SOFTWARE DESIGN DOCUMENT

eMart

Session: 2020

Submitted By

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Submitted To

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Chapter 1: Introduction

Project Description:

We will be designing a simple **Online Shopping System**. The system will allow customer to go to the web page and do online shopping and system will allow admin to update whole web pages. Customer can see the products, products details, deals, register his/her account in system to buy products and login his account whereas Admin can show the products, products details, different deals, allow customer to register his/her account in system to buy products and login to his account.

Vision:

The vision of this project is to provide online facilities to customers to buy different products from home.

Scope:

The scope of this project is to facilitate the customers with online services by creating account on this system. Customers can view different available products in the mart. They can also view the product details, available offers and buy products if they have an account.

Chapter 2: Requirements

Functional requirements:

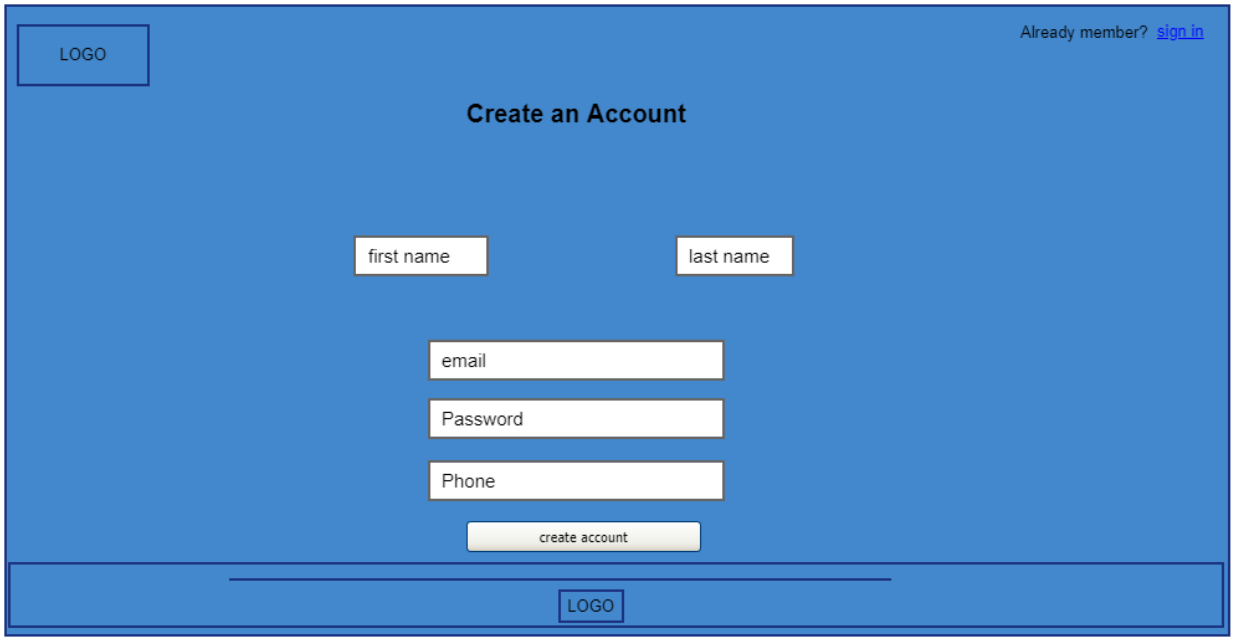
- Our system shall allow the admin to see Account's login form and enter his Account's username and password to sign in to this system.
- Our system shall allow the customers to see Account's login form and enter his Account's username and password to sign in to this system.
- Our system shall allow the admin to see Sign-up form and enter his/her required information to make an account in this system.
- Our system shall allow the customers to see Sign-up form and enter his/her required information to make an account in this system.
- Our system shall allow the admin to show the company logo to the customers and change or update it anytime.
- Our system shall allow the customers to see the logo and go to home page of this system when they click the logo.
- Our system shall allow admin to show different products currently available in the mart on home page.
- Our system shall allow the customers to see the products currently available in the shop on home page.
- Our system shall allow the admin to provide product details i.e., company name, price, expiry dates, etc.
- Our system shall allow the customers to see product details when they click on the product shown on home page.
- Our system shall allow the admin to change or update product details anytime.
- Our system shall allow the admin to show different deals currently available in the shop.
- Our system shall allow the customers to see available deals of the shop.
- Our system shall allow the customer to add the product to the watchlist.
- Our system shall allow the customer to add the product to the cart.
- Our system shall allow the customers to see the watchlist.
- Our system shall allow the customers to see the cart.
- Our system shall allow the customers to buy products.

Non-functional requirements:

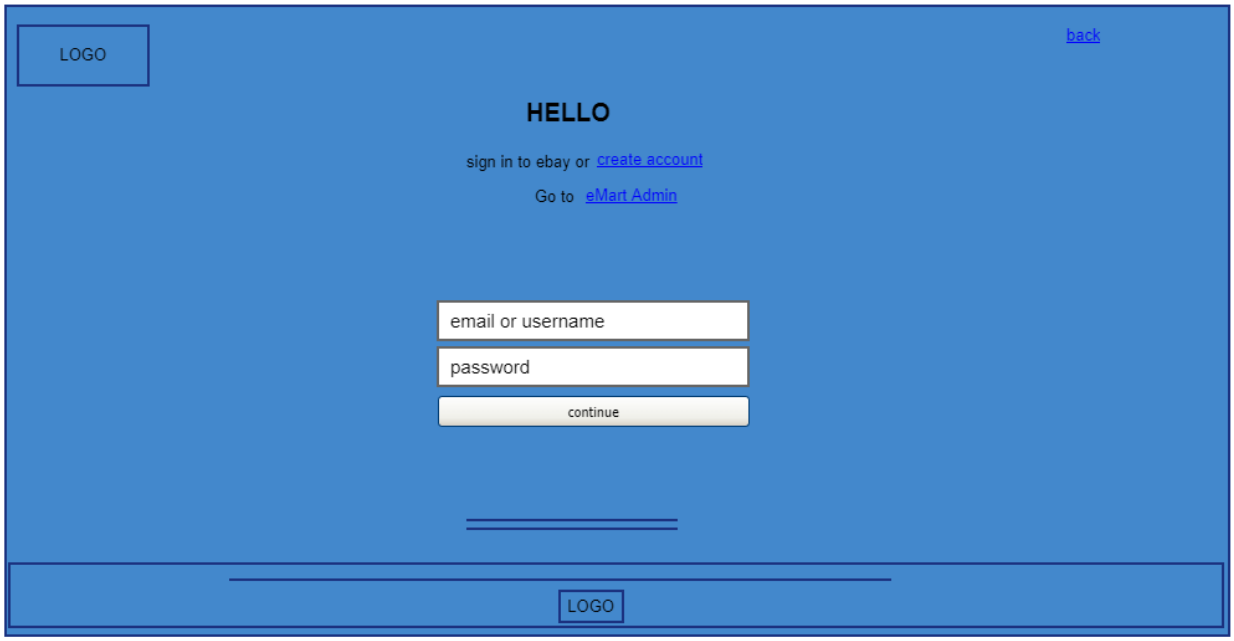
- Responsive: Our system must be responsive from 1 to 3 seconds.
- Security: Our system must provide a functionality to of sign-in/log-in using which user can use this this software.
- Scalability: Our system must have a capability to scale as the number of users increase.
- Availability: Our system must be available 24/7 to every customer by using non-redundant power supply.
- Usability: Our system must be user friendly.
- Reliability: Our system must be reliable by performing its function respectably in a defined environment without failure.
- Manageability: Our system must be manageable by monitoring it to keep the system secure, and running smoothly.
- Maintainability: Our system must be maintainable by modifying to correct faults, improve performance, or adapt to a changed environment.
- Data integrity: Our system must maintain the accuracy and consistency of data through authentication by ongoing use of error checking and validation routines.
- Recoverability: Our system must be recoverable by verifying system's ability to recover from failures like software/hardware crashes, network failures etc.
- Capacity: Our system must be capable to deal with the amount of information or services that can be handled by the system.

Wireframes:

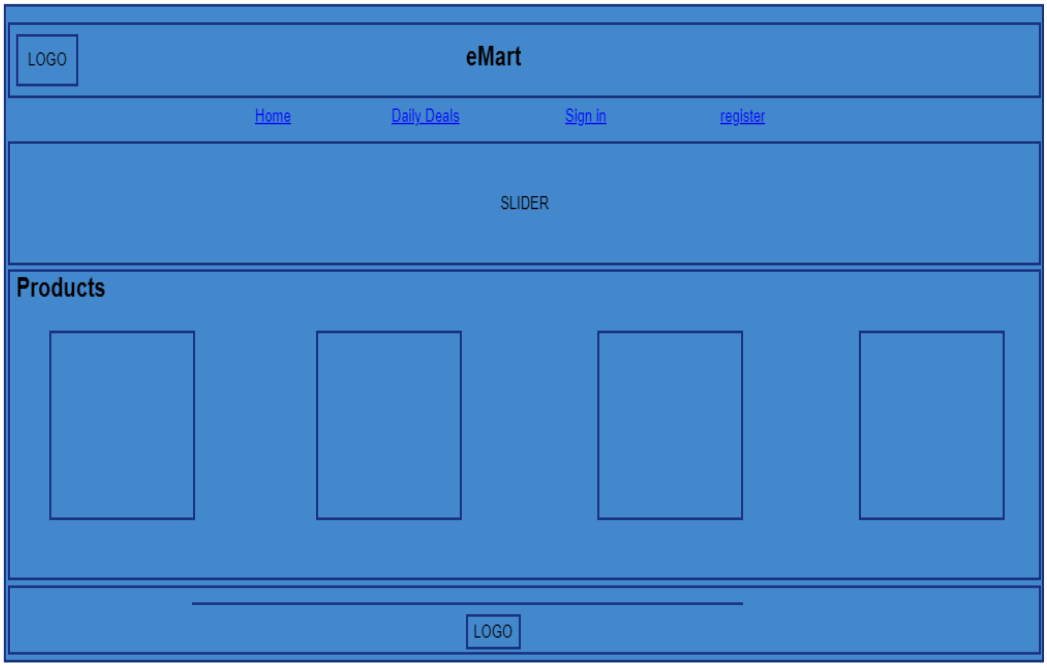
Sign-up



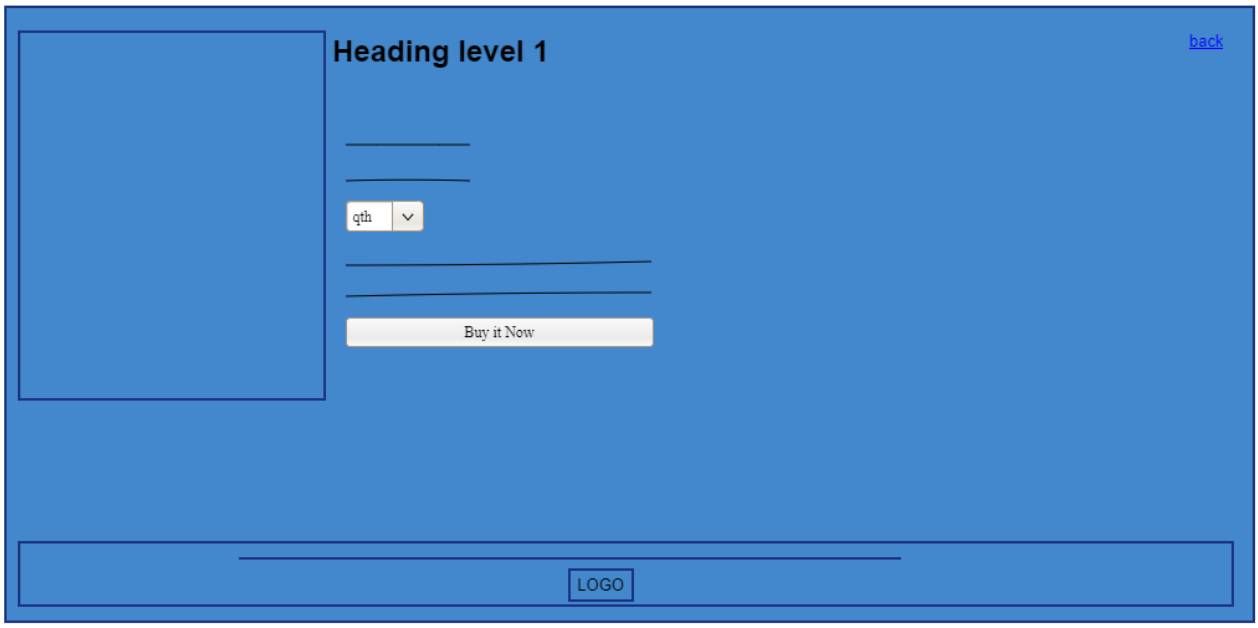
Sign In


LOGO
back
HELLO
sign in to ebay or create account
Go to eMart Admin
email or username
password
continue
LOGO

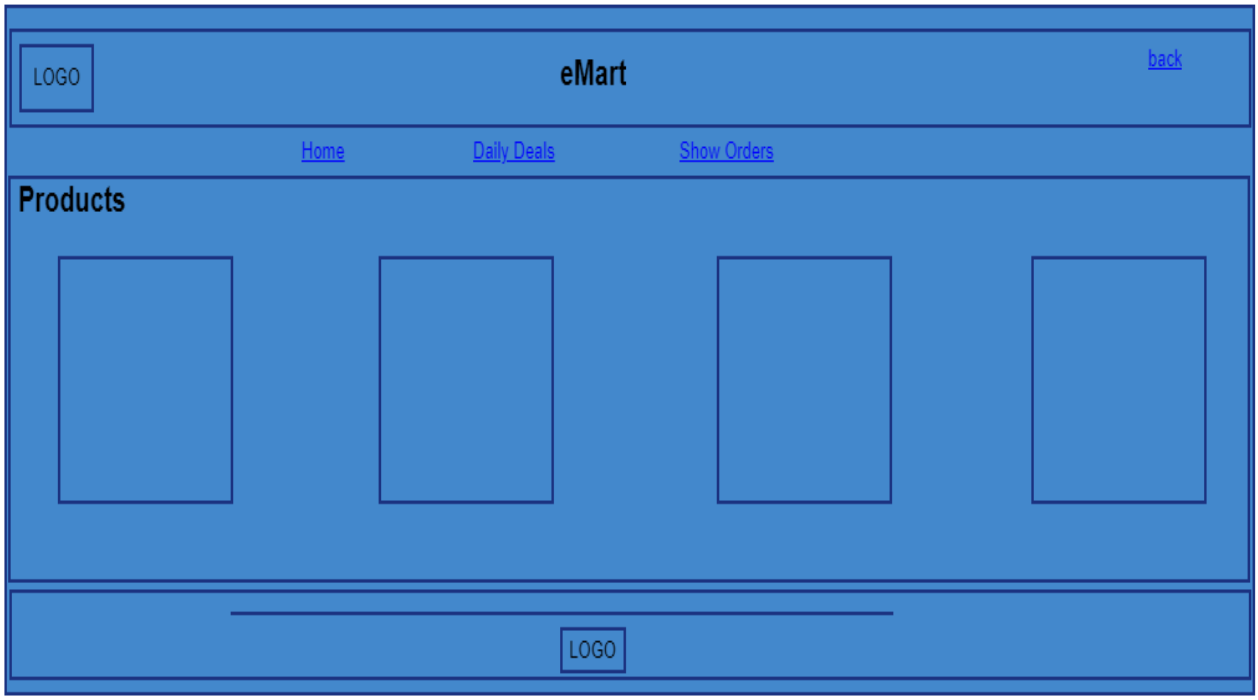
Home


LOGO
eMart
Home
Daily Deals
Sign in
register
SLIDER
Products
LOGO

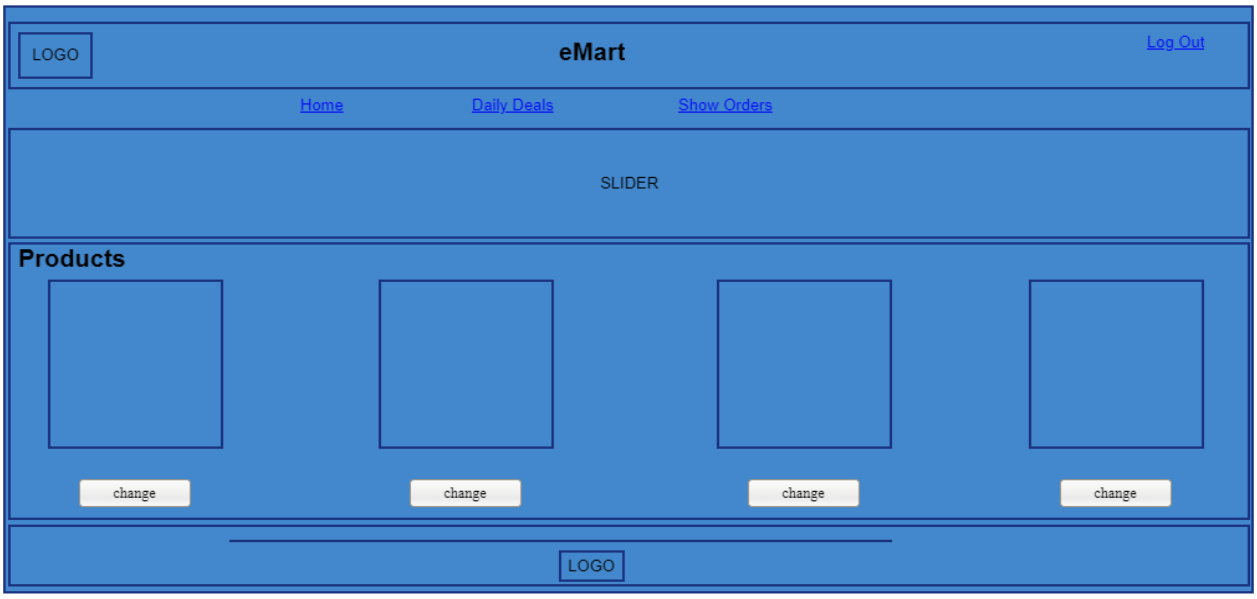
Product Details



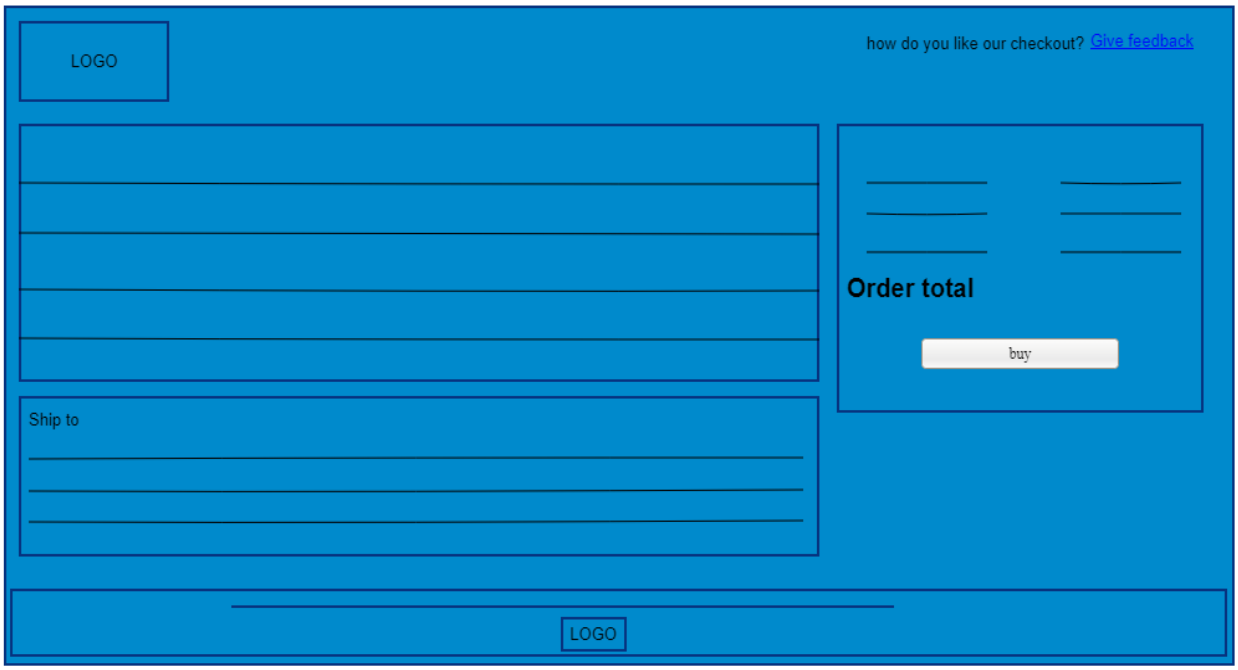
Daily Deals



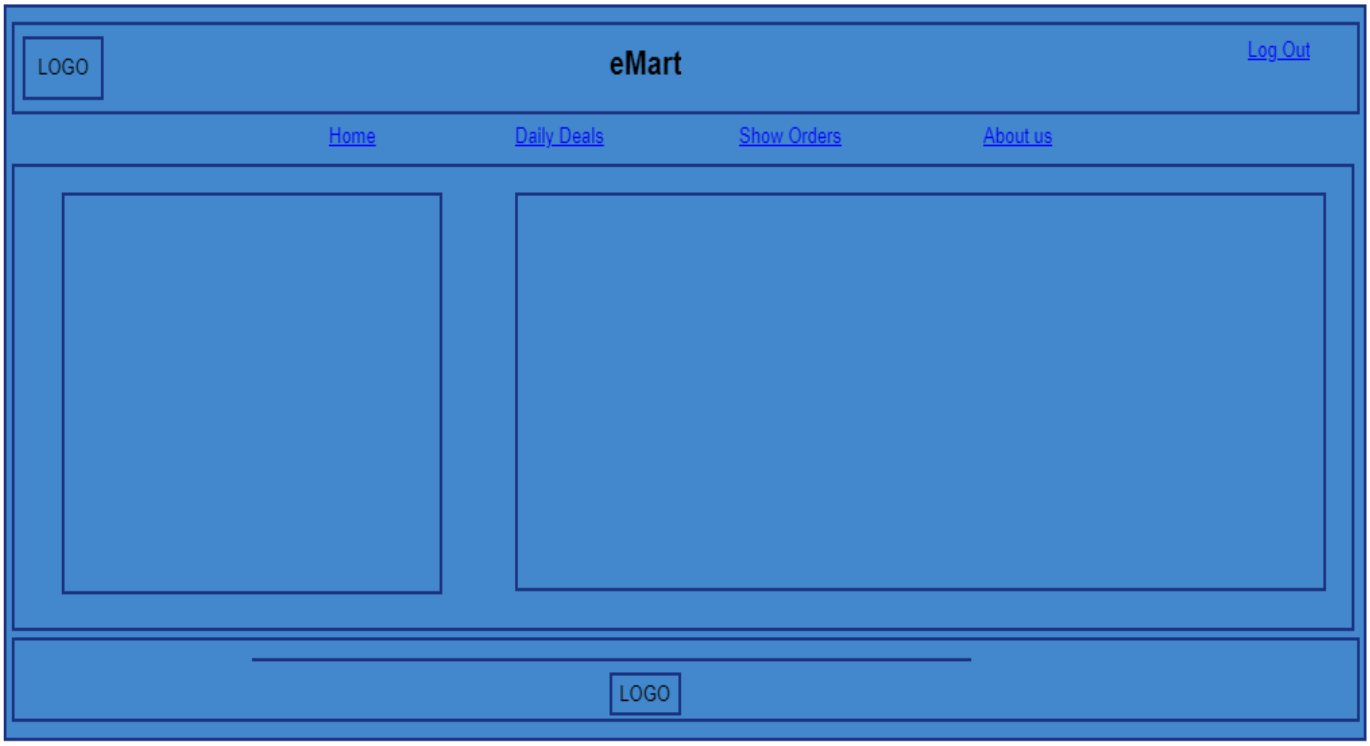
Admin Home



Buy



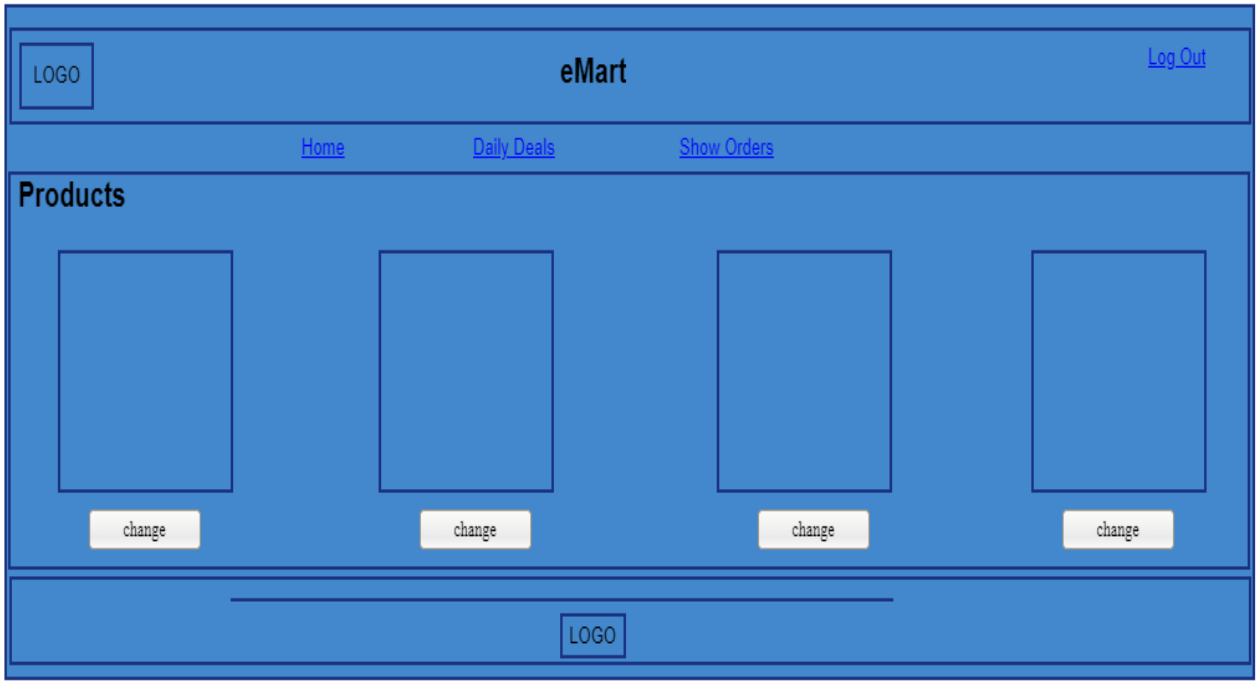
About us



Admin About us

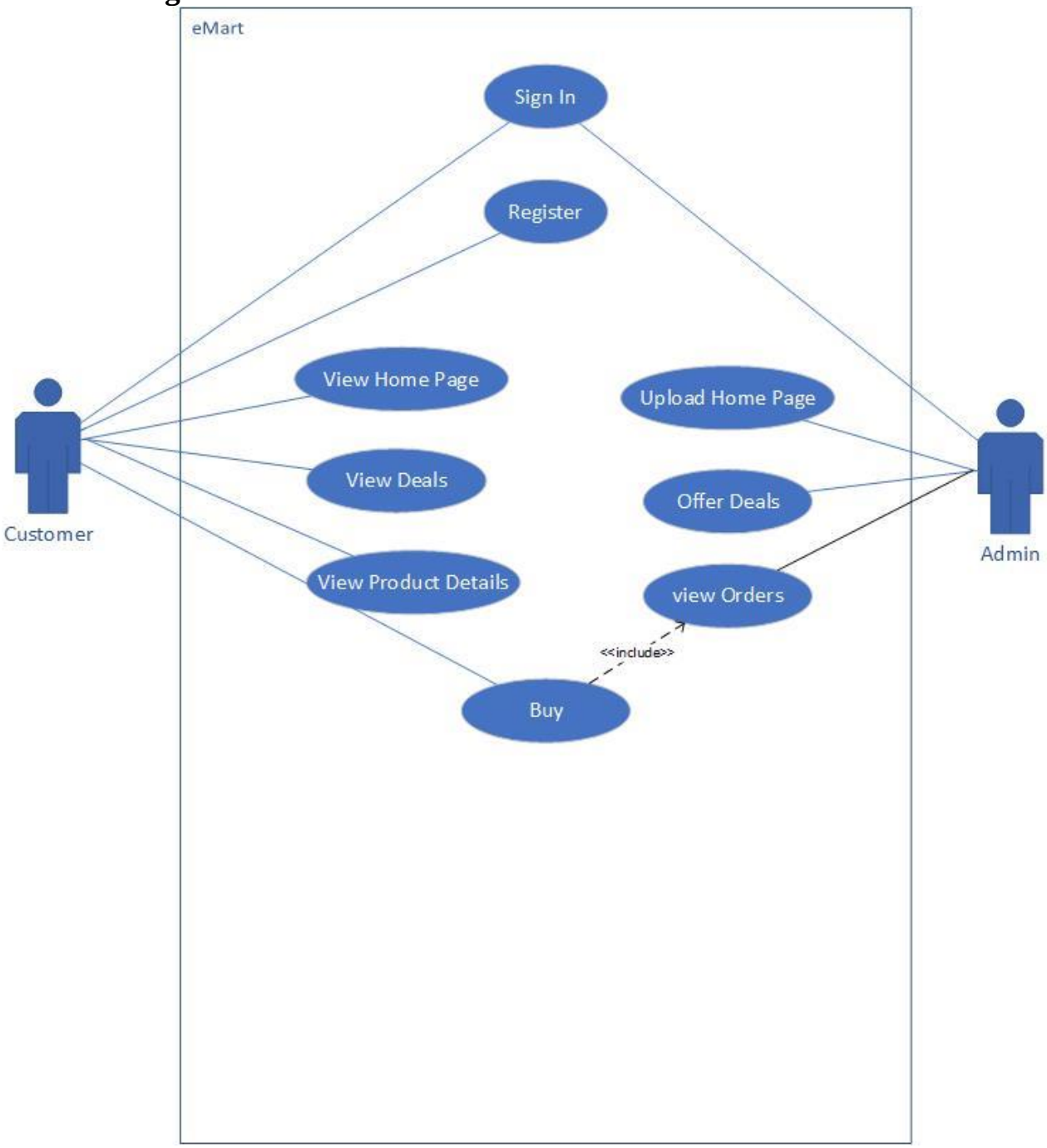
Show Order

Admin Deals

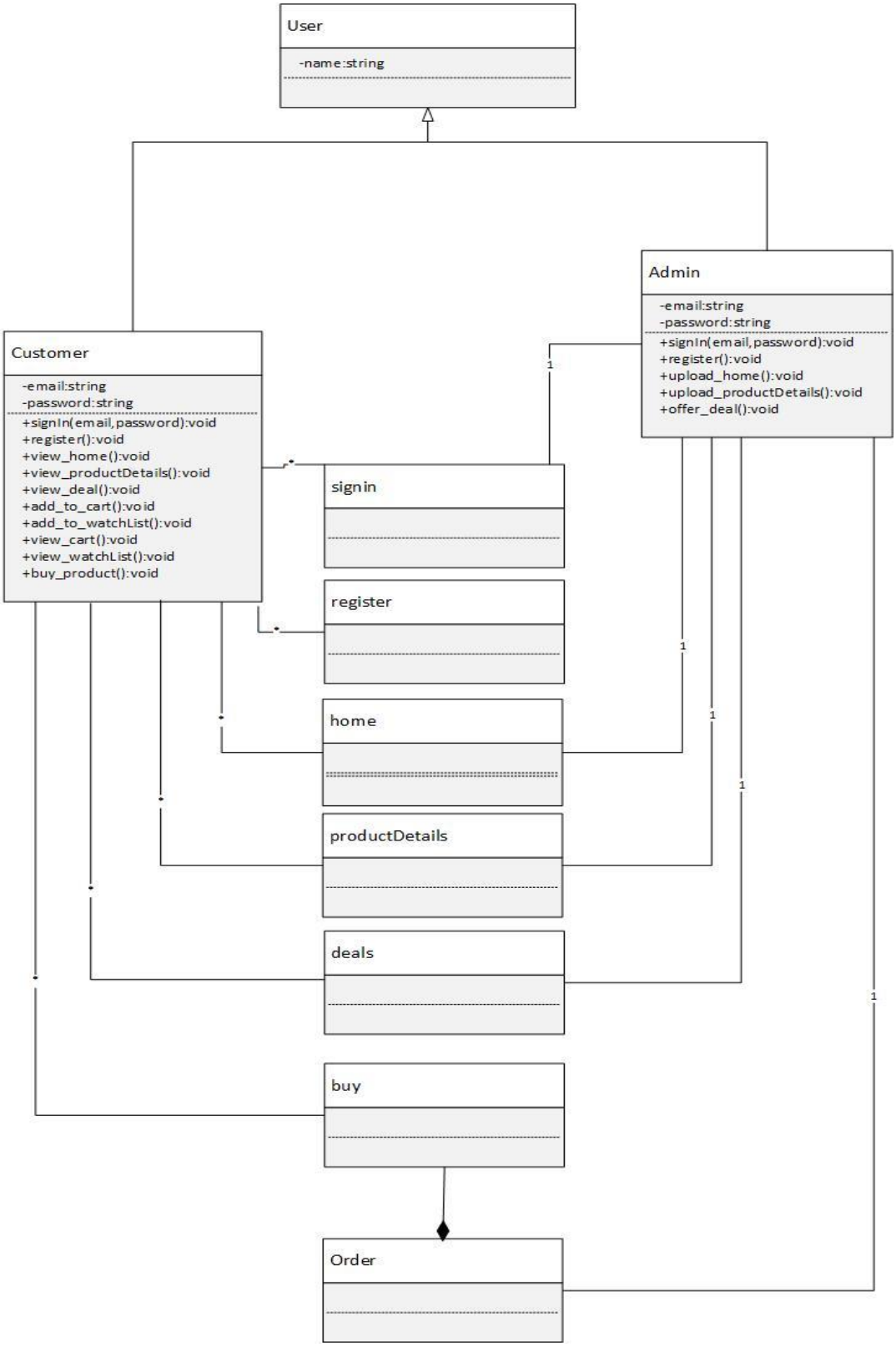


Chapter 3: Design

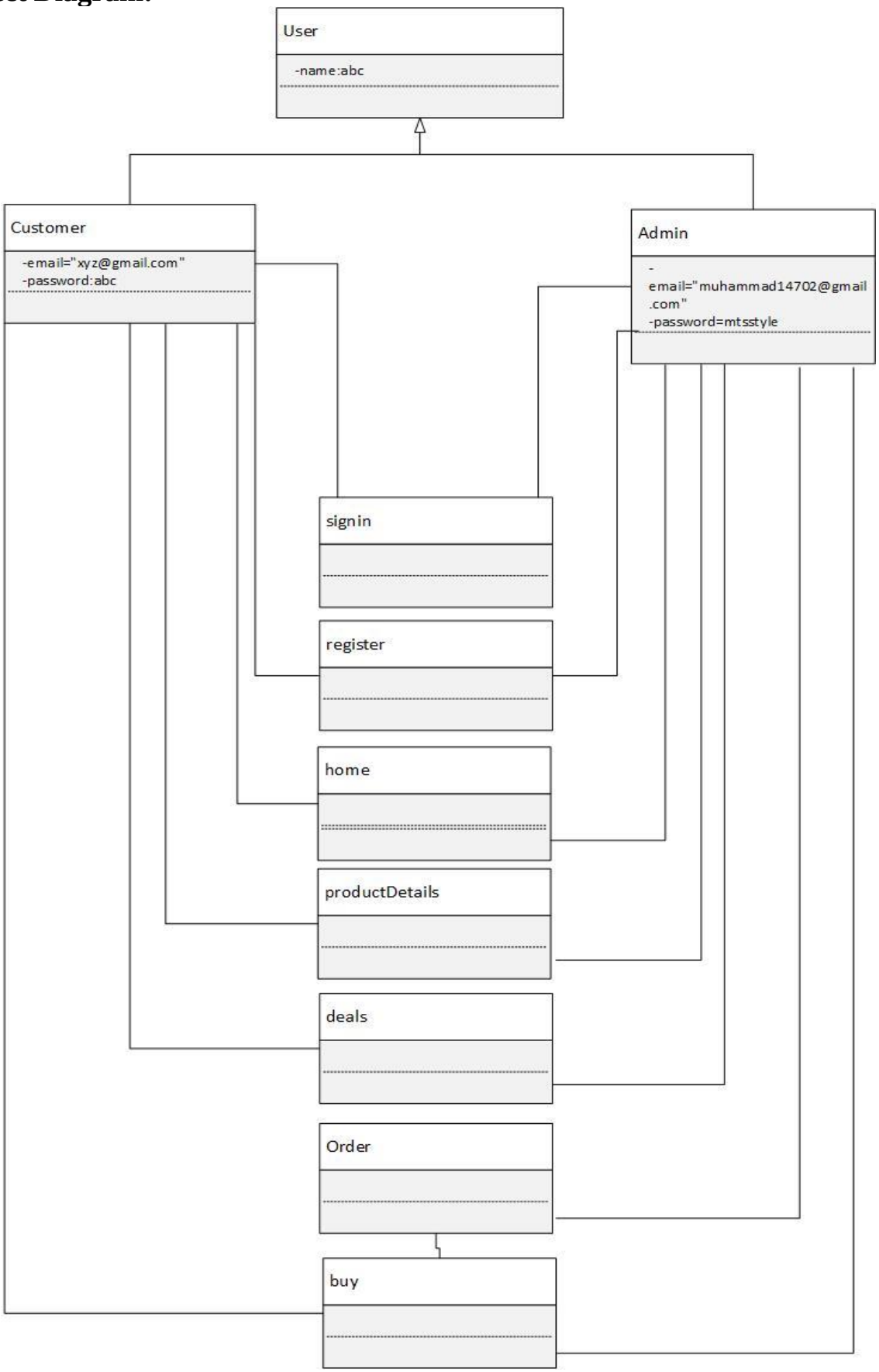
Use Case Diagram:



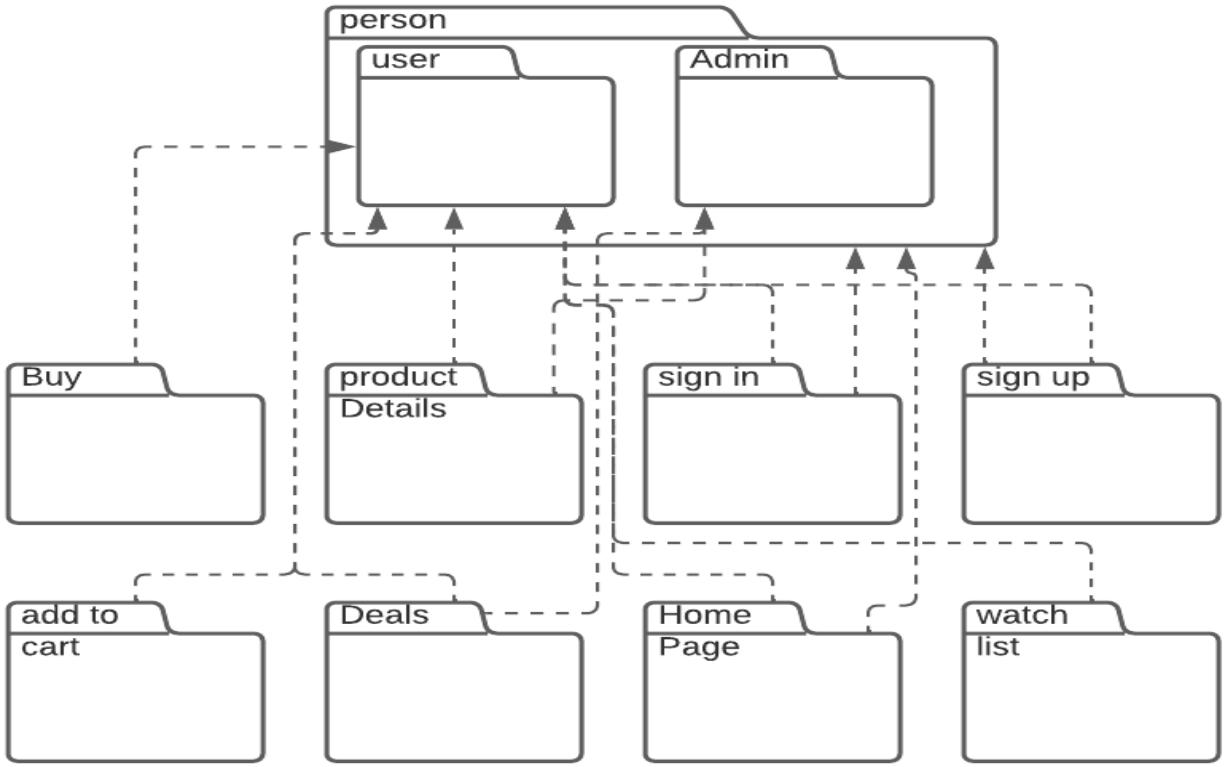
Class Diagram:



Object Diagram:

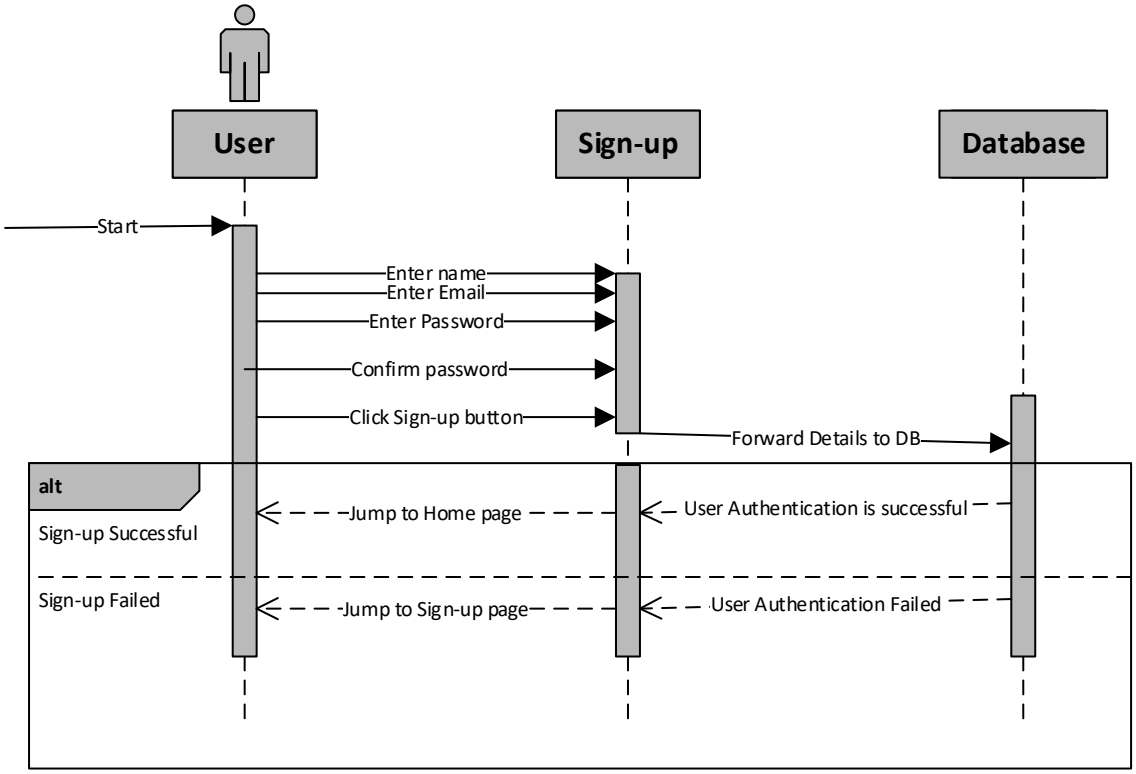


Package Diagram:

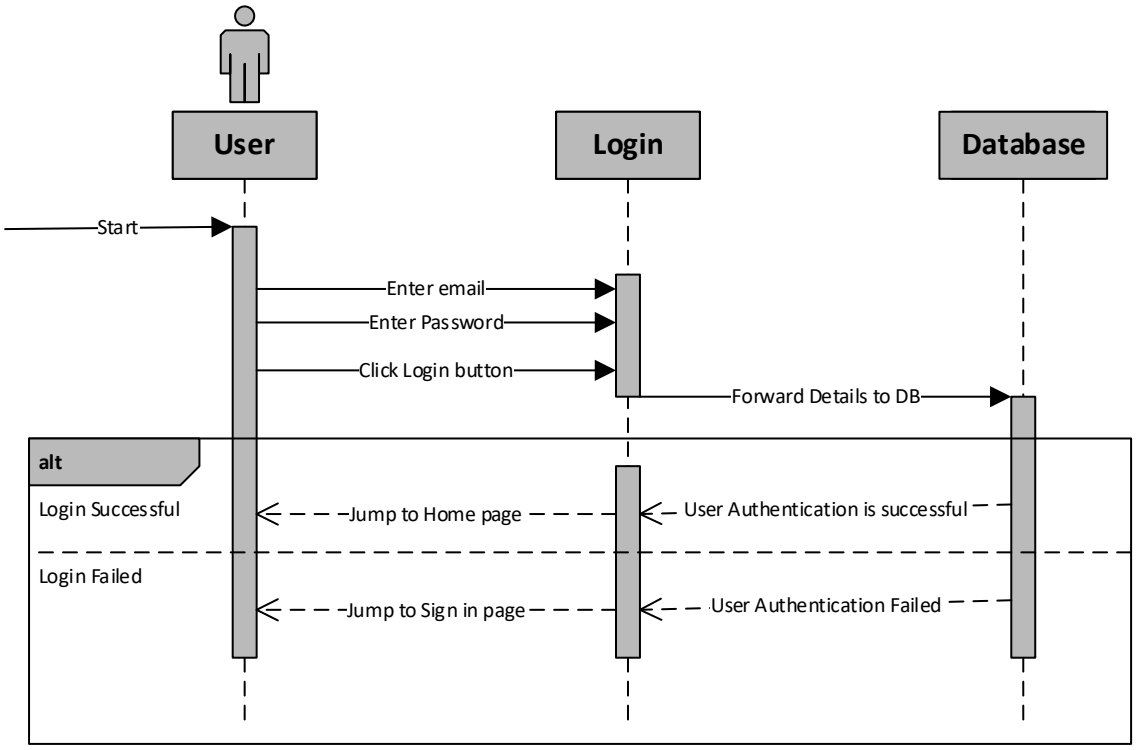


Sequence Diagrams:

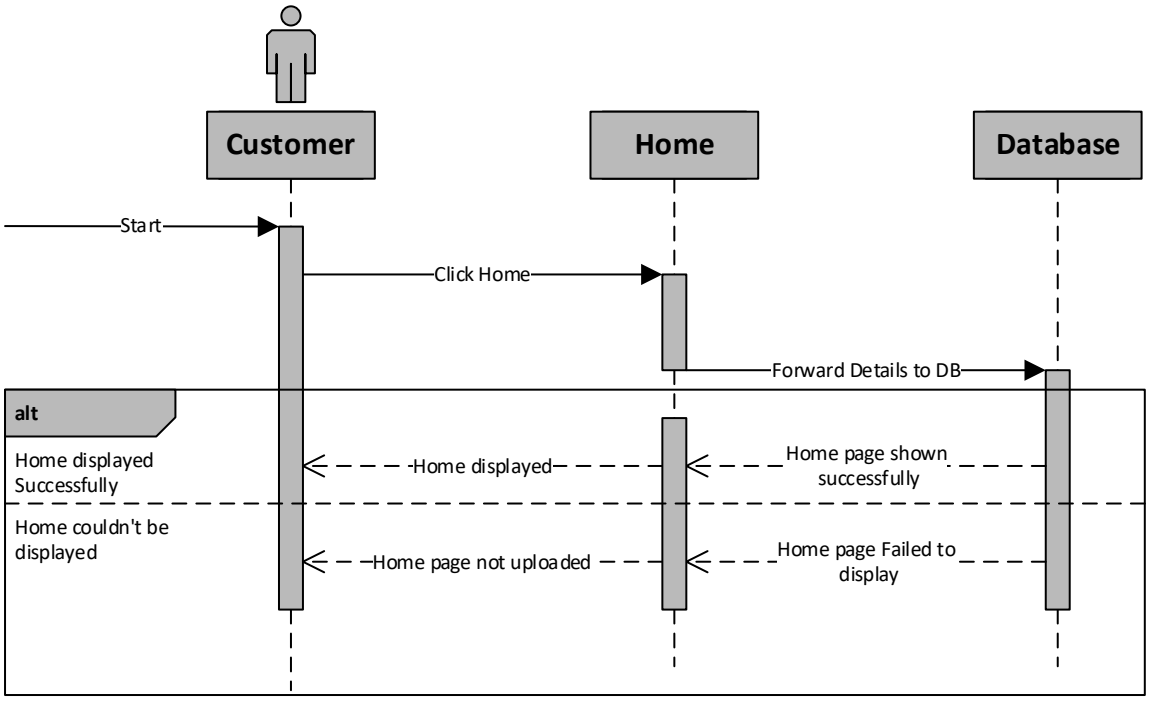
Sign-up



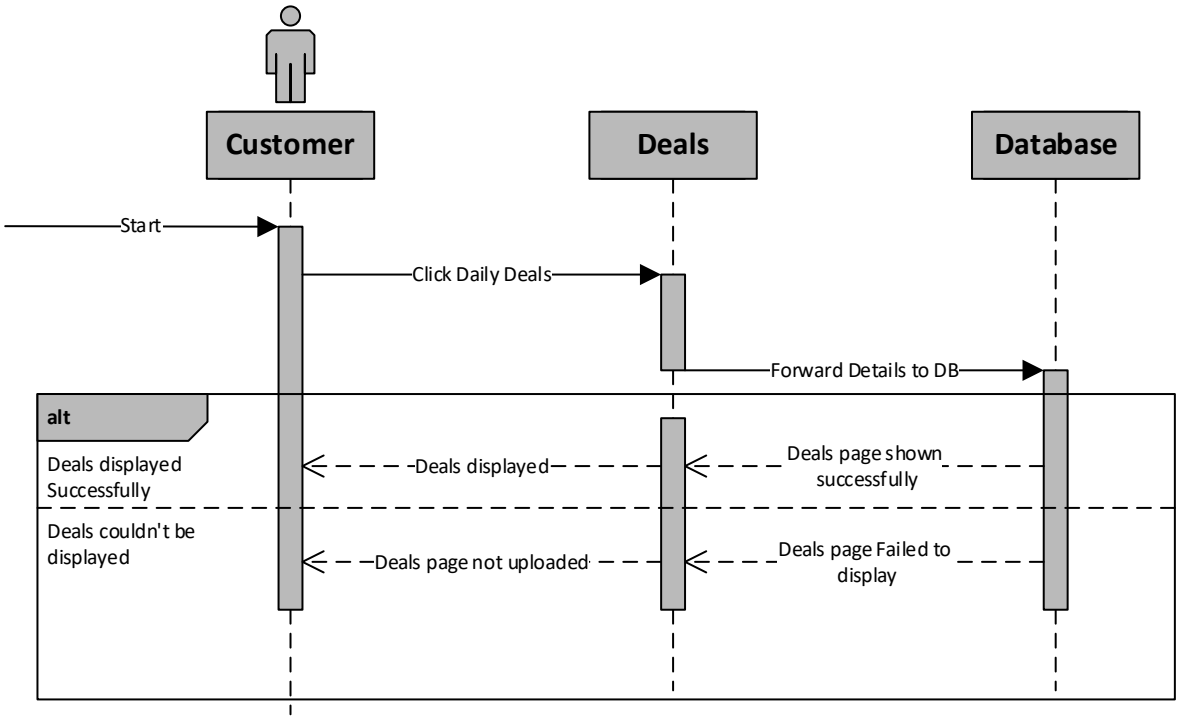
Login


User
Login
Database
Start
Enter email
Enter Password
Click Login button
Forward Details to DB
alt
Login Successful
Jump to Home page
User Authentication is successful
Login Failed
Jump to Sign in page
User Authentication Failed

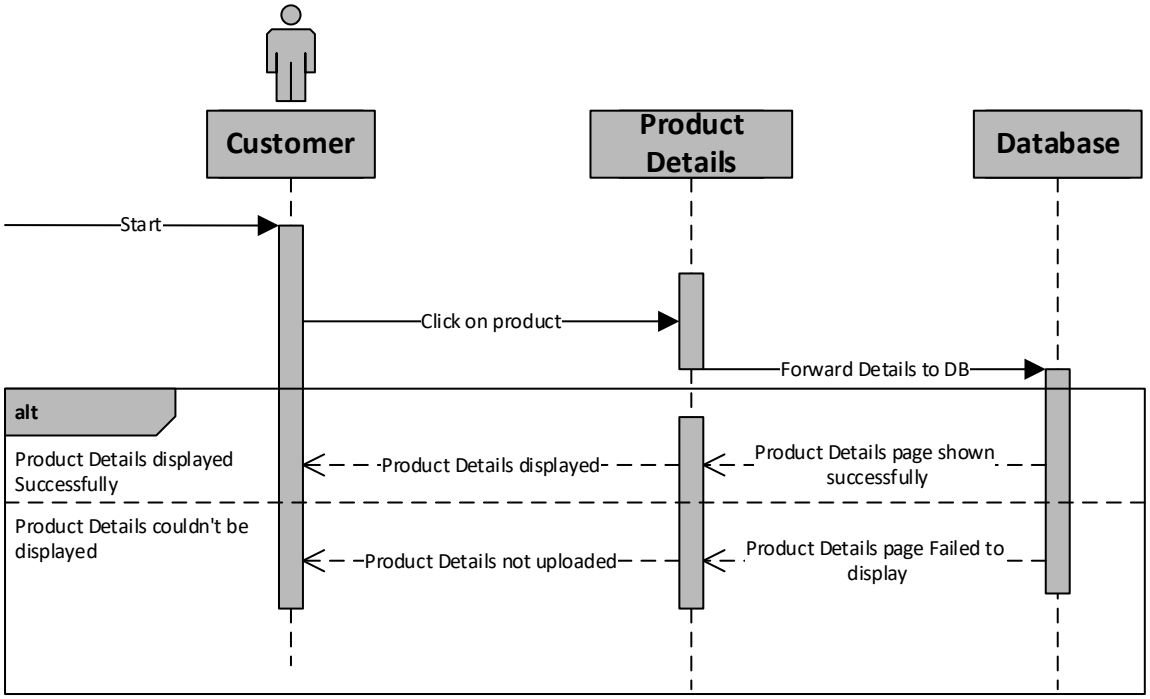
Home


Customer
Home
Database
Start
Click Home
Forward Details to DB
alt
Home displayed Successfully
Home displayed
Home page shown successfully
Home couldn't be displayed
Home page not uploaded
Home page Failed to display

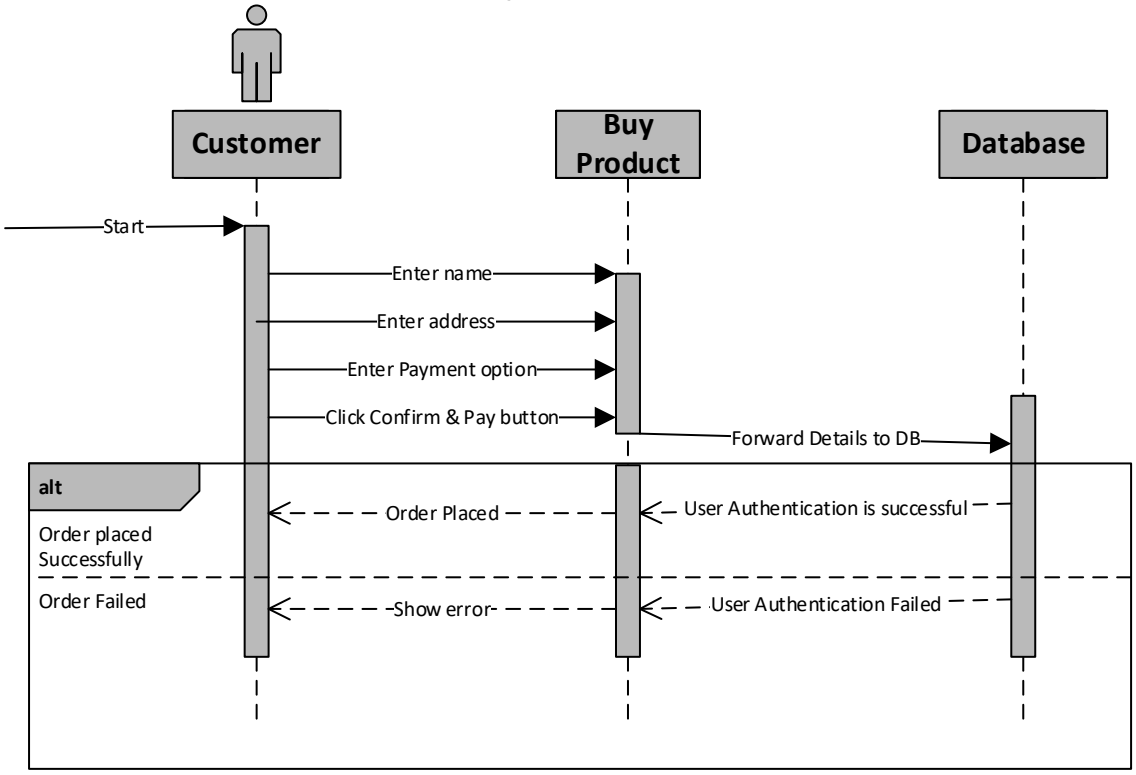
Deals



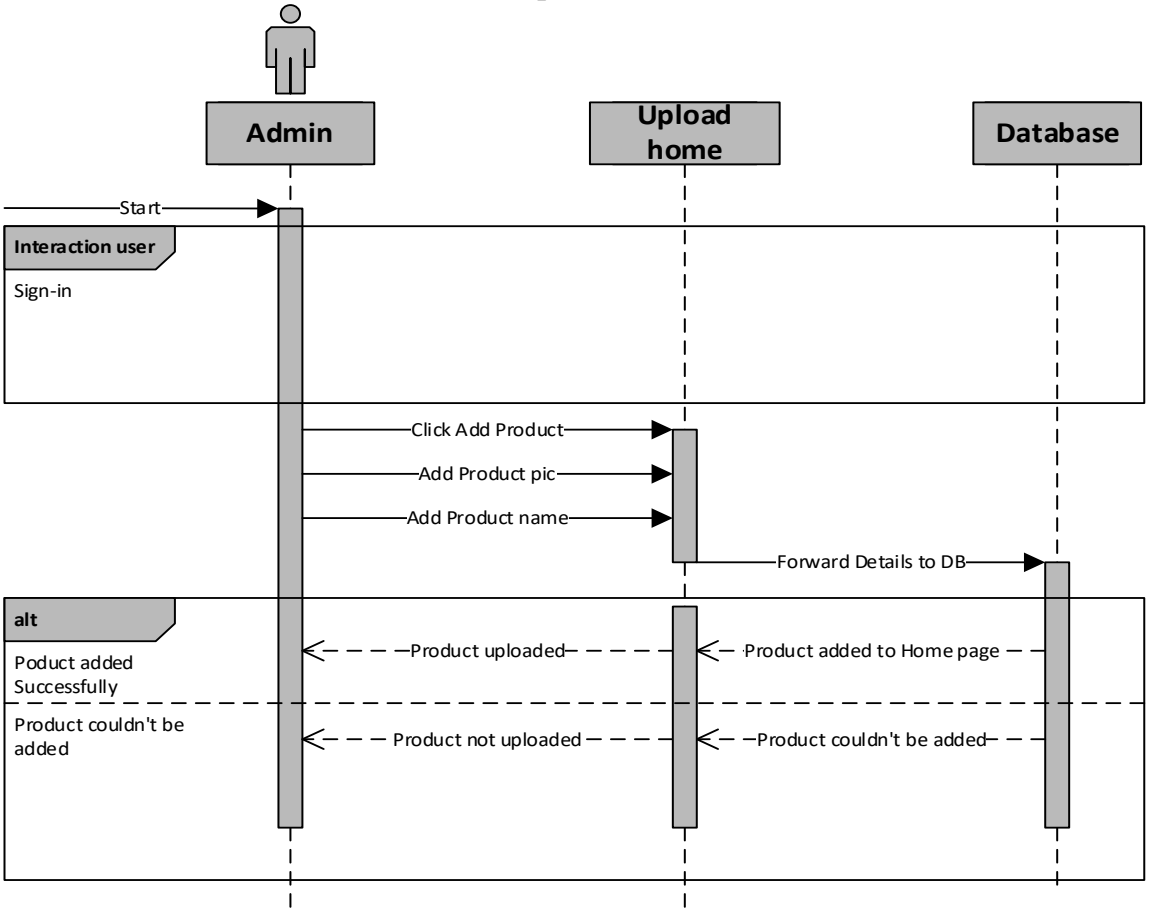
Product Details



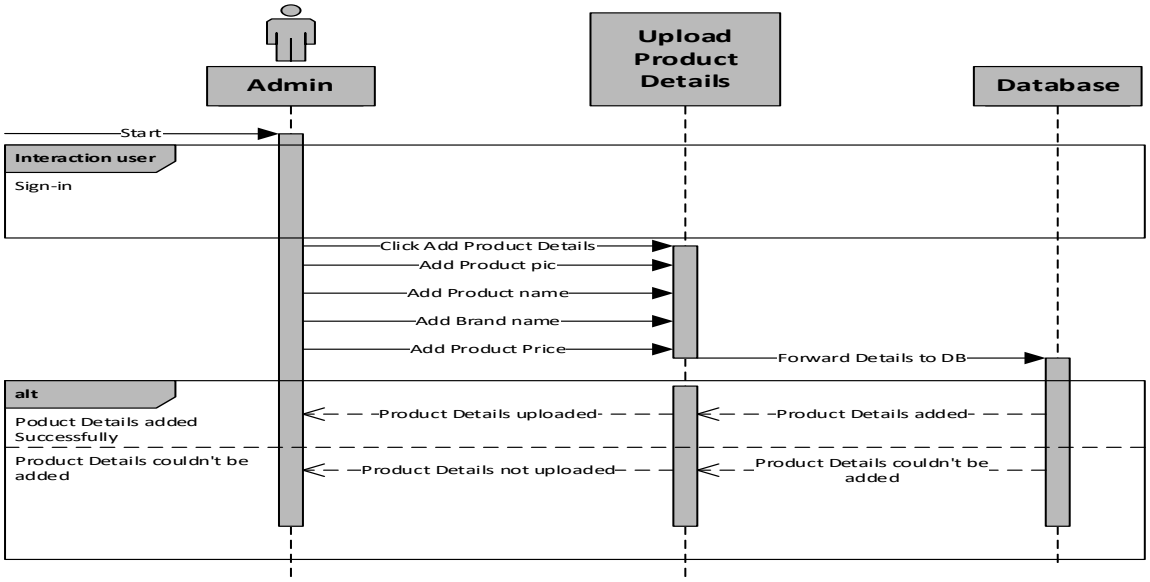
Buy Product



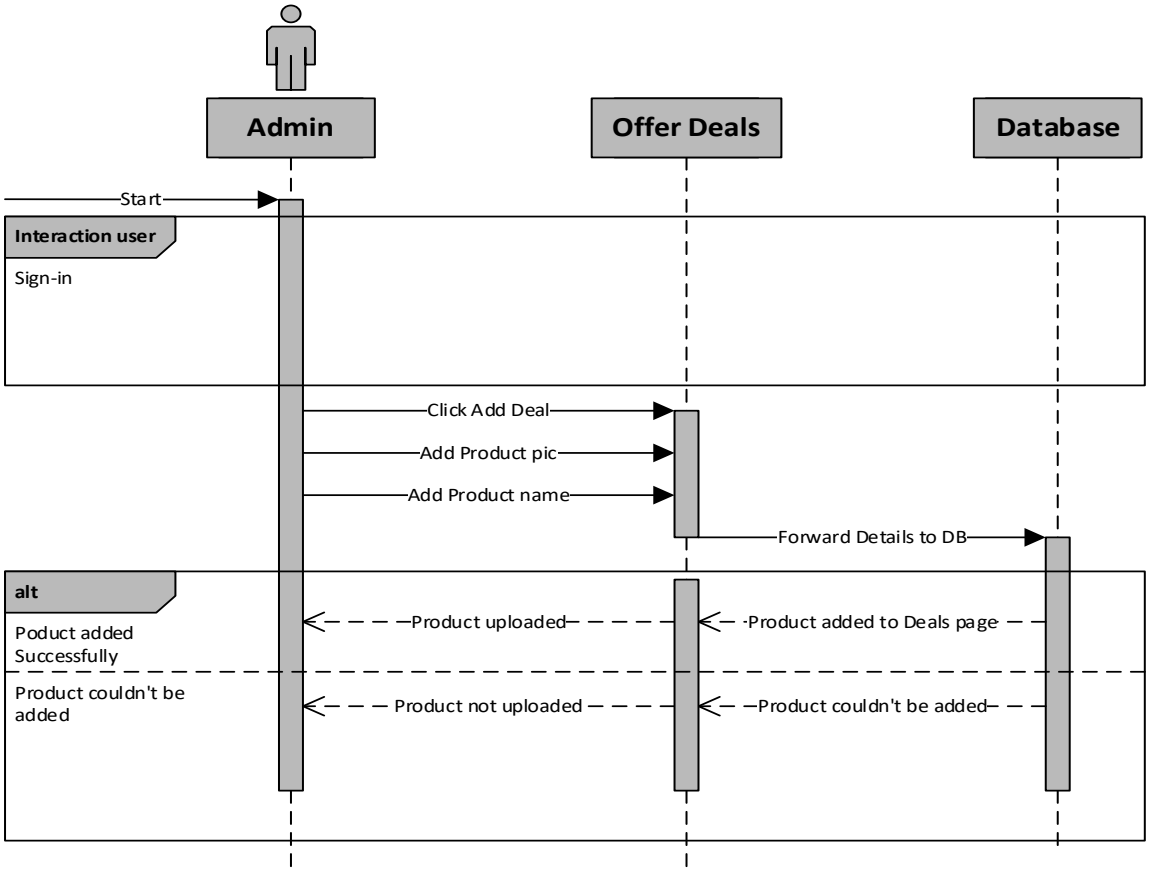
Upload Home



Upload Product Details

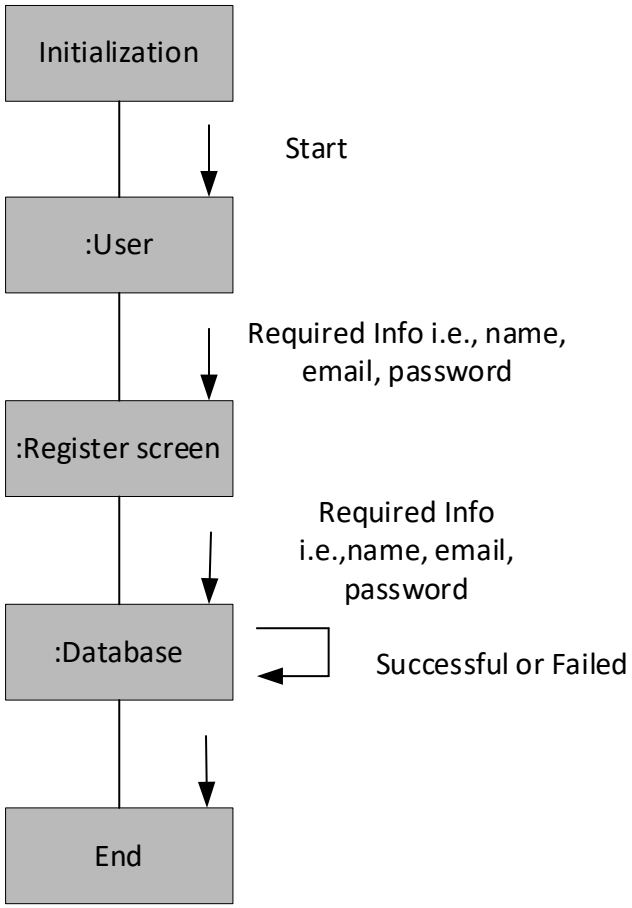


Offer Deals

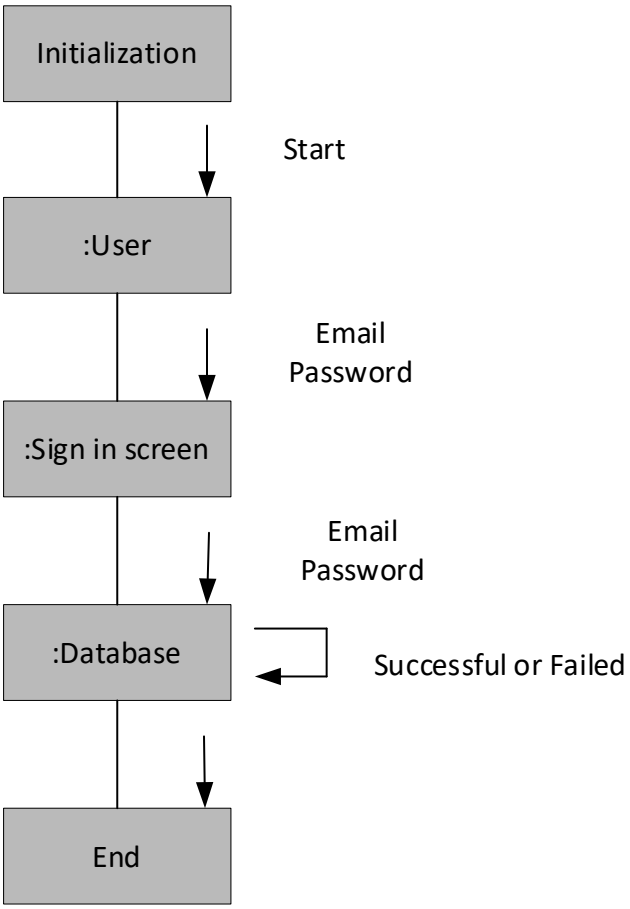


Collaboration Diagrams:

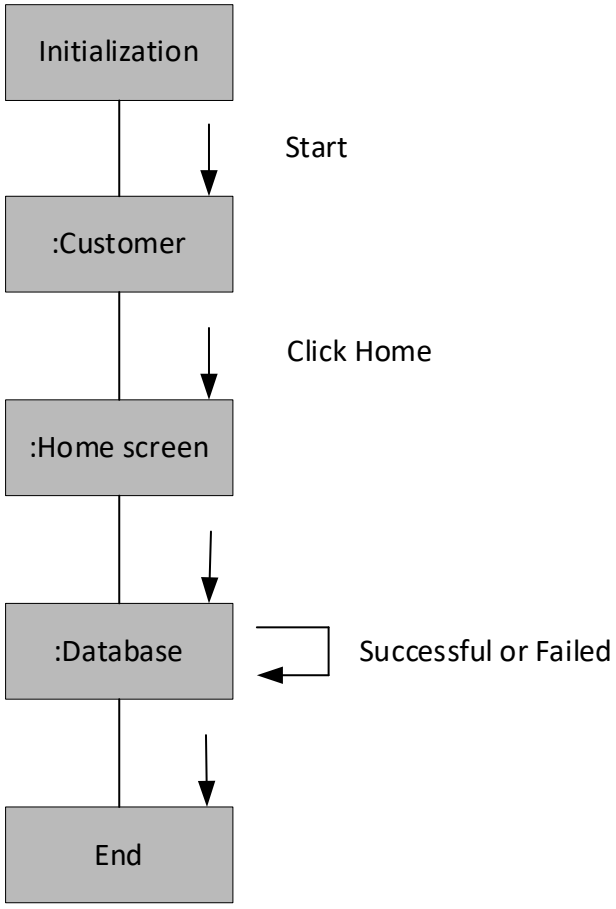
Register



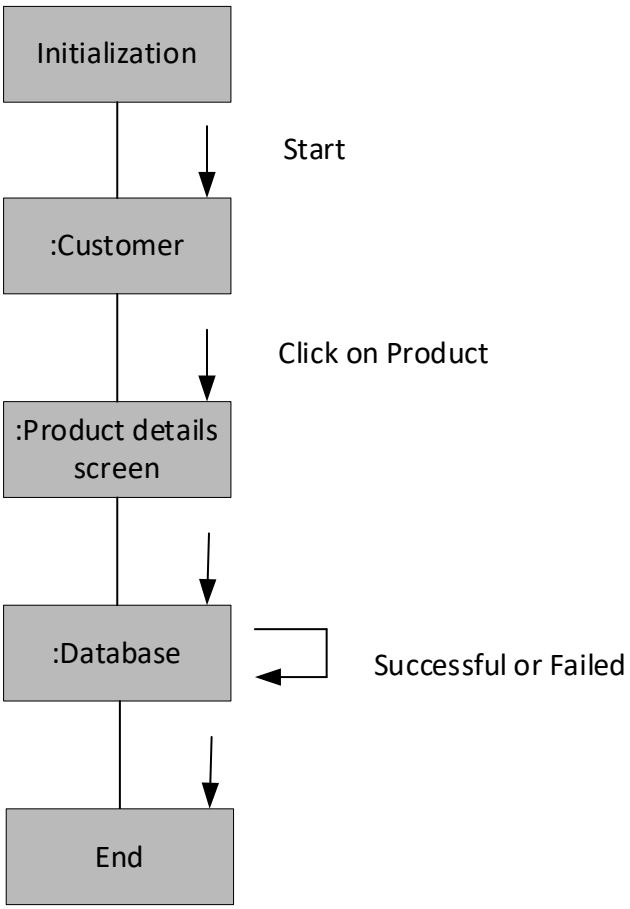
Login


Initialization
Start
:User
Email
Password
:Sign in screen
Email
Password
:Database
Successful or Failed
End

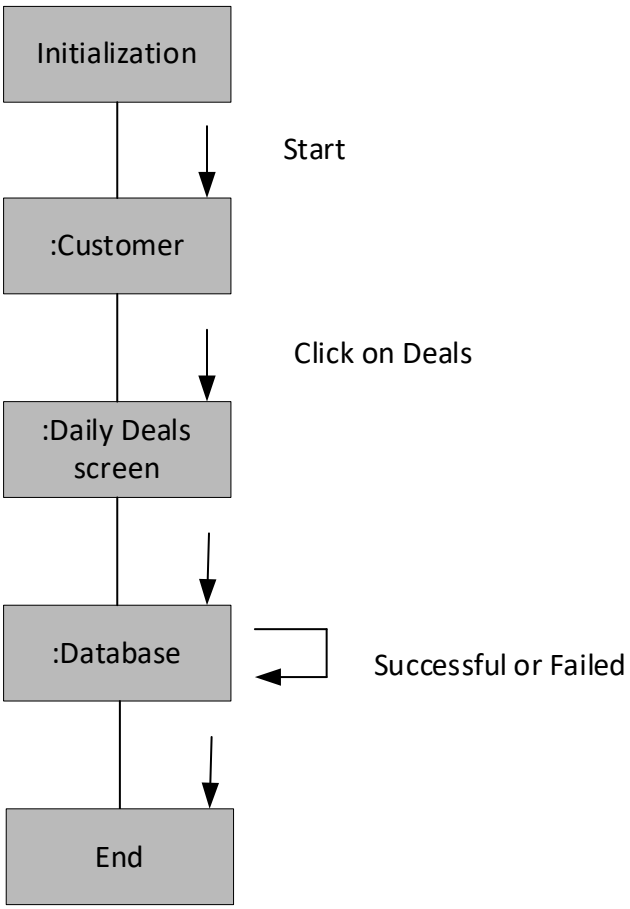
Home


Initialization
Start
:Customer
Click Home
:Home screen
:Database
Successful or Failed
End

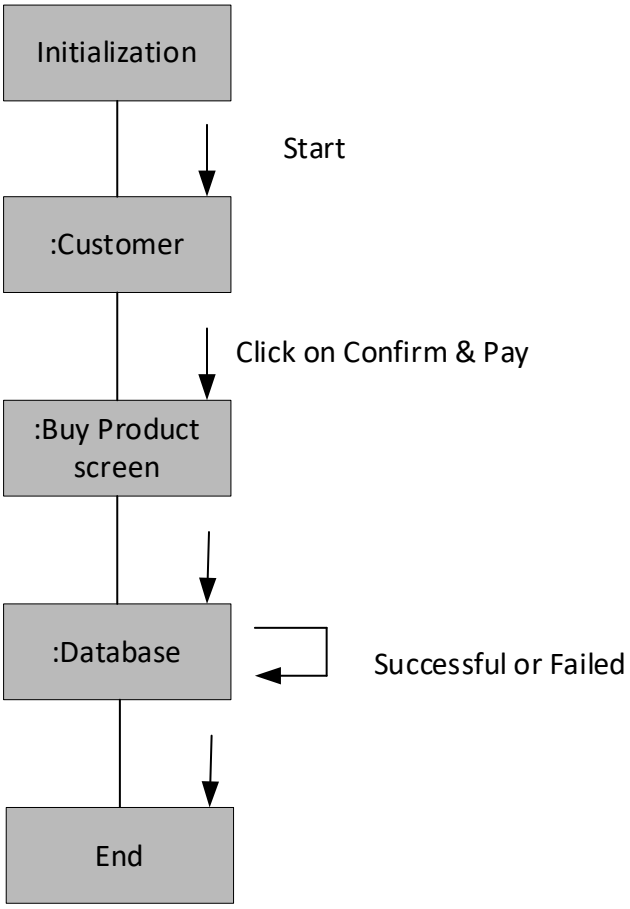
Product Details



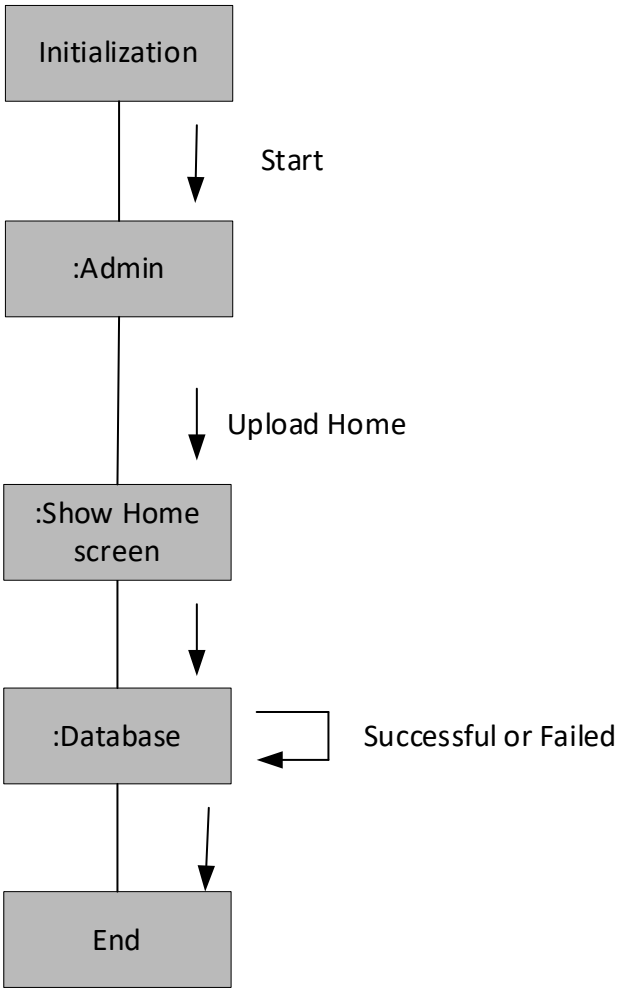
Deals


Initialization
Start
:Customer
Click on Deals
:Daily Deals screen
:Database
Successful or Failed
End

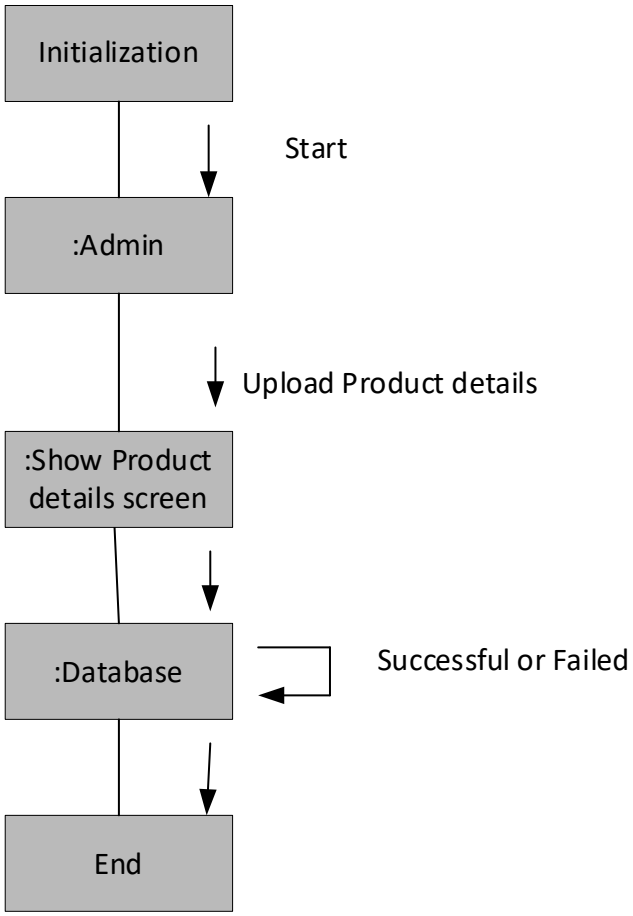
Buy Product


Initialization
Start
:Customer
Click on Confirm & Pay
:Buy Product screen
:Database
Successful or Failed
End

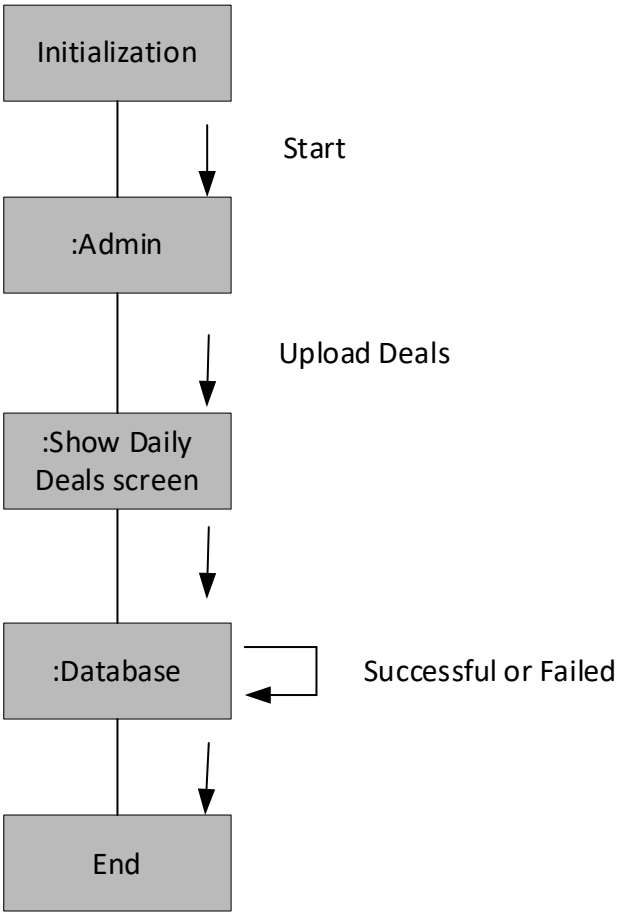
Upload Home


Initialization
Start
:Admin
Upload Home
:Show Home screen
:Database
Successful or Failed
End

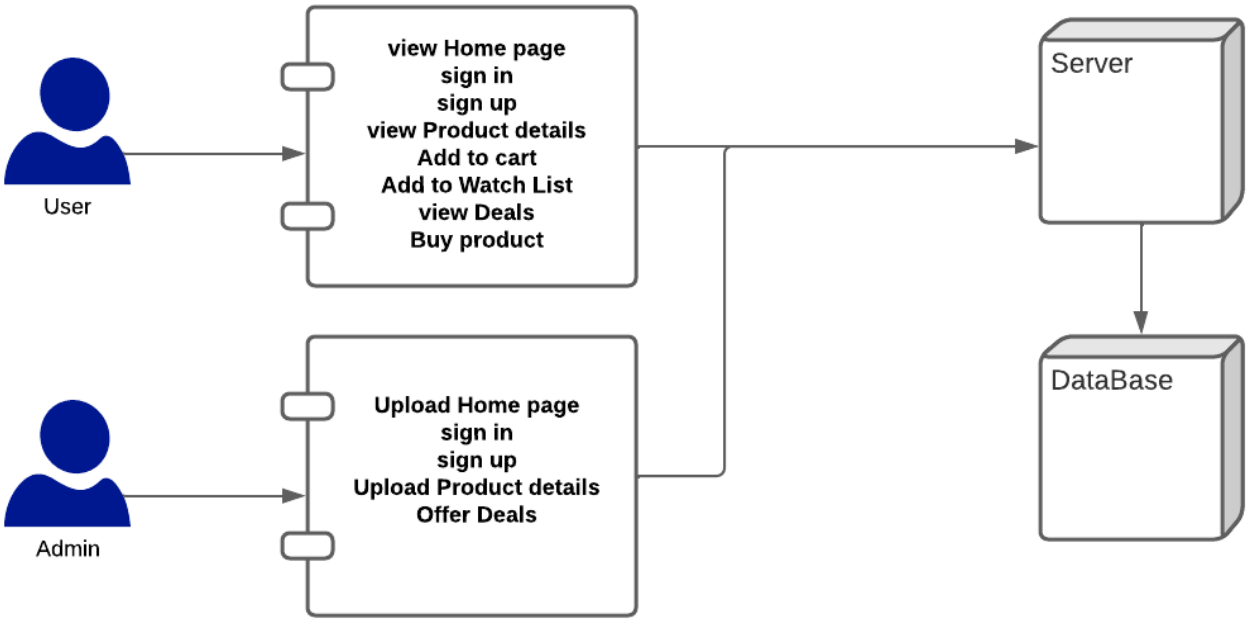
Upload Product Details



Upload Deals



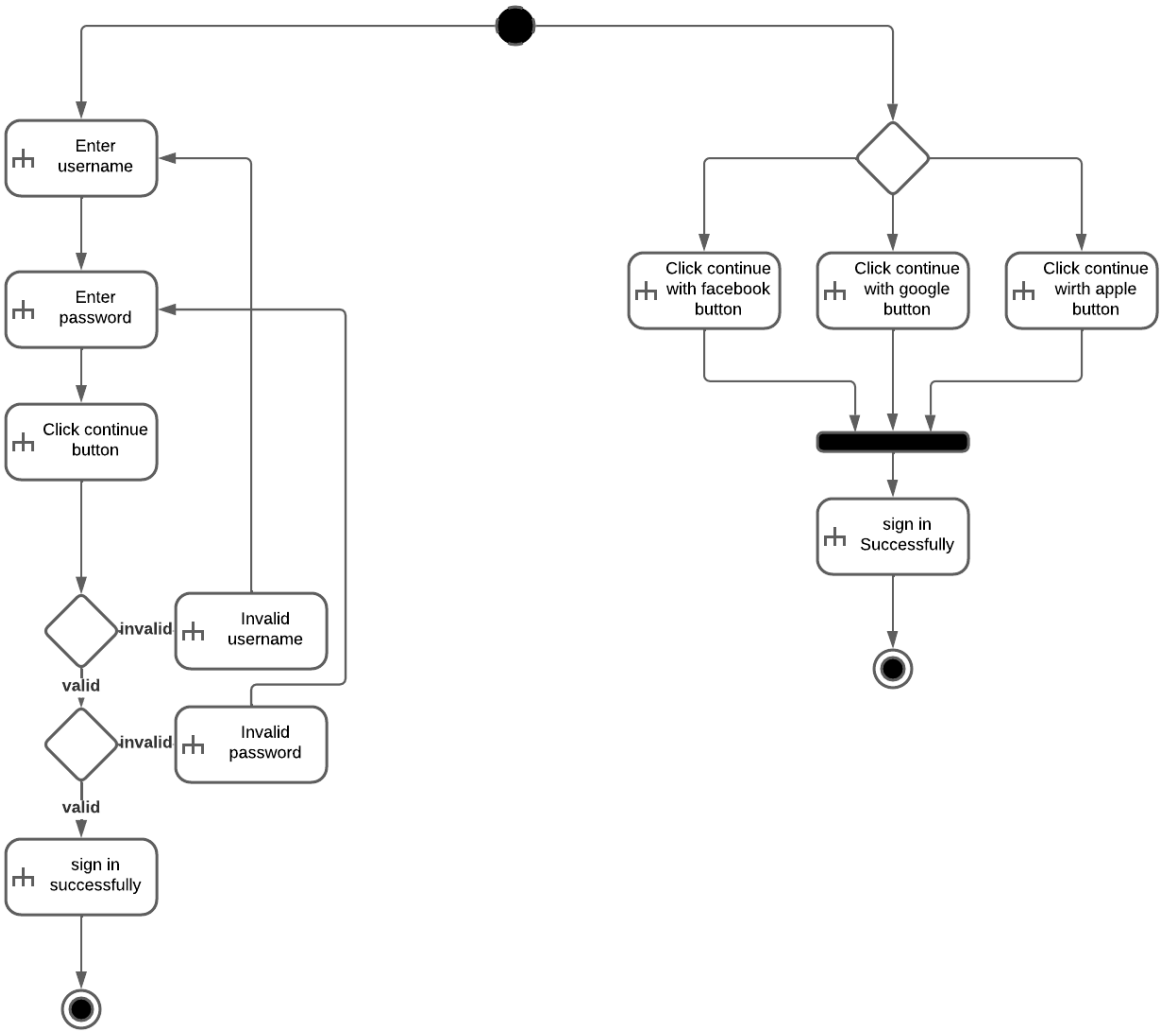
Deployment Diagram:



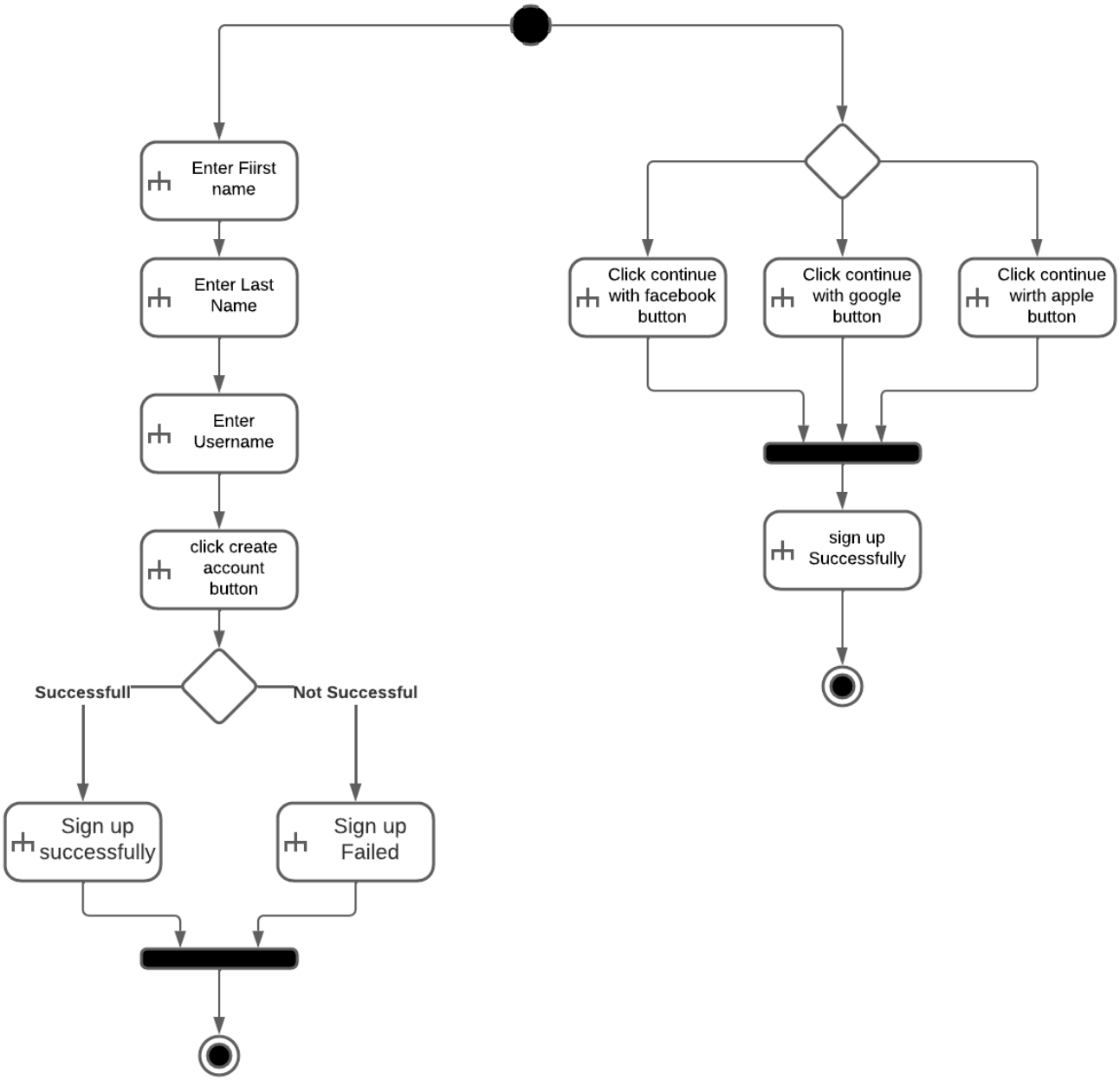
Component Diagram:

Activity Diagrams:

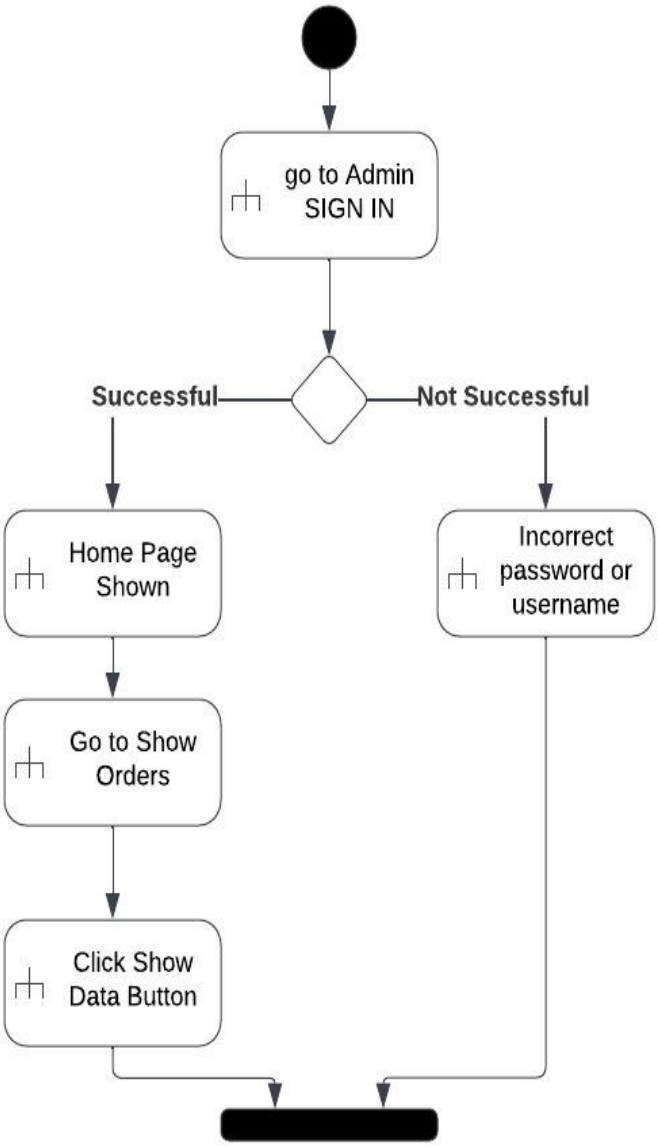
Sign in



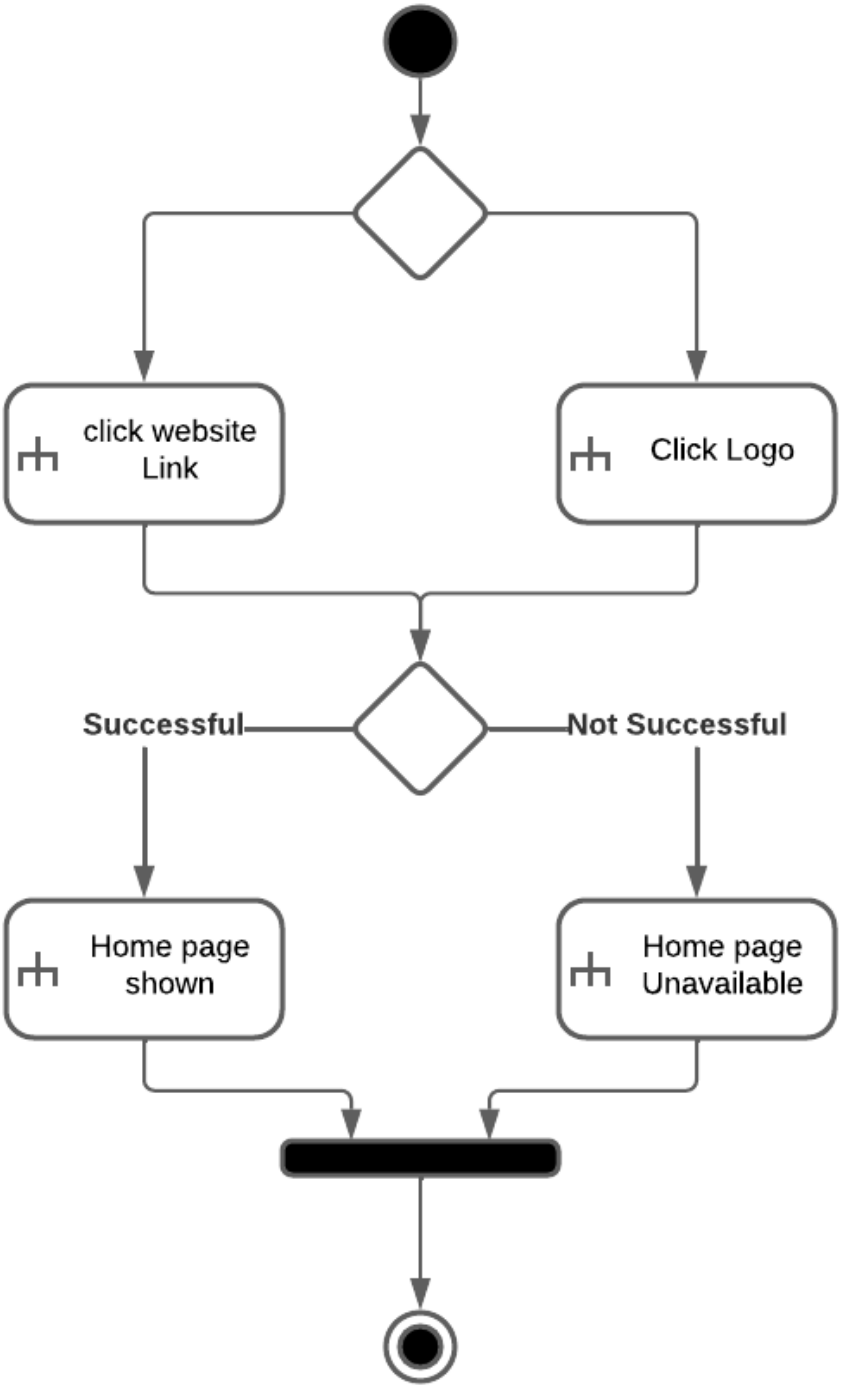
Register


Enter Fiirst name
Enter Last Name
Enter Username
click create account button
Successfull
Not Successful
Sign up successfully
Sign up Failed
Click continue with facebook button
Click continue with google button
Click continue wirth apple button
sign up Successfully

