Initial Catalog=PMSDB;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select ProjectId, Name, Status from
Projects where ProjectId=@id", conn);
            cmd.Parameters.AddWithValue("id", comboBox1.Text);
            SqlDataReader reader1 = cmd.ExecuteReader();
            while (reader1.Read())
            {
                string Id = reader1["ProjectId"].ToString();
                ProjName.Text = reader1["Name"].ToString();
                int value = 0;
                switch (reader1["Status"].ToString())
                    case "Planned":
                        value = 10;
                        break:
                    case "Analyzed":
                        value = 35;
                        break;
                    case "Started":
                        value = 60;
                        break;
                    case "Completed":
                        value = 80;
                        break;
                    case "Closed":
                        value = 100;
                        break;
                        // Handle other statuses as needed
                }
                // Add data points based on the "Name" column value
                series.Points.AddXY(Id, value);
                // Label the X-axis directly
                chart1.ChartAreas[0].AxisX.Title = "Project";
                // Label the Y-axis directly
                chart1.ChartAreas[0].AxisY.Title = "Progress";
                // Refresh the chart to display the changes
                chart1.Refresh();
            }
```

```
reader1.Close();
        }
        private void button1_Click_1(object sender, EventArgs e)
            comboBox1.Text = "";
            ProjName.Text = " ";
            chart1.Series.Clear();
            Series series = new Series("Data Series");
            series.ChartType = SeriesChartType.Column;
            chart1.Series.Add(series);
            // Connect to the database
            string connectionString = "Data Source=localhost\\SQLEXPRESS;Initial
Catalog=PMSDB;Integrated Security=True";
            using (SqlConnection connection = new SqlConnection(connectionString))
                connection.Open();
                SqlCommand cmd = new SqlCommand("SELECT ProjectId, Status FROM
Projects", connection);
                // Read data from the database and add data points to the series
                SqlDataReader reader1 = cmd.ExecuteReader();
                while (reader1.Read())
                    string Id = reader1["ProjectId"].ToString();
                    int value = 0;
                    switch (reader1["Status"].ToString())
                        case "Planned":
                            value = 10;
                            break;
                        case "Analyzed":
                            value = 35;
                            break;
                        case "Started":
                            value = 60;
                            break;
                        case "Completed":
                            value = 80;
                            break:
                        case "Closed":
                            value = 100;
                            break:
                            // Handle other statuses as needed
                    }
                    // Add data points based on the "Name" column value
                    series.Points.AddXY(Id, value);
                    // Label the X-axis directly
                    chart1.ChartAreas[0].AxisX.Title = "Project";
                    // Label the Y-axis directly
                    chart1.ChartAreas[0].AxisY.Title = "Progress";
                    // Refresh the chart to display the changes
```

```
chart1.Refresh();
}
reader1.Close();

}
}
}
```

========= Screenshots & Code implementation end ... =========

Demo video of our project



Click me

https://drive.google.com/file/d/1Bty0FCPX91jddkMx1wVGunjNbm2dikQo/view?usp=sharing