

Customer Maintenance

Customers:

Add Wholesale

Add Retail

Delete

Exit

RetailCustomer

First Name

Last Name:

Email:

Home Phone:

Save Cancel

WholesaleCustomer

First Name

Last Name:

Email:

Company:

Save Cancel

```
using CustomerHierarchy;  
using System;  
using System.Collections.Generic;  
using System.Windows.Forms;
```

```
namespace CustomerMaintainance
```

```

{
    public partial class frmCustomerMaintenance : Form
    {
        List<Customer> lstCustomers = new List<Customer>();
        string strOutput;
        public frmCustomerMaintenance()
        {
            InitializeComponent();
        }

        private void btnAddWholesale_Click(object sender, EventArgs e)
        {
            frmWholesaleCustomer wholesaleForm = new frmWholesaleCustomer();
            wholesaleForm.ShowDialog();
            lstBxCustomerMaintenance.Items.Add(wholesaleForm.Output);
            lstCustomers.Add(wholesaleForm.WholeSaleCustomer);
        }

        private void btnAddRetail_Click(object sender, EventArgs e)
        {
            frmRetailCustomer retailForm = new frmRetailCustomer();
            retailForm.ShowDialog();
            lstBxCustomerMaintenance.Items.Add(retailForm.Output);
            lstCustomers.Add(retailForm.RetailCustomer);
        }

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

        public string Output
        {
            get => strOutput;
            set
            {
                strOutput = value;
            }
        }

        public List<Customer> GetCustomerList
        {
            get => lstCustomers;
            set
            {
                lstCustomers = value;
            }
        }
    }
}

```

```

    }

    private void btnDelete_Click(object sender, EventArgs e)
    {
        DialogResult dialogResult1;
        string strName, _Name;
        int intComma;
        strName = Convert.ToString(lstBxCustomerMaintenance.SelectedItem);
        try
        {
            intComma = lstBxCustomerMaintenance.SelectedItem.ToString().IndexOf(',');
            _Name = strName.Substring(0, intComma);

            //Confirm operation
            dialogResult1 = MessageBox.Show("Are you sure you want to delete " + _Name +
            "?", "Confirm Delete", MessageBoxButtons.YesNo);

            if (dialogResult1 == DialogResult.Yes)
            {
                lstBxCustomerMaintenance.Items.RemoveAt(lstBxCustomerMaintenance.SelectedIndex);
                lstCustomers.RemoveAt(lstBxCustomerMaintenance.SelectedIndex + 1);
            }

            else
            {
                MessageBox.Show("The record has not be deleted.");
            }
        }
        catch (NullReferenceException)
        {
            MessageBox.Show(" Please select the customer from the list.", "Error");
        }
    }
}

using CustomerHierarchy;
using System;
using System.Windows.Forms;

namespace CustomerMaintainance
{
    public partial class frmRetailCustomer : Form
    {

```

```

public string _FirstName, _LastName, _Email, _HomePhone, strOutput;
RetailCustomer RCustomer;
private void btnCancel_Click(object sender, EventArgs e)
{
    this.Close();
}

public frmRetailCustomer()
{
    InitializeComponent();
}

private void btnSave_Click(object sender, EventArgs e)
{
    try
    {
        _FirstName = txtBxFirstName.Text;
        _LastName = txtBxLastName.Text;
        _Email = txtBxEmail.Text;
        _HomePhone = txtBxCompany.Text;
        int rateSign = _Email.IndexOf('@');
        if (rateSign < 0)
        {
            MessageBox.Show("Please enter a valid email address.");
            txtBxEmail.SelectAll();
            txtBxEmail.Focus();
        }
        else
        {
            int dashSign = _HomePhone.IndexOf('-');
            if (dashSign == 3 || dashSign == 7)
            {
                RetailCustomer RCustomer = new RetailCustomer(_FirstName, _LastName,
                _Email, _HomePhone);
                strOutput = RCustomer.GetDisplayText();
                this.Close();
            }
            else
            {
                MessageBox.Show("Please enter a valid phone number.");
                txtBxCompany.SelectAll();
                txtBxCompany.Focus();
            }
        }
    }
}

```

```

        catch (Customer.EmptyFieldsException ex)
        {
            MessageBox.Show(ex.Message);
        }
    }
    public RetailCustomer RetailCustomer
    {
        get => RCustomer;

        set
        {
            RCustomer = value;
        }
    }
    public string Output
    {
        get => strOutput;
        set
        {
            strOutput = value;
        }
    }
}
}

```

```

using CustomerHierarchy;
using System;
using System.Windows.Forms;

```

```

namespace CustomerMaintainance
{
    public partial class frmWholesaleCustomer : Form
    {
        public string _FirstName, _LastName, _Email, _Company, strOutput;
        WholesaleCustomer WSCustomer;
        private void btnCancel_Click(object sender, EventArgs e)
        {
            this.Close();
        }

        public frmWholesaleCustomer()
        {
            InitializeComponent();
        }

        private void btnSave_Click(object sender, EventArgs e)

```

```

    {
        try
        {
            _FirstName = txtBxFirstName.Text;
            _LastName = txtBxLastName.Text;
            _Email = txtBxEmail.Text;
            _Company = txtBxCompany.Text;
            //call in wholesale customer
            WholesaleCustomer WSCustomer = new WholesaleCustomer(_FirstName,
            _LastName, _Email, _Company);
            strOutput = WSCustomer.GetDisplayText();
            this.Close();
            //go to the main form
        }
        catch (Customer.EmptyFieldsException ex)
        {
            MessageBox.Show(ex.Message);
        }
    }

    public string Output
    {
        get => strOutput;
        set
        {
            strOutput = value;
        }
    }

    public WholesaleCustomer WholeSaleCustomer
    {
        get => WSCustomer;

        set
        {
            WSCustomer = value;
        }
    }
}

using System;

namespace CustomerHierarchy
{

```

```

public class Customer
{

    //constructor
    public Customer(string firstName, string lastName, string email)
    {

        FirstName = firstName;
        LastName = lastName;
        Email = email;
        if (FirstName == "" || LastName == "" || Email == "")
        { throw new EmptyFieldsException(); }

    }
    public string FirstName
    {
        get; set;
    }
    public string LastName
    {
        get;set;
    }
    public string Email
    {
        get;set;
    }
    public virtual string GetDisplayText()
    {
        return (FirstName + " " +LastName + ", " + Email + " ");
    }
    public class EmptyFieldsException : ApplicationException
    {
        public EmptyFieldsException(string message) : base(message) { }
        public EmptyFieldsException() : base("One or more fields are empty. Please fill in all the
information required.") { }
    }

}
}

```

```

using System;
namespace CustomerHierarchy
{

```

```

public class RetailCustomer : Customer
{
    public RetailCustomer(string firstName,string lastName, string email, string homePhone) :
base(firstName,lastName, email)
    {
        HomePhone = homePhone;
        if (HomePhone == "")
        { throw new EmptyFieldsException(); }
    }
    public string HomePhone
    {
        get;set;
    }
    public override string GetDisplayText()
    {
        return (base.GetDisplayText() + "ph: " + HomePhone);
    }
}
}

```

```

using System;
namespace CustomerHierarchy
{
    public class WholesaleCustomer : Customer
    {
        public WholesaleCustomer(string firstName, string lastName, string email, string company)
: base(firstName,lastName, email)
        {
            Company = company;
            if (Company == "")
            { throw new EmptyFieldsException(); }
        }
        public string Company
        {
            get;
            set;
        }
        public override string GetDisplayText()
        {
            return base.GetDisplayText() + Company;
        }
    }
}

```