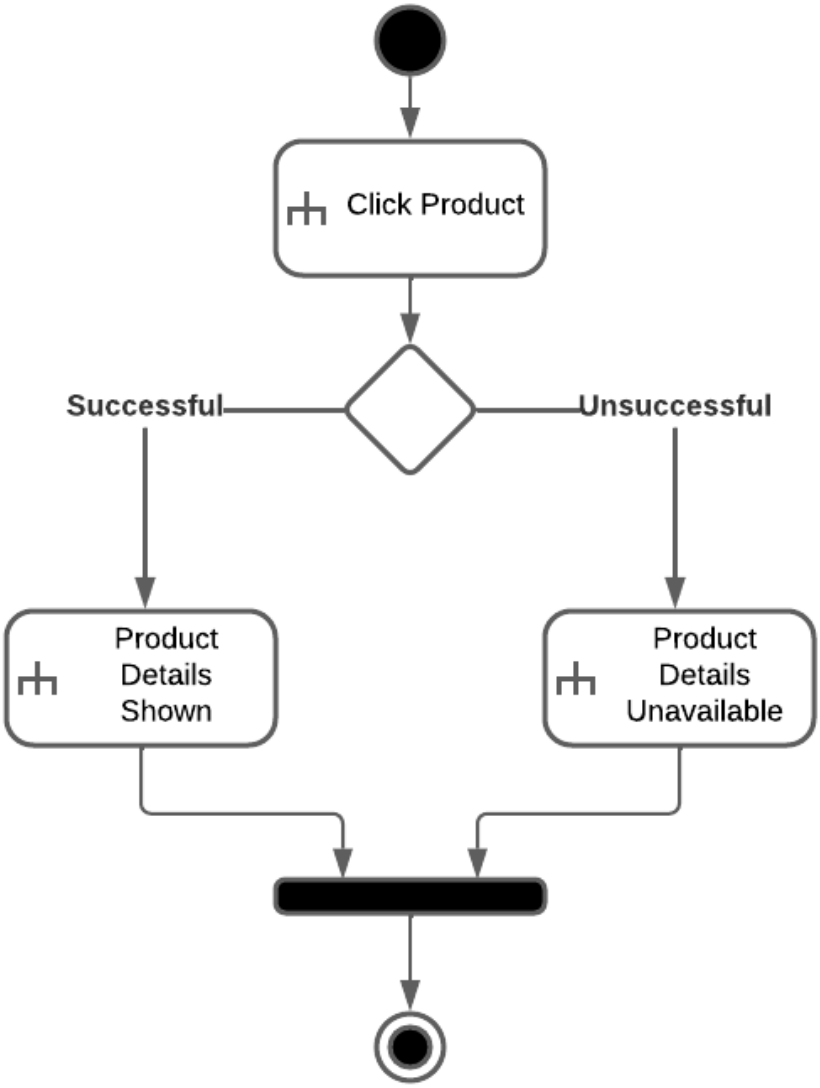
Show Orders


go to Admin SIGN IN
Successful
Not Successful
Home Page Shown
Incorrect password or username
Go to Show Orders
Click Show Data Button

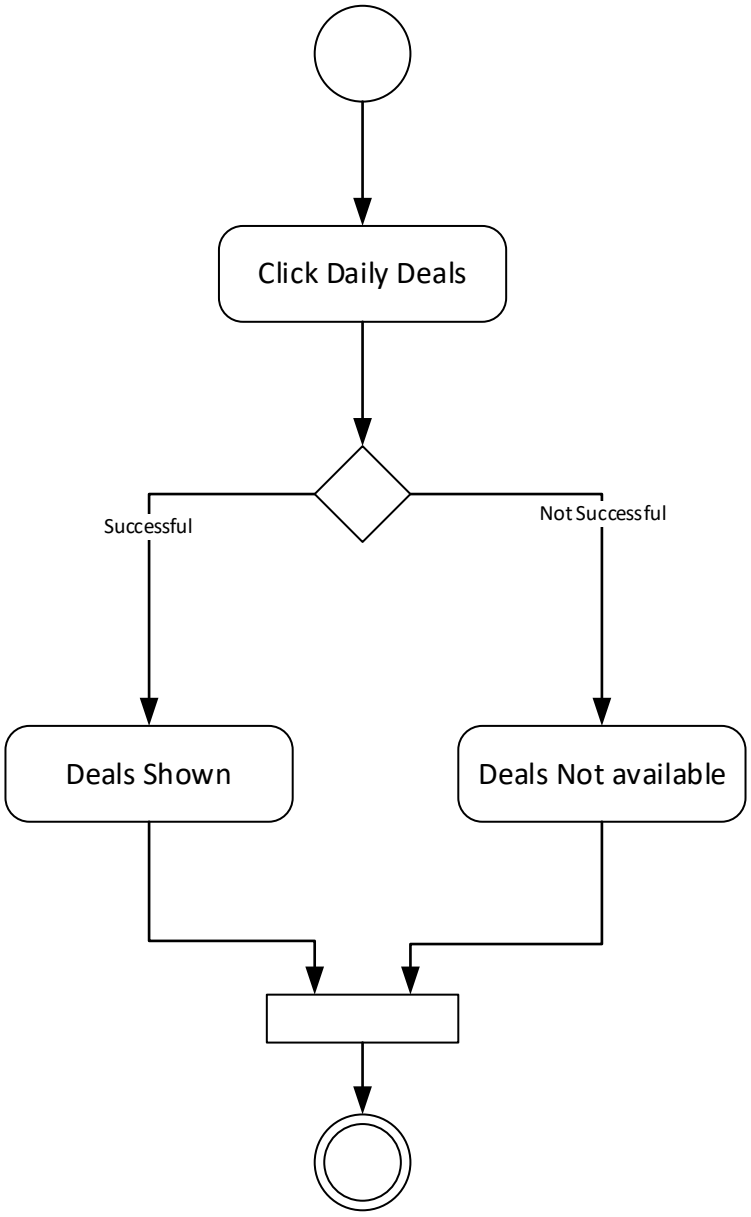
View Home


click website Link
Click Logo
Successful
Not Successful
Home page shown
Home page Unavailable

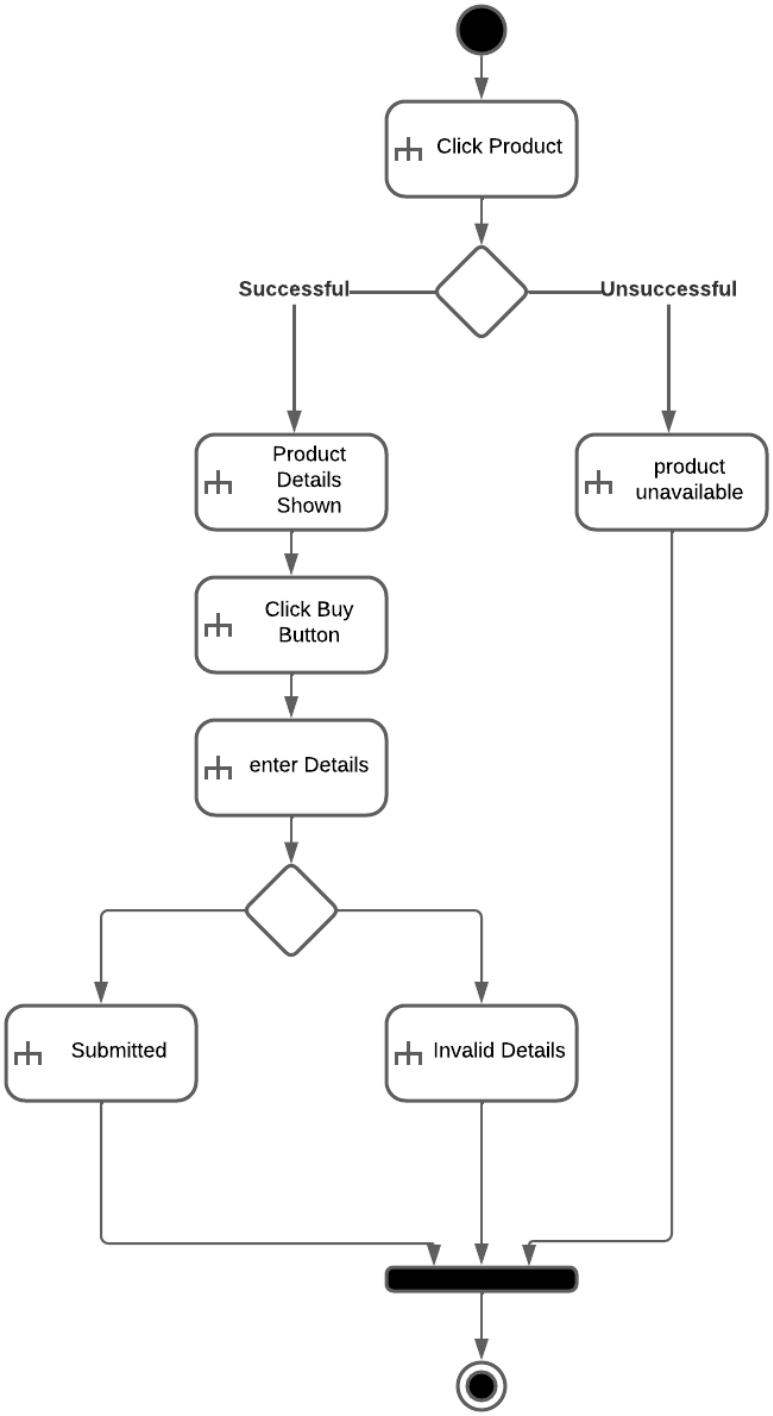
View Product Details



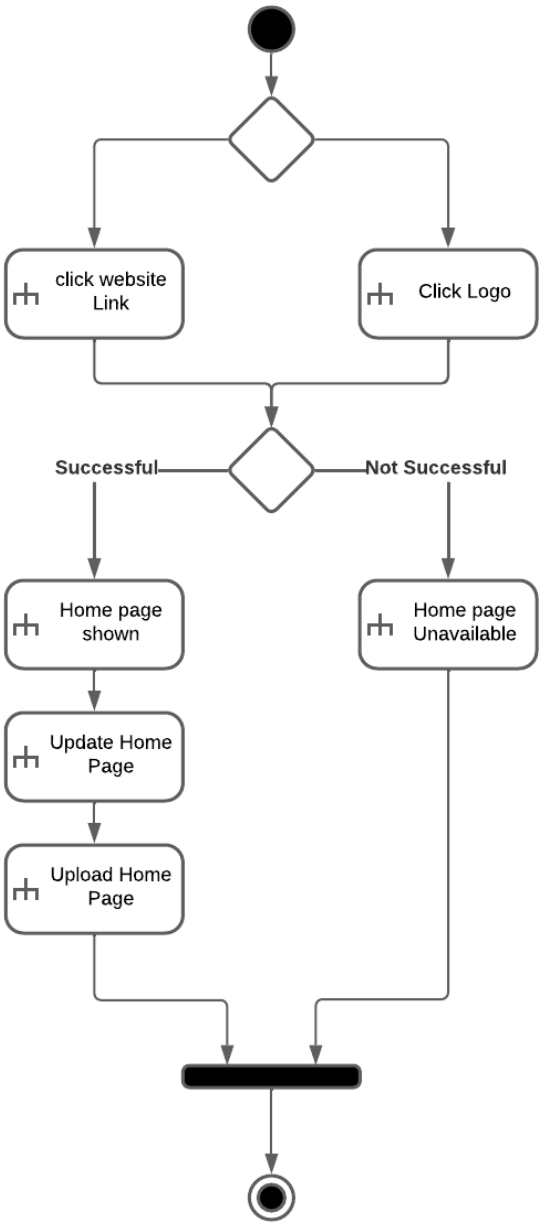
View Deals


Click Daily Deals
Successful
Not Successful
Deals Shown
Deals Not available

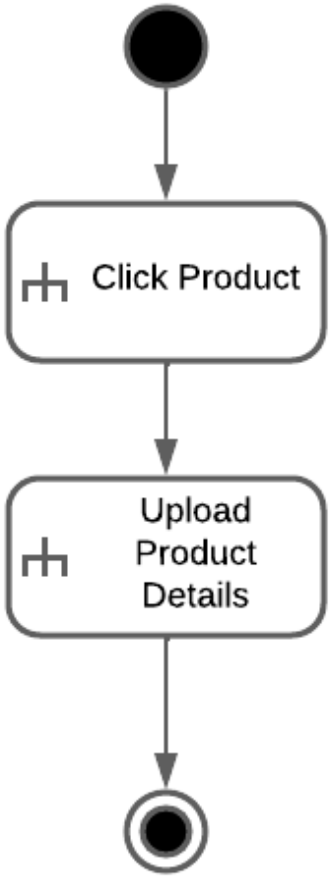
Buy


Click Product
Successful
Unsuccessful
Product Details Shown
product unavailable
Click Buy Button
enter Details
Submitted
Invalid Details

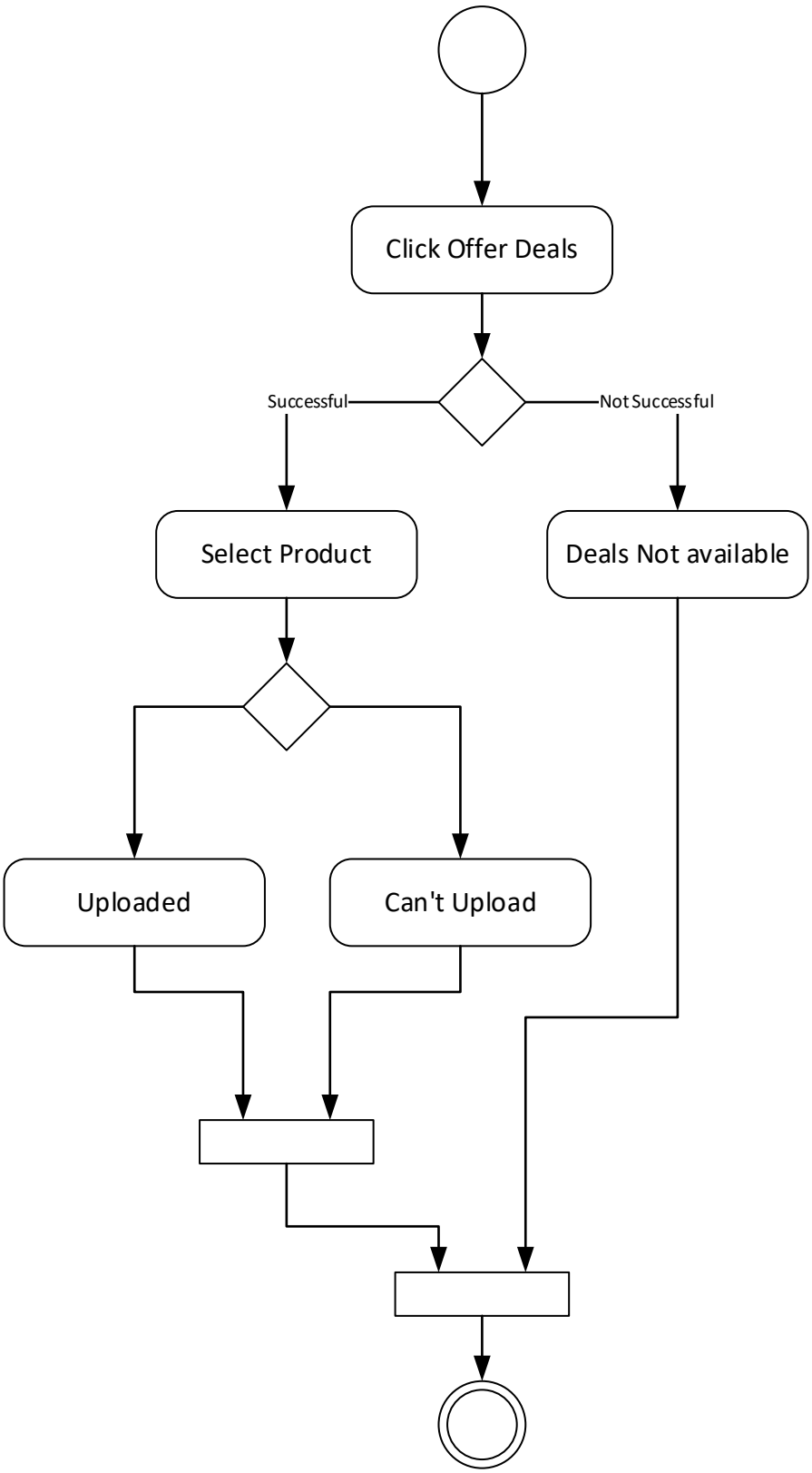
Upload Home


click website Link
Click Logo
Successful
Not Successful
Home page shown
Home page Unavailable
Update Home Page
Upload Home Page

Upload Product Details

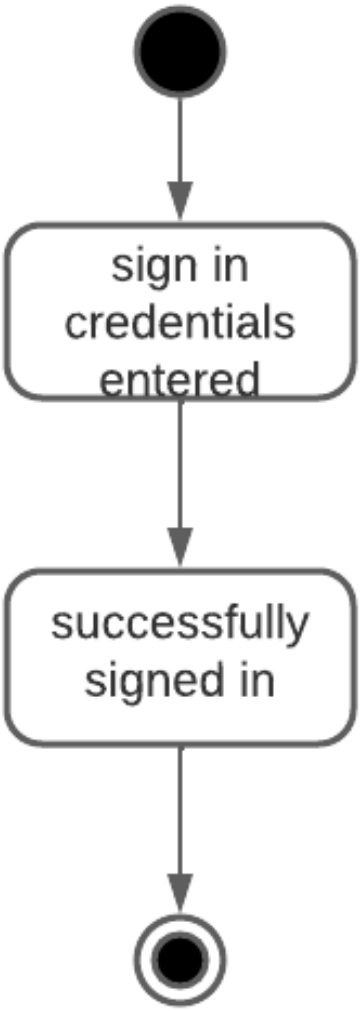


Upload Deals

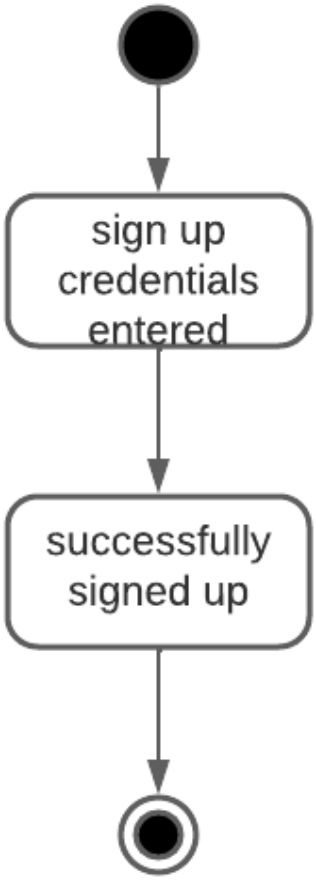


State chart Diagrams:

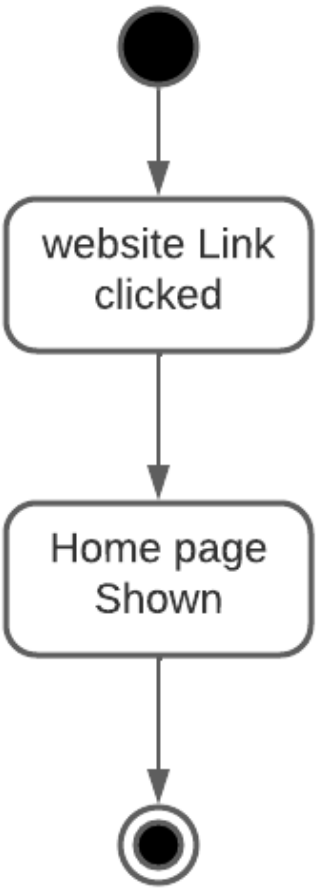
Login



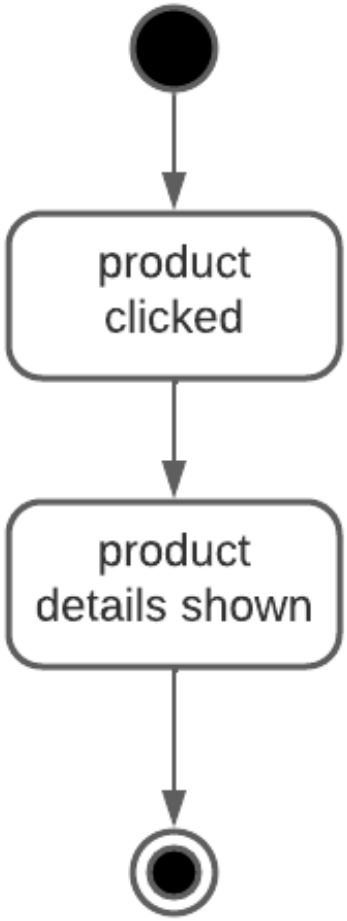
Sign Up



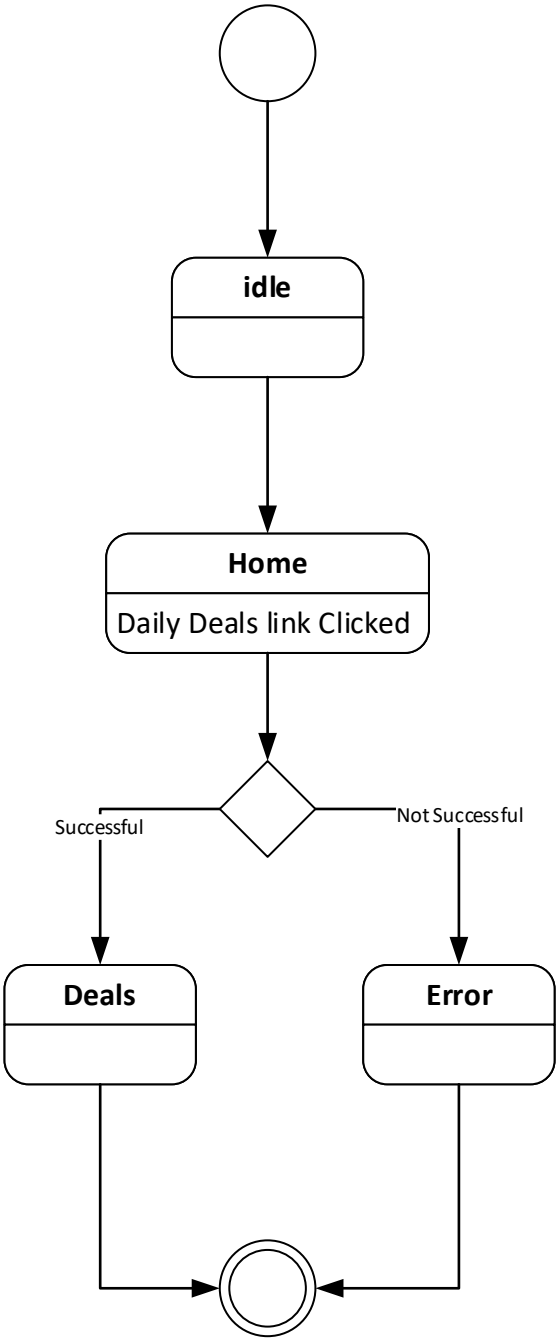
Home



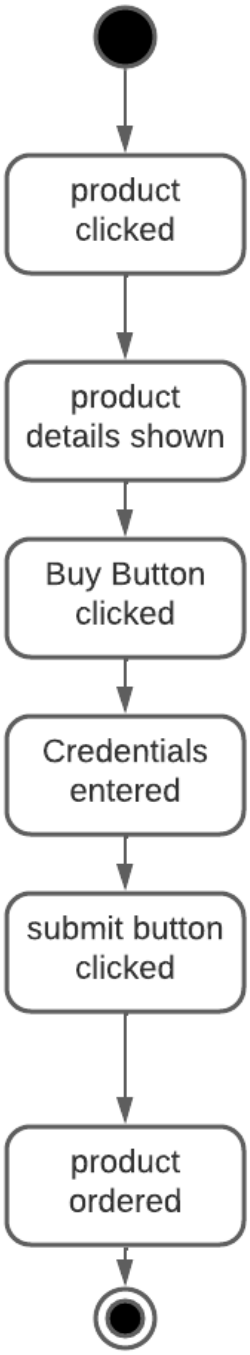
Product Details



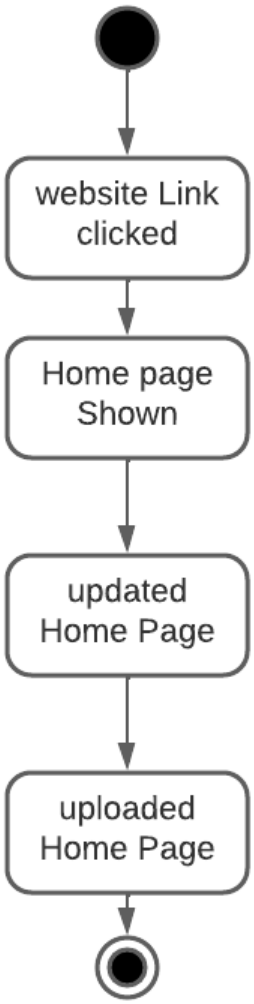
View Deals


idle
Home
Daily Deals link Clicked
Successful
Not Successful
Deals
Error

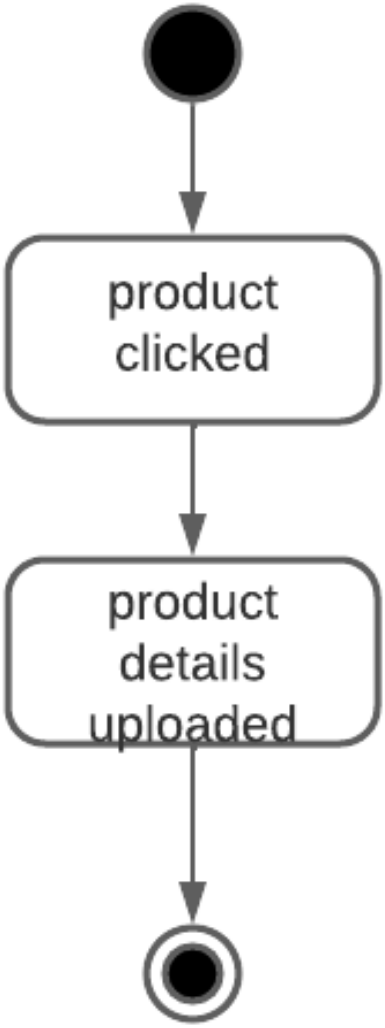
Buy


product clicked
product details shown
Buy Button clicked
Credentials entered
submit button clicked
product ordered

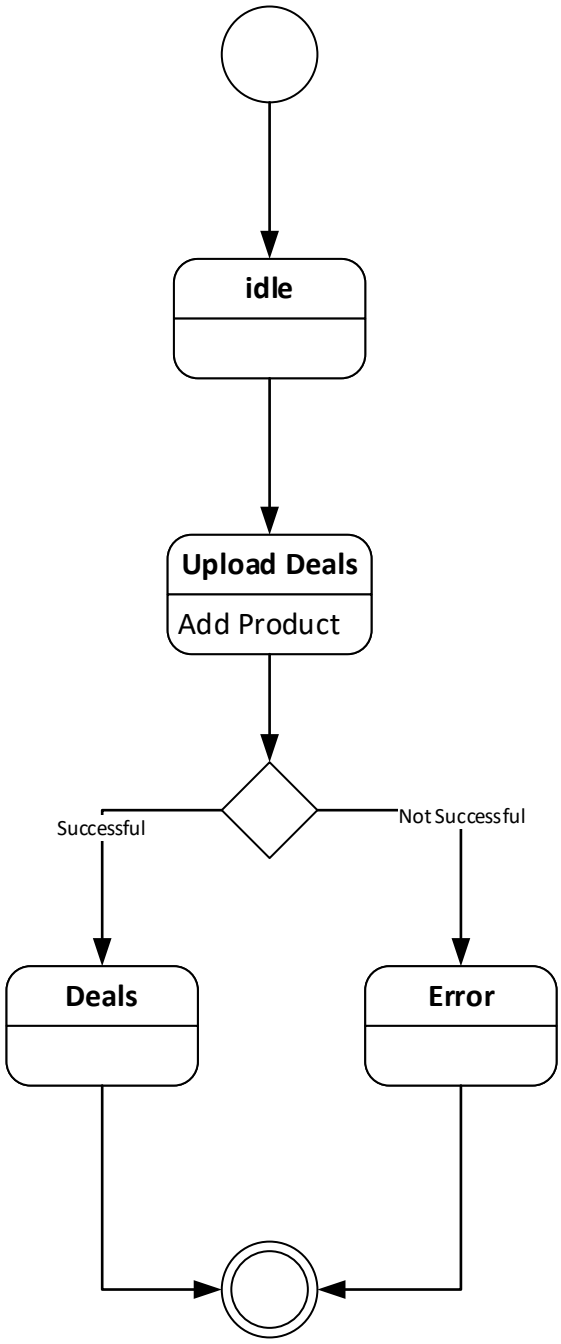
Upload Home


website Link clicked
Home page Shown
updated Home Page
uploaded Home Page

Upload Product Details



Upload Deals



Chapter 4: Software Architecture

We have used **MVC** structure because it has many advantages;

Advantages

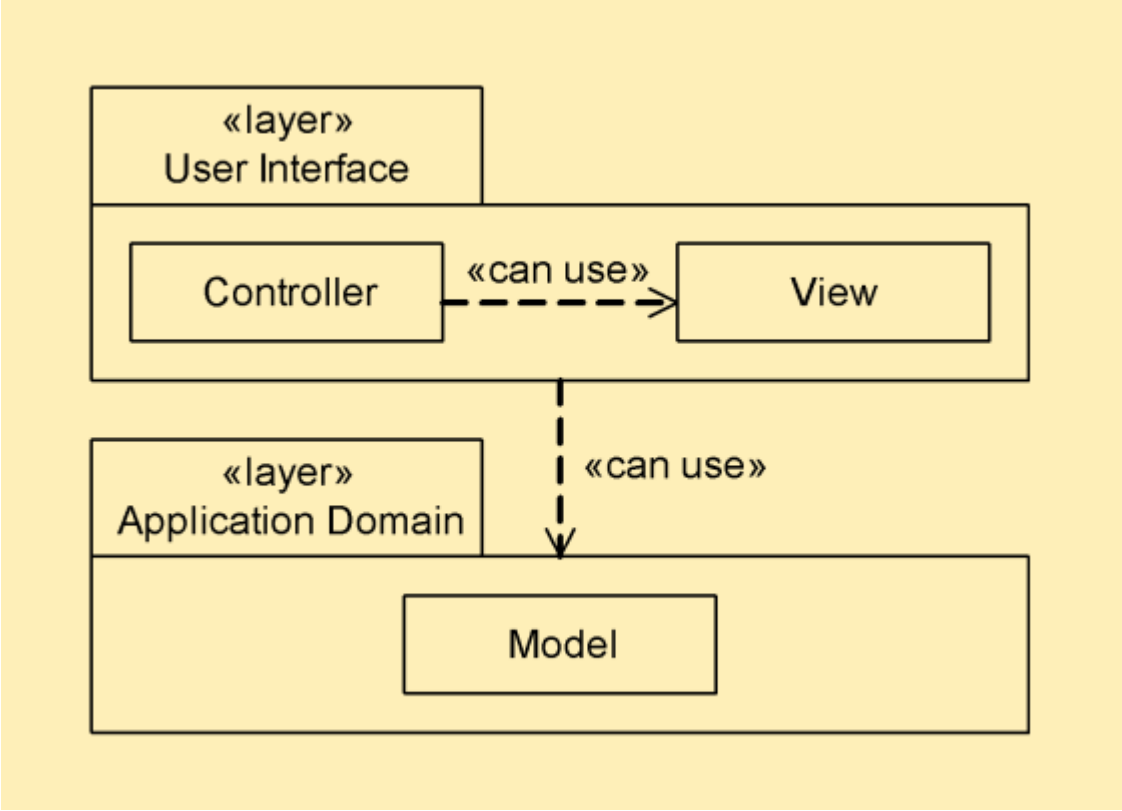
- Views and controllers can be added, removed or changed without disturbing the model
- Views can be added or changed during execution.
- User interface components can be changed, even at runtime.
- In our system, we used MVC to store the users' data in database through array list.
- It helped us to avoid redundancy.
- Also, data is managed well by using MVC.

Drawbacks

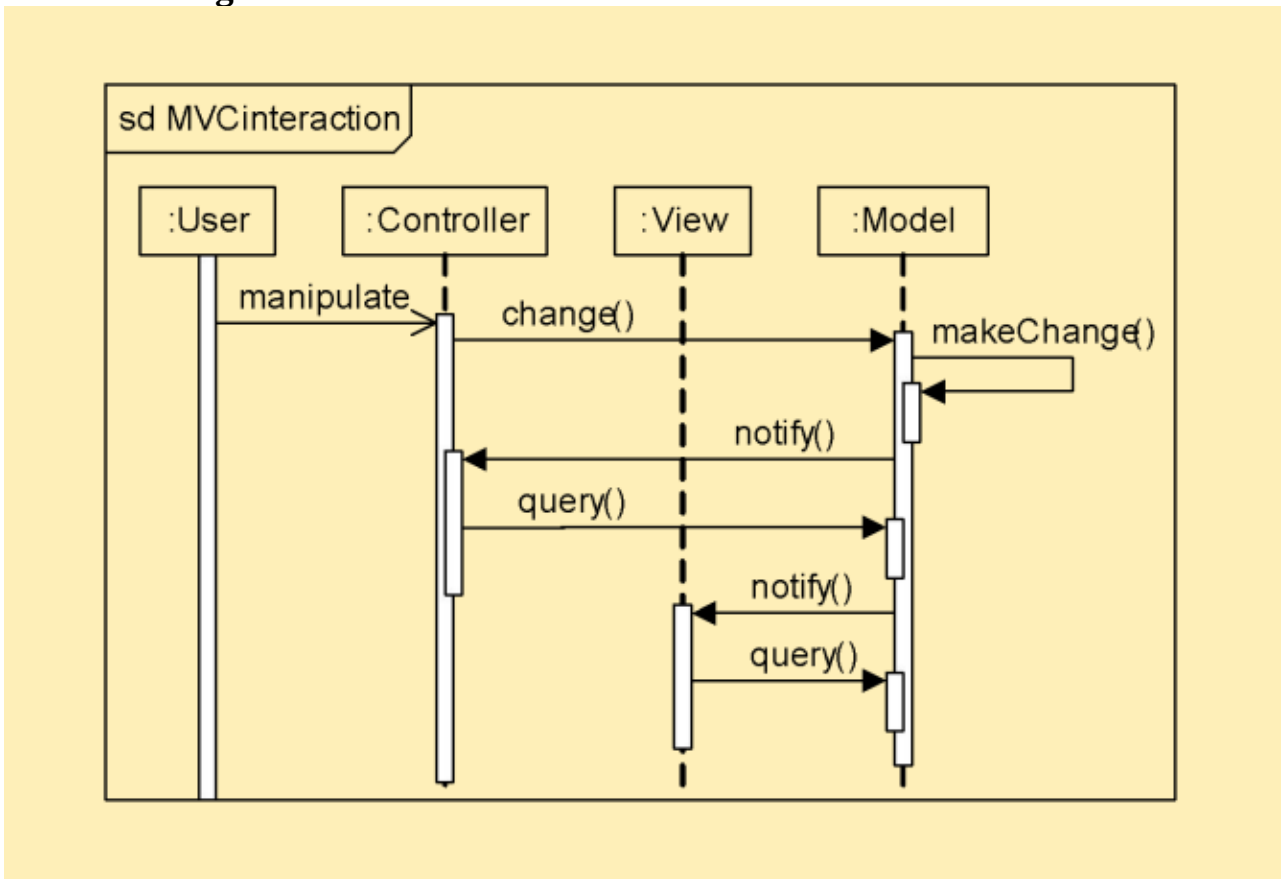
- Views and controller are often hard to separate.
- Frequent updates may slow data display and degrade user interface performance.
- The MVC style makes user interface components highly dependent on model components.

Diagram

Static Diagram

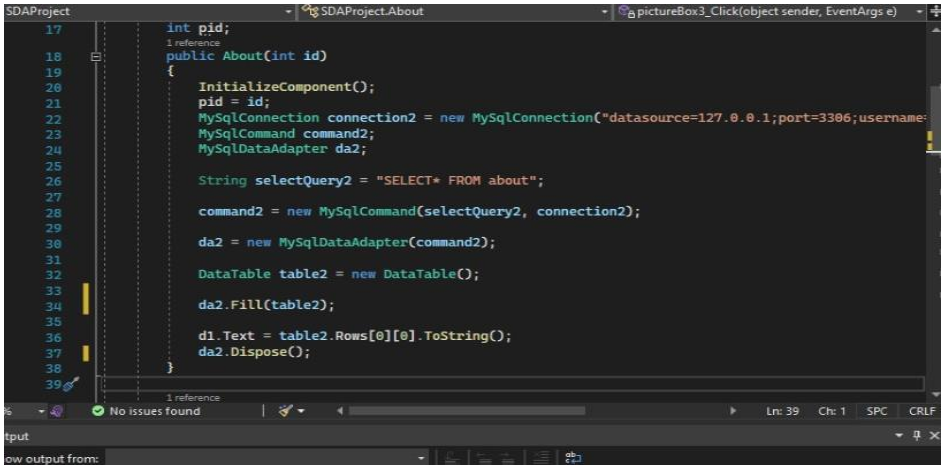


Behavior Diagram



Chapter 5: Code Snippets

About



```
SDAProject | SDAProject.About | pictureBox3_Click(object sender, EventArgs e)

17      int pid;
        1 reference
18      public About(int id)
19      {
20          InitializeComponent();
21          pid = id;
22          MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=
23          MySqlCommand command2;
24          MySqlDataAdapter da2;
25
26          String selectQuery2 = "SELECT* FROM about";
27
28          command2 = new MySqlCommand(selectQuery2, connection2);
29
30          da2 = new MySqlDataAdapter(command2);
31
32          DataTable table2 = new DataTable();
33
34          da2.Fill(table2);
35
36          d1.Text = table2.Rows[0][0].ToString();
37          da2.Dispose();
38      }
39
        1 reference

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tput
ow output from:
```
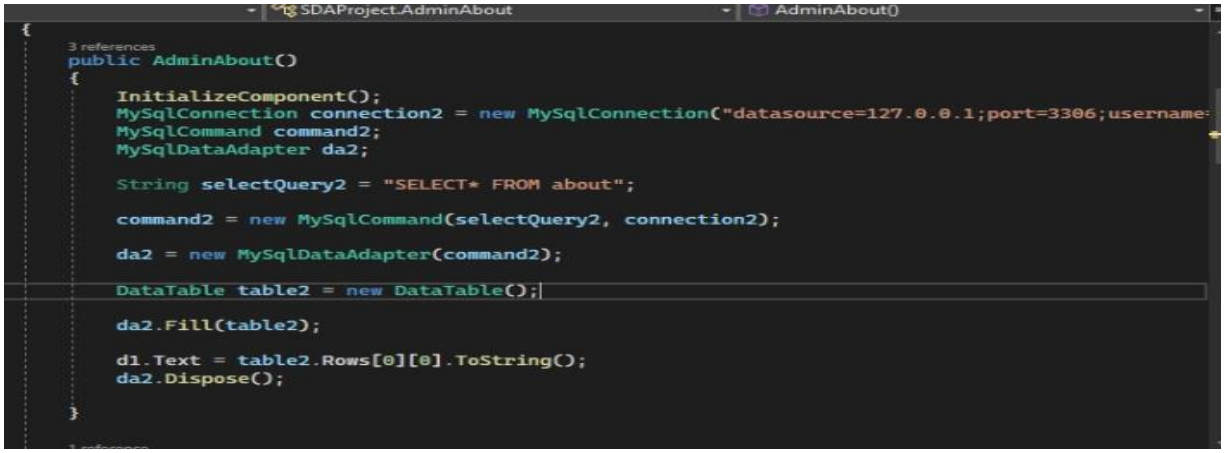

Admin About



```
SDAProject.AdminAbout | AdminAbout()

{
    3 references
    public AdminAbout()
    {
        InitializeComponent();
        MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=
        MySqlCommand command2;
        MySqlDataAdapter da2;

        String selectQuery2 = "SELECT* FROM about";

        command2 = new MySqlCommand(selectQuery2, connection2);

        da2 = new MySqlDataAdapter(command2);

        DataTable table2 = new DataTable();

        da2.Fill(table2);

        d1.Text = table2.Rows[0][0].ToString();
        da2.Dispose();

    }
```

```
1 reference
private void button1_Click(object sender, EventArgs e)
{
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=
    MySqlCommand command;
    String insertQuery = "DELETE FROM about;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();

    insertQuery = "INSERT INTO about(Description) VALUES(@desc)";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@desc", MySqlDbType.Text);
    command.Parameters["@desc"].Value = d1.Text;
    if (command.ExecuteNonQuery() == 1)
    {

    }
    connection.Close();
    MessageBox.Show("Changed\n");
}
}
```

Admin Deals

```
SDAProject.AdminDeals                AdminDeals()
3 references
public AdminDeals()
{
    InitializeComponent();
    MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username
    MySqlCommand command2;
    MySqlDataAdapter da2;

    String selectQuery2 = "SELECT* FROM picture where  id=5";

    command2 = new MySqlCommand(selectQuery2, connection2);

    da2 = new MySqlDataAdapter(command2);

    DataTable table2 = new DataTable();

    da2.Fill(table2);

    byte[] img2 = (byte[])table2.Rows[0][4];
    MemoryStream ms2 = new MemoryStream(img2);
    pictureBox6.Image = Image.FromStream(ms2);
    n1.Text = table2.Rows[0][1].ToString();
    p1.Text = table2.Rows[0][5].ToString();
    d1.Text = table2.Rows[0][2].ToString();
    da2.Dispose();
No issues found                      Ln: 48  Ch: 1  SPC  CRLF
```

```
p1.Text = table2.Rows[0][5].ToString();
d1.Text = table2.Rows[0][2].ToString();
da2.Dispose();


string selectQuery3 = "SELECT* FROM picture where  id=6";

command2 = new MySqlCommand(selectQuery3, connection2);

da2 = new MySqlDataAdapter(command2);

DataTable table3 = new DataTable();

da2.Fill(table3);

byte[] img3 = (byte[])table3.Rows[0][4];
MemoryStream ms3 = new MemoryStream(img3);
pictureBox5.Image = Image.FromStream(ms3);
n2.Text = table3.Rows[0][1].ToString();
p2.Text = table3.Rows[0][5].ToString();
d2.Text = table3.Rows[0][2].ToString();
da2.Dispose();
```

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```
string selectQuery5 = "SELECT* FROM picture where  id=8";

command2 = new MySqlCommand(selectQuery5, connection2);

da2 = new MySqlDataAdapter(command2);

DataTable table5 = new DataTable();

da2.Fill(table5);

byte[] img5 = (byte[])table5.Rows[0][4];
MemoryStream ms5 = new MemoryStream(img5);
pictureBox7.Image = Image.FromStream(ms5);
n4.Text = table5.Rows[0][1].ToString();
p4.Text = table5.Rows[0][5].ToString();
d4.Text = table5.Rows[0][2].ToString();
da2.Dispose();

}
```

SDAProject.AdminDeals | button3_Click(object sender, EventArgs e)

```
ivate void button2_Click(object sender, EventArgs e)

if (n1.Text != "" && p1.Text != "" && d1.Text != "")
{
    MemoryStream ms = new MemoryStream();
    pictureBox6.Image.Save(ms, pictureBox6.Image.RawFormat);
    byte[] img = ms.ToArray();
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand command;
    String insertQuery = "DELETE FROM picture WHERE id=5;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();

    insertQuery = "INSERT INTO picture(id,name,Description,quantity,address,price) VALUES(@id,@name,@desc,@qth,@img,@pri)";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.Text);
    command.Parameters.Add("@qth", MySqlDbType.Int64);
    command.Parameters.Add("@pri", MySqlDbType.Int64);
```

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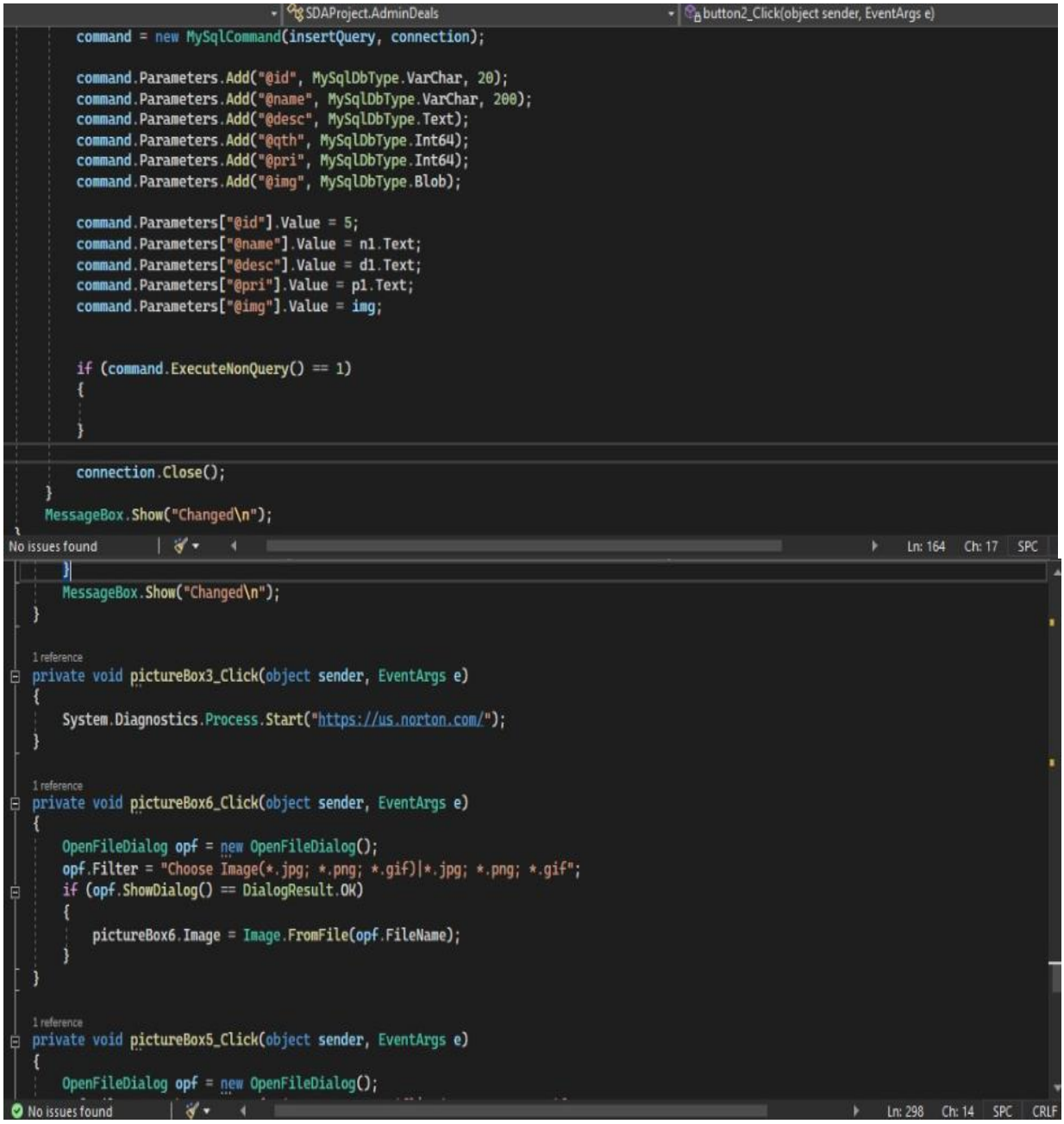

```
SDAProject.AdminDeals                    button2_Click(object sender, EventArgs e)

        command = new MySqlCommand(insertQuery, connection);

        command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
        command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
        command.Parameters.Add("@desc", MySqlDbType.Text);
        command.Parameters.Add("@qth", MySqlDbType.Int64);
        command.Parameters.Add("@pri", MySqlDbType.Int64);
        command.Parameters.Add("@img", MySqlDbType.Blob);

        command.Parameters["@id"].Value = 5;
        command.Parameters["@name"].Value = n1.Text;
        command.Parameters["@desc"].Value = d1.Text;
        command.Parameters["@qth"].Value = p1.Text;
        command.Parameters["@pri"].Value = p1.Text;
        command.Parameters["@img"].Value = img;


        if (command.ExecuteNonQuery() == 1)
        {

        }

        connection.Close();
    }
    MessageBox.Show("Changed\n");
}
```

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```
        }
        MessageBox.Show("Changed\n");
    }

    1 reference
    private void pictureBox3_Click(object sender, EventArgs e)
    {
        System.Diagnostics.Process.Start("https://us.norton.com/");
    }

    1 reference
    private void pictureBox6_Click(object sender, EventArgs e)
    {
        OpenFileDialog opf = new OpenFileDialog();
        opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
        if (opf.ShowDialog() == DialogResult.OK)
        {
            pictureBox6.Image = Image.FromFile(opf.FileName);
        }
    }

    1 reference
    private void pictureBox5_Click(object sender, EventArgs e)
    {
        OpenFileDialog opf = new OpenFileDialog();
```

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```
1 reference
private void pictureBox5_Click(object sender, EventArgs e)
{
    OpenFileDialog opf = new OpenFileDialog();
    opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
    if (opf.ShowDialog() == DialogResult.OK)
    {
        pictureBox5.Image = Image.FromFile(opf.FileName);
    }
}

1 reference
private void pictureBox4_Click(object sender, EventArgs e)
{
    OpenFileDialog opf = new OpenFileDialog();
    opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
    if (opf.ShowDialog() == DialogResult.OK)
    {
        pictureBox4.Image = Image.FromFile(opf.FileName);
    }
}

1 reference
private void pictureBox7_Click(object sender, EventArgs e)
```

Admin Home

```
6 references
public AdminHome()
{
    InitializeComponent();
    MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand command2;
    MySqlDataAdapter da2;

    String selectQuery2 = "SELECT* FROM picture where  id=1";

    command2 = new MySqlCommand(selectQuery2, connection2);

    da2 = new MySqlDataAdapter(command2);

    DataTable table2 = new DataTable();


    da2.Fill(table2);

    byte[] img2 = (byte[])table2.Rows[0][4];
    MemoryStream ms2 = new MemoryStream(img2);
    pictureBox6.Image = Image.FromStream(ms2);
    n1.Text = table2.Rows[0][1].ToString();
    p1.Text = table2.Rows[0][5].ToString();
    d1.Text = table2.Rows[0][2].ToString();
```

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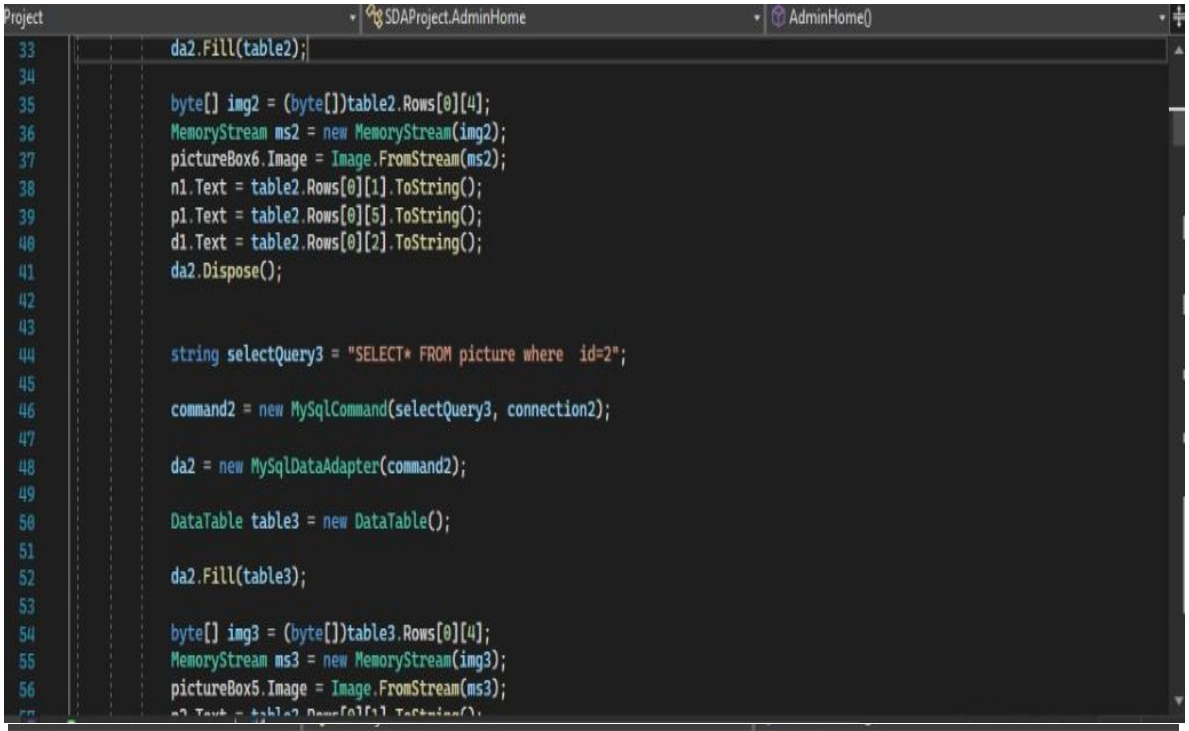


```
string selectQuery4 = "SELECT* FROM picture where  id=3";

command2 = new MySqlCommand(selectQuery4, connection2);

da2 = new MySqlDataAdapter(command2);

DataTable table4 = new DataTable();

da2.Fill(table4);

byte[] img4 = (byte[])table4.Rows[0][4];
MemoryStream ms4 = new MemoryStream(img4);
pictureBox4.Image = Image.FromStream(ms4);
n3.Text = table4.Rows[0][1].ToString();
d3.Text = table4.Rows[0][2].ToString();
p3.Text = table4.Rows[0][5].ToString();

da2.Dispose();
```

```
SDAProject.AdminHome                                   button2_Click(object sender, EventArgs e)
        p4.Text = table5.Rows[0][5].ToString();
        d4.Text = table5.Rows[0][2].ToString();
        da2.Dispose();




    }

    1 reference
    private void pictureBox6_Click(object sender, EventArgs e)
    {
        OpenFileDialog opf = new OpenFileDialog();
        opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
        if (opf.ShowDialog() == DialogResult.OK)
        {
            pictureBox6.Image = Image.FromFile(opf.FileName);
        }
    }

    1 reference
    private void button2_Click(object sender, EventArgs e)
    {
        if(n1.Text!="" && p1.Text!="" &&  d1.Text!="")
        {
            MemoryStream ms = new MemoryStream();
```

```
118
        1 reference
119     private void button2_Click(object sender, EventArgs e)
120     {
121         if(n1.Text!="" && p1.Text!="" &&  d1.Text!="")
122         {
123             MemoryStream ms = new MemoryStream();
124             pictureBox6.Image.Save(ms, pictureBox6.Image.RawFormat);
125             byte[] img = ms.ToArray();
126             MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart")
127             MySqlCommand command;
128             String insertQuery = "DELETE FROM picture WHERE id=1;";
129             connection.Open();
130             command = new MySqlCommand(insertQuery, connection);
131             command.ExecuteNonQuery();
132             connection.Close();
133
134
135             insertQuery = "INSERT INTO picture(id,name,Description,quantity,address,price) VALUES(@id,@name,@desc,@qth,@img,@pri)";
136             connection.Open();
137             command = new MySqlCommand(insertQuery, connection);
138
139             command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
140             command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
141             command.Parameters.Add("@desc", MySqlDbType.Text);
```

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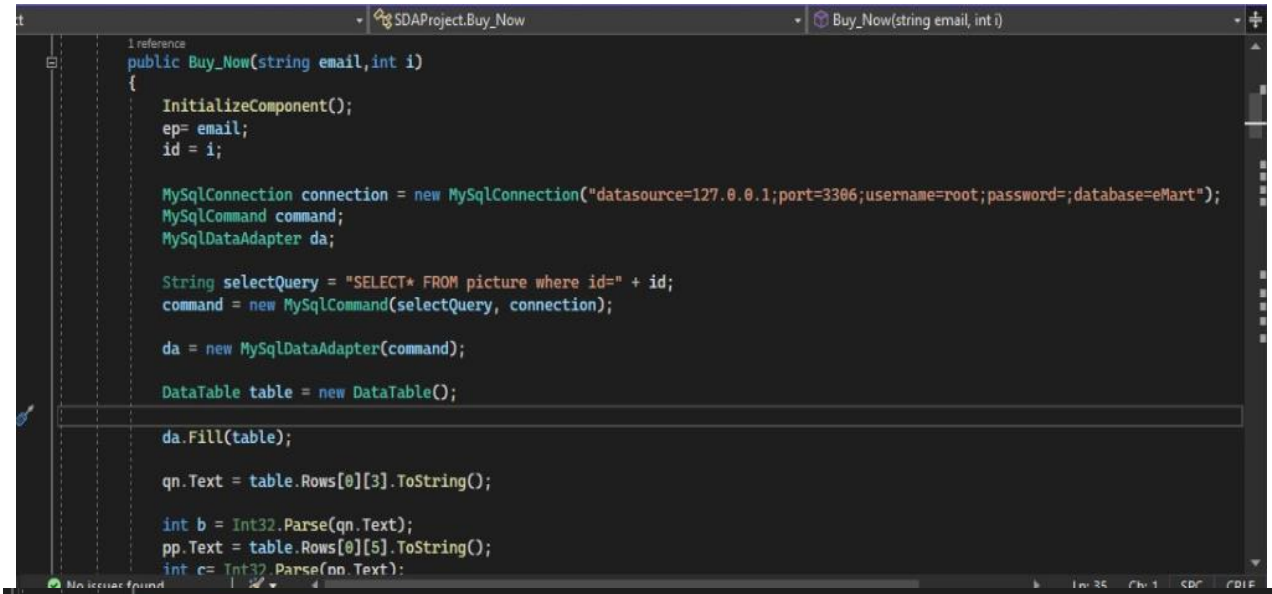
```
            command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
            command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
            command.Parameters.Add("@desc", MySqlDbType.Text);
            command.Parameters.Add("@qth", MySqlDbType.Int64);
            command.Parameters.Add("@pri", MySqlDbType.Int64);
            command.Parameters.Add("@img", MySqlDbType.Blob);

            command.Parameters["@id"].Value = 1;
            command.Parameters["@name"].Value = n1.Text;
            command.Parameters["@desc"].Value = d1.Text;
            command.Parameters["@pri"].Value = p1.Text;
            command.Parameters["@img"].Value = img;


            if (command.ExecuteNonQuery() == 1)
            {

            }

            connection.Close();
        }
        MessageBox.Show("Changed\n");
    }
```

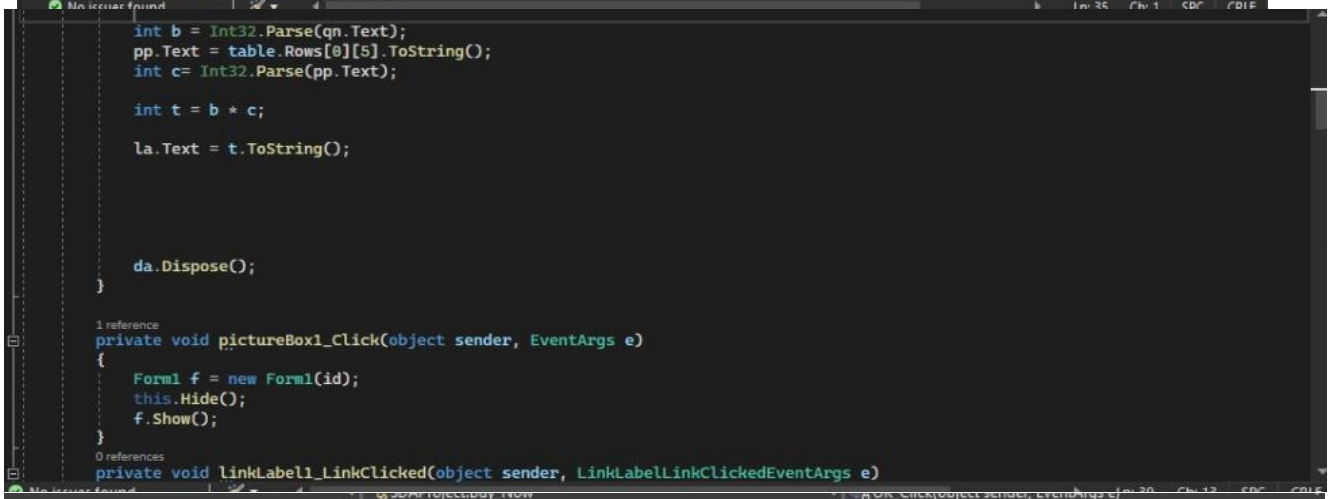
```
1 reference
private void pictureBox5_Click(object sender, EventArgs e)
{
    OpenFileDialog opf = new OpenFileDialog();
    opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
    if (opf.ShowDialog() == DialogResult.OK)
    {
        pictureBox5.Image = Image.FromFile(opf.FileName);
    }
}

1 reference
private void pictureBox4_Click(object sender, EventArgs e)
{
    OpenFileDialog opf = new OpenFileDialog();
    opf.Filter = "Choose Image(*.jpg; *.png; *.gif)|*.jpg; *.png; *.gif";
    if (opf.ShowDialog() == DialogResult.OK)
    {
        pictureBox4.Image = Image.FromFile(opf.FileName);
    }
}

1 reference
private void pictureBox7_Click(object sender, EventArgs e)
```

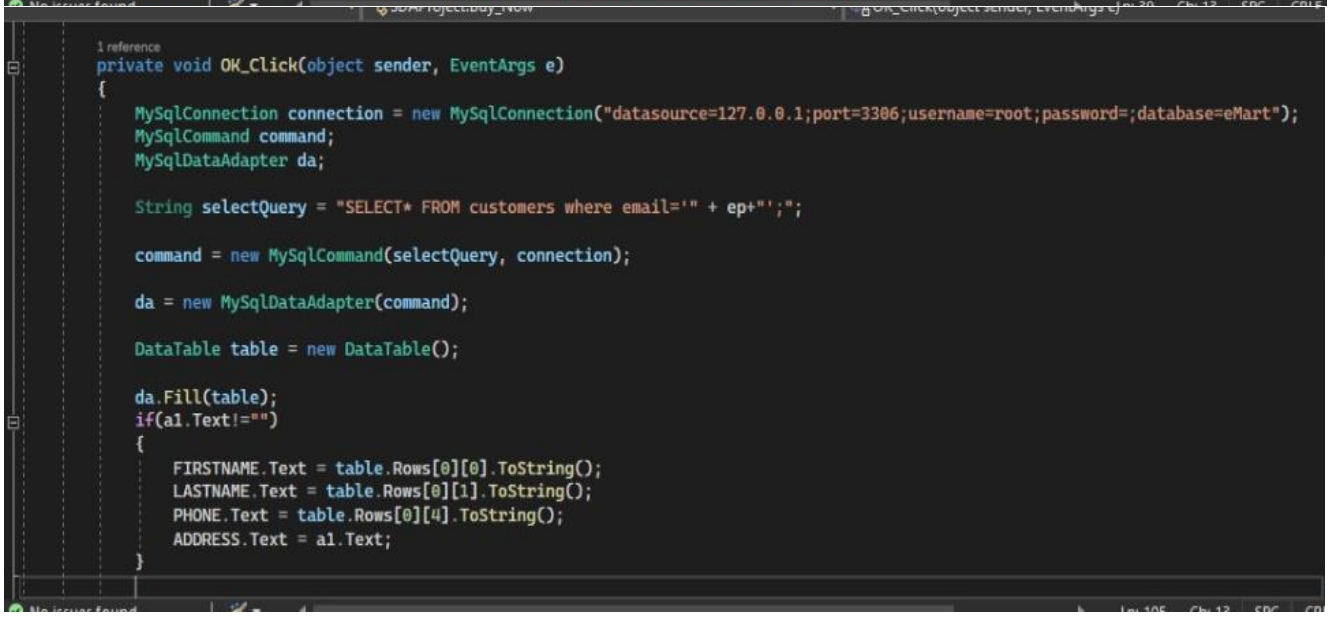
Admin Orders

```
1 reference
private void button1_Click(object sender, EventArgs e)
{
    string connectionString = "datasource=127.0.0.1;port=3306;username=root;password=;database=eMart";
    using (MySqlConnection sqlcon = new MySqlConnection(connectionString))
    {
        sqlcon.Open();
        MySqlDataAdapter sqlad = new MySqlDataAdapter("SELECT * FROM order_place ", sqlcon);
        DataTable student = new DataTable();
        sqlad.Fill(student);
        dataGridView1.DataSource = student;
        sqlcon.Close();
    }
}

1 reference
private void linkLabel4_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
{
    AdminDeals d = new AdminDeals();
    this.Hide();
    d.Show();
}

1 reference
```

Buy Now


SDAProject.Buy_Now
Buy_Now(string email, int i)
1 reference
public Buy_Now(string email,int i)
{
InitializeComponent();
ep= email;
id = i;
MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
MySqlCommand command;
MySqlDataAdapter da;
String selectQuery = "SELECT* FROM picture where id=" + id;
command = new MySqlCommand(selectQuery, connection);
da = new MySqlDataAdapter(command);
DataTable table = new DataTable();
da.Fill(table);
qn.Text = table.Rows[0][3].ToString();
int b = Int32.Parse(qn.Text);
pp.Text = table.Rows[0][5].ToString();
int c= Int32.Parse(pp.Text);


int b = Int32.Parse(qn.Text);
pp.Text = table.Rows[0][5].ToString();
int c= Int32.Parse(pp.Text);
int t = b * c;
la.Text = t.ToString();
da.Dispose();
}
1 reference
private void pictureBox1_Click(object sender, EventArgs e)
{
Form1 f = new Form1(id);
this.Hide();
f.Show();
}
0 references
private void linkLabel1_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)


1 reference
private void OK_Click(object sender, EventArgs e)
{
MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
MySqlCommand command;
MySqlDataAdapter da;
String selectQuery = "SELECT* FROM customers where email='" + ep+"';";
command = new MySqlCommand(selectQuery, connection);
da = new MySqlDataAdapter(command);
DataTable table = new DataTable();
da.Fill(table);
if(a1.Text!="")
{
FIRSTNAME.Text = table.Rows[0][0].ToString();
LASTNAME.Text = table.Rows[0][1].ToString();
PHONE.Text = table.Rows[0][4].ToString();
ADDRESS.Text = a1.Text;
}

```
            da.Dispose();
        }



        0 references
        private void textBox1_KeyPress(object sender, KeyPressEventArgs e)
        {
            char ch=e.KeyChar;
            if(!Char.IsDigit(ch) && ch!=8 && ch!=46)
            {
                e.Handled = true;
            }
        }

        1 reference
        private void linkLabel1_LinkClicked_1(object sender, LinkLabelLinkClickedEventArgs e)
        {
            Home h = new Home(id);
            this.Hide();
            h.Show();
        }
```

No issues found | Ln: 105 | Ch: 13 | SPC | CRL

SDAProject.Buy_Now | OK_Click(object sender, EventArgs e)

```
        1 reference
        private void BUY_Click(object sender, EventArgs e)
        {
            if(ADDRESS.Text!="")
            {
                MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart")
                MySqlCommand command;
                MySqlDataAdapter da;

                String selectQuery = "SELECT* FROM picture where id=" + id;
                command = new MySqlCommand(selectQuery, connection);

                da = new MySqlDataAdapter(command);

                DataTable table = new DataTable();

                da.Fill(table);
                byte[] img = (byte[])table.Rows[0][4];
                qn.Text = table.Rows[0][3].ToString();

                int b = Int32.Parse(qn.Text);
                pp.Text = table.Rows[0][5].ToString();
                int c = Int32.Parse(pp.Text);

                int t = b * c;

                la.Text = t.ToString();


                MySqlConnection connection1 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart
                MySqlCommand command1;
                string insertQuery = "INSERT INTO order_place(FirstName,LastName,address,phone,id,pic,quantity,PerItemPrice,TotalPrice)
                connection1.Open();
                command1 = new MySqlCommand(insertQuery, connection1);

                command1.Parameters.Add("@fn", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@ln", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@ad", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@p", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@pid", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@q", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@pp", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@tp", MySqlDbType.VarChar, 200);
                command1.Parameters.Add("@img", MySqlDbType.Blob);
```

```
            command1.Parameters["@fn"].Value = FIRSTNAME.Text;
            command1.Parameters["@ln"].Value = LASTNAME.Text;
            command1.Parameters["@ad"].Value = ADDRESS.Text;
            command1.Parameters["@p"].Value = PHONE.Text;
            command1.Parameters["@pid"].Value = id;
            command1.Parameters["@q"].Value = b;
            command1.Parameters["@pp"].Value = c;
            command1.Parameters["@tp"].Value = b*c;
            command1.Parameters["@img"].Value = img;


            if (command1.ExecuteNonQuery() == 1)
            {

            }

            connection1.Close();




            da.Dispose();
            MessageBox.Show("Your Order Has Been Placed\nThanks For Shopping");
```

No issues found | Ln: 215 Ch: 30 SPC CRLF

Confirm Sign in

```
1 reference
private void MoveToSignIn_Click(object sender, EventArgs e)
{
    string emailcheck = "{";
    string passwordcheck = "{";
    bool flag = false;
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand cmd;
    MySqlDataReader mdr;

    connection.Open();

    string query = "SELECT * FROM customers WHERE email='" + USERNAME.Text + "'";
    cmd = new MySqlCommand(query, connection);

    mdr = cmd.ExecuteReader();

    if (mdr.Read())
    {
        emailcheck = mdr.GetString("email");
        passwordcheck = mdr.GetString("password");
        flag = true;
    }
    else
```

```
if (mdr.Read())
{
    emailcheck = mdr.GetString("email");
    passwordcheck = mdr.GetString("password");
    flag = true;
}
else
{
    MessageBox.Show("No Record Of This ID");

}
if (flag == true)
{
    if (emailcheck == USERNAME.Text && passwordcheck == PASSWORD.Text)
    {

        Buy_Now form = new Buy_Now(emailcheck,pe);
        this.Hide();
        form.Show();
    }
    else
    {
        MessageBox.Show("User is Invalid");
```

Daily Deals

```
private void p2_Click(object sender, EventArgs e)
{
    MemoryStream ms = new MemoryStream();
    p2.Image.Save(ms, p2.Image.RawFormat);
    byte[] img = ms.ToArray();
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand command;
    String insertQuery = "DELETE FROM picture WHERE id=6;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();


    insertQuery = "INSERT INTO picture(id,name,quantity,address,price,Description) VALUES(@id,@name,@qth,@img,@pri,@desc)";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.VarChar, 20);

    command.Parameters.Add("@qth", MySqlDbType.Int64);
    command.Parameters.Add("@pri", MySqlDbType.Int64);
```

No issues found | Ln: 193 Ch: 14 SPC CRL

```
    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.VarChar, 20);

    command.Parameters.Add("@qth", MySqlDbType.Int64);
    command.Parameters.Add("@pri", MySqlDbType.Int64);
    command.Parameters.Add("@img", MySqlDbType.Blob);

    command.Parameters["@id"].Value = pid = 5;
    command.Parameters["@name"].Value = n1.Text;
    command.Parameters["@pri"].Value = pr1.Text;
    command.Parameters["@desc"].Value = d1.Text;
    command.Parameters["@img"].Value = img;


    if (command.ExecuteNonQuery() == 1)
    {

    }
    connection.Close();

    Product_Details p = new Product_Details(pid);
    this.Hide();
```

```
1 reference
private void p1_Click(object sender, EventArgs e)
{
    MemoryStream ms = new MemoryStream();
    p1.Image.Save(ms, p1.Image.RawFormat);
    byte[] img = ms.ToArray();
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart")
    MySqlCommand command;
    String insertQuery = "DELETE FROM picture WHERE id=5;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();

    insertQuery = "INSERT INTO picture(id,name,quantity,address,price,Description) VALUES(@id,@name,@qth,@img,@pri,@desc)";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.VarChar, 20);

    command.Parameters.Add("@qth", MySqlDbType.Int64);
    command.Parameters.Add("@pri", MySqlDbType.Int64);

    string selectQuery4 = "SELECT* FROM picture where  id=7";

    command2 = new MySqlCommand(selectQuery4, connection2);

    da2 = new MySqlDataAdapter(command2);

    DataTable table4 = new DataTable();

    da2.Fill(table4);

    byte[] img4 = (byte[])table4.Rows[0][4];
    MemoryStream ms4 = new MemoryStream(img4);
    p3.Image = Image.FromStream(ms4);
    n3.Text = table4.Rows[0][1].ToString();
    d3.Text = table4.Rows[0][2].ToString();
    pr3.Text = table4.Rows[0][5].ToString();

    da2.Dispose();

    string selectQuery5 = "SELECT* FROM picture where  id=8";

    command2 = new MySqlCommand(selectQuery5, connection2);
    byte[] img2 = (byte[])table2.Rows[0][4];
    MemoryStream ms2 = new MemoryStream(img2);
    p1.Image = Image.FromStream(ms2);
    n1.Text = table2.Rows[0][1].ToString();
    pr1.Text = table2.Rows[0][5].ToString();
    d1.Text = table2.Rows[0][2].ToString();
    da2.Dispose();


    string selectQuery3 = "SELECT* FROM picture where  id=6";

    command2 = new MySqlCommand(selectQuery3, connection2);

    da2 = new MySqlDataAdapter(command2);

    DataTable table3 = new DataTable();

    da2.Fill(table3);

    byte[] img3 = (byte[])table3.Rows[0][4];
    MemoryStream ms3 = new MemoryStream(img3);
    p2.Image = Image.FromStream(ms3);
    n2.Text = table3.Rows[0][1].ToString();
    pr2.Text = table3.Rows[0][5].ToString();
```

```
4 references
public DailyDeals(int p)
{
    InitializeComponent();
    pid = p;
    MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart"
    MySqlCommand command2;
    MySqlDataAdapter da2;

    String selectQuery2 = "SELECT* FROM picture where  id=5";

    command2 = new MySqlCommand(selectQuery2, connection2);

    da2 = new MySqlDataAdapter(command2);

    DataTable table2 = new DataTable();

    da2.Fill(table2);

    byte[] img2 = (byte[])table2.Rows[0][4];
    MemoryStream ms2 = new MemoryStream(img2);
    p1.Image = Image.FromStream(ms2);
    n1.Text = table2.Rows[0][1].ToString();
    pr1.Text = table2.Rows[0][5].ToString();
```

No issues found Ln: 36 Ch: 1 SPC

Home

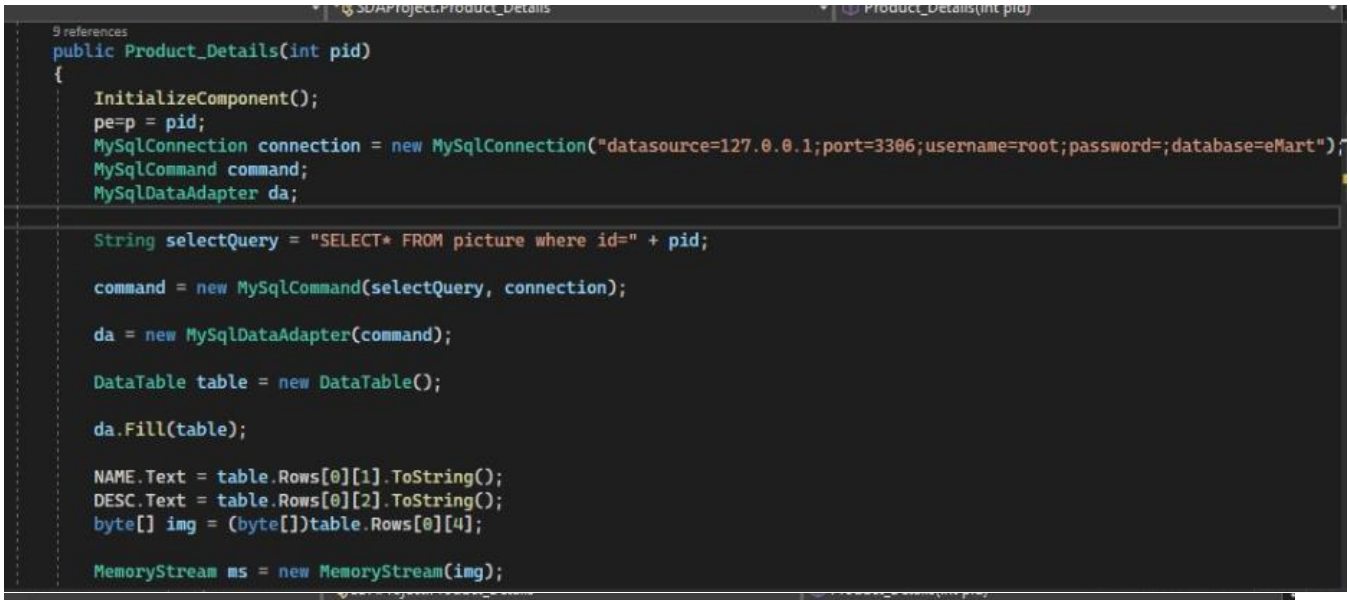
```
public int id = 0;
18 references
public Form1(int p)
{
    InitializeComponent();
    id = p;

        MySqlConnection connection2 = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eM
        MySqlCommand command2;
        MySqlDataAdapter da2;

        String selectQuery2 = "SELECT* FROM picture where  id=1";

        command2 = new MySqlCommand(selectQuery2, connection2);

        da2 = new MySqlDataAdapter(command2);

        DataTable table2 = new DataTable();


        da2.Fill(table2);

        byte[] img2 = (byte[])table2.Rows[0][4];
        MemoryStream ms2 = new MemoryStream(img2);
```

```
            da2.Fill(table2);

            byte[] img2 = (byte[])table2.Rows[0][4];
            MemoryStream ms2 = new MemoryStream(img2);
            pictureBox6.Image = Image.FromStream(ms2);
            n1.Text = table2.Rows[0][1].ToString();
            p1.Text = table2.Rows[0][5].ToString();
        d1.Text = table2.Rows[0][2].ToString();
        da2.Dispose();


            string selectQuery3 = "SELECT* FROM picture where  id=2";

            command2 = new MySqlCommand(selectQuery3, connection2);

            da2 = new MySqlDataAdapter(command2);

            DataTable table3 = new DataTable();

            da2.Fill(table3);

            byte[] img3 = (byte[])table3.Rows[0][4];
            MemoryStream ms3 = new MemoryStream(img3);
            pictureBox5.Image = Image.FromStream(ms3);
```

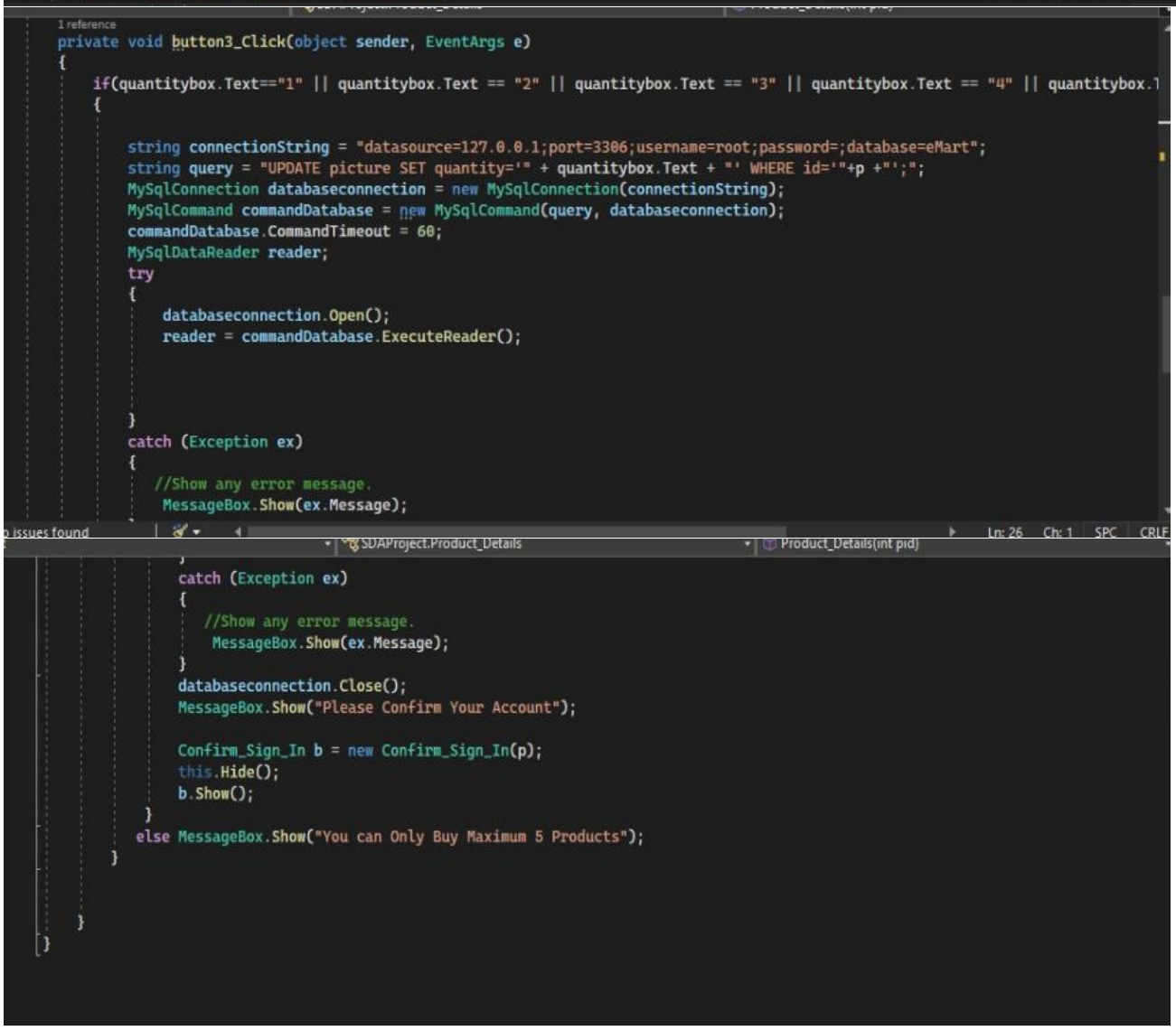
```
1 reference
private void pictureBox6_Click(object sender, EventArgs e)
{
    void Form1.pictureBox6_Click(object sender, EventArgs e)
    MemoryStream ms = new MemoryStream();
    pictureBox6.Image.Save(ms, pictureBox6.Image.RawFormat);
    byte[] img = ms.ToArray();
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMa
    MySqlCommand command;
    String insertQuery = "DELETE FROM picture WHERE id=1;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();


    insertQuery = "INSERT INTO picture(id,name,quantity,address,price,Description) VALUES(@id,@name,@qth,@img,@pri,@desc)
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.VarChar, 20);
```

```
{
    void Form1.pictureBox6_Click(object sender, EventArgs e)
    MemoryStream ms = new MemoryStream();
    pictureBox6.Image.Save(ms, pictureBox6.Image.RawFormat);
    byte[] img = ms.ToArray();
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMa
    MySqlCommand command;
    String insertQuery = "DELETE FROM picture WHERE id=1;";
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);
    command.ExecuteNonQuery();
    connection.Close();


    insertQuery = "INSERT INTO picture(id,name,quantity,address,price,Description) VALUES(@id,@name,@qth,@img,@pri,@desc)
    connection.Open();
    command = new MySqlCommand(insertQuery, connection);

    command.Parameters.Add("@id", MySqlDbType.VarChar, 20);
    command.Parameters.Add("@name", MySqlDbType.VarChar, 200);
    command.Parameters.Add("@desc", MySqlDbType.VarChar, 20);
```

Product Details



```
9 references
public Product_Details(int pid)
{
    InitializeComponent();
    pe=p = pid;
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand command;
    MySqlDataAdapter da;

    String selectQuery = "SELECT* FROM picture where id=" + pid;

    command = new MySqlCommand(selectQuery, connection);

    da = new MySqlDataAdapter(command);

    DataTable table = new DataTable();

    da.Fill(table);

    NAME.Text = table.Rows[0][1].ToString();
    DESC.Text = table.Rows[0][2].ToString();
    byte[] img = (byte[])table.Rows[0][4];

    MemoryStream ms = new MemoryStream(img);
```

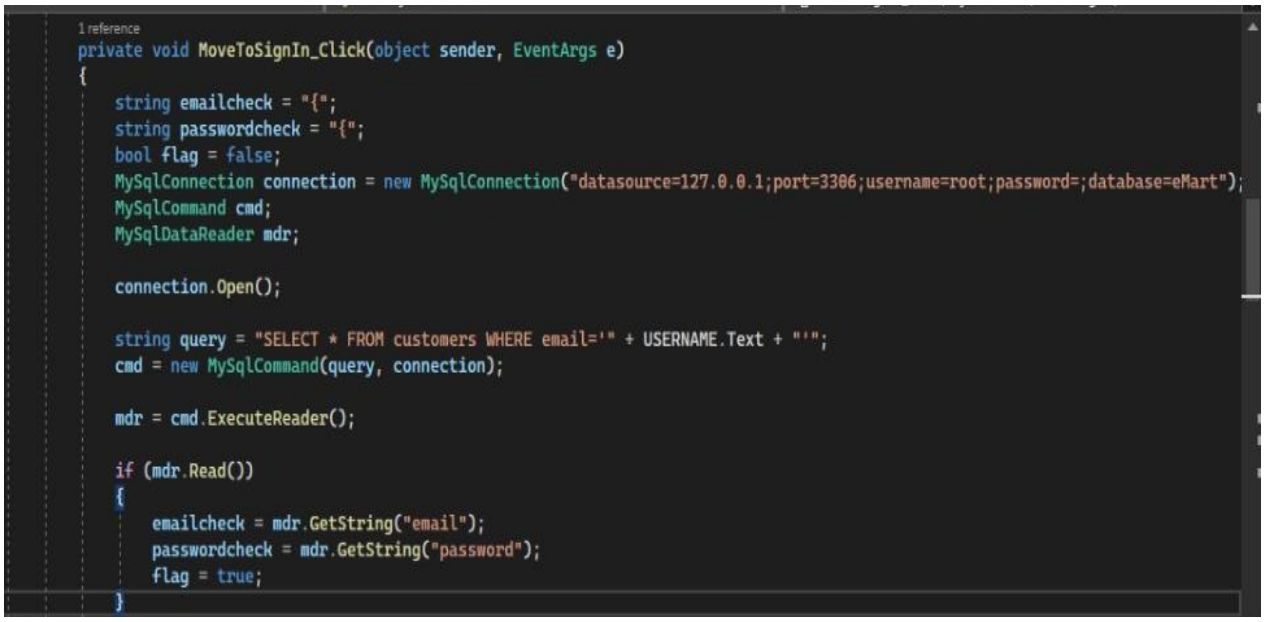


```
1 reference
private void button3_Click(object sender, EventArgs e)
{
    if(quantitybox.Text=="1" || quantitybox.Text == "2" || quantitybox.Text == "3" || quantitybox.Text == "4" || quantitybox.T
    {

        string connectionString = "datasource=127.0.0.1;port=3306;username=root;password=;database=eMart";
        string query = "UPDATE picture SET quantity='" + quantitybox.Text + "' WHERE id='"+p +"';";
        MySqlConnection databaseconnection = new MySqlConnection(connectionString);
        MySqlCommand commandDatabase = new MySqlCommand(query, databaseconnection);
        commandDatabase.CommandTimeout = 60;
        MySqlDataReader reader;
        try
        {
            databaseconnection.Open();
            reader = commandDatabase.ExecuteReader();



        }
        catch (Exception ex)
        {
            //Show any error message.
            MessageBox.Show(ex.Message);
        }
        databaseconnection.Close();
        MessageBox.Show("Please Confirm Your Account");

        Confirm_Sign_In b = new Confirm_Sign_In(p);
        this.Hide();
        b.Show();
    }
    else MessageBox.Show("You can Only Buy Maximum 5 Products");
}


}
}
```

Sign in

```
1 reference
private void MoveToSignIn_Click(object sender, EventArgs e)
{
    if (USERNAME.Text == "muhammad14702@gmail.com" && PASSWORD.Text == "mtsstyle")
    {
        AdminHome h = new AdminHome();
        this.Hide();
        h.Show();
    }
    else MessageBox.Show("Invalid Id or Password");
}
}
}
```

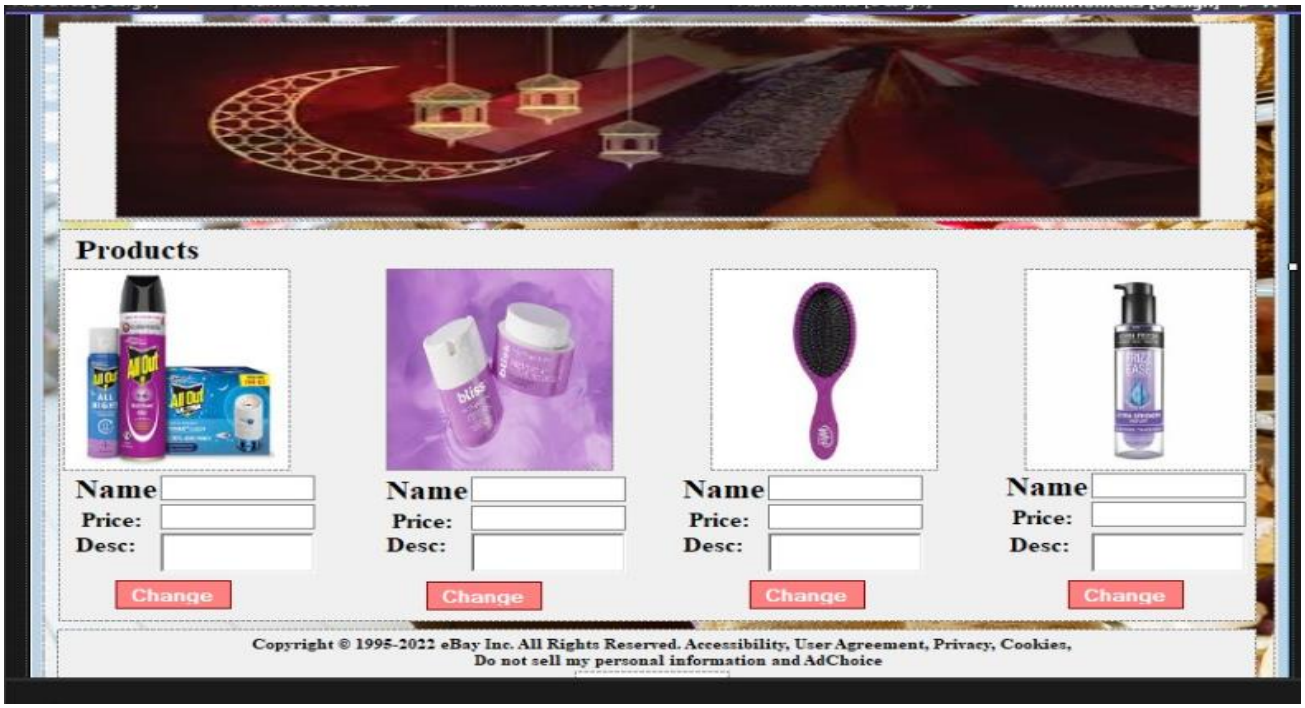
Admin Sign in



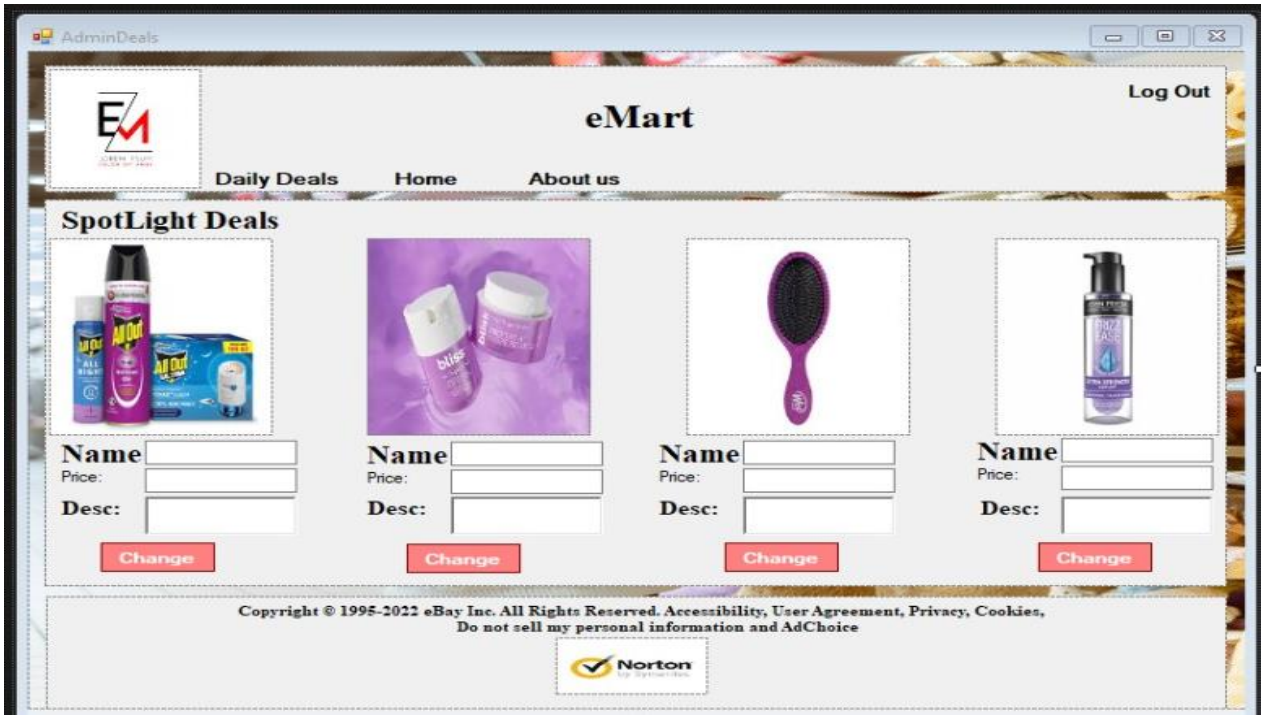
```
1 reference
private void MoveToSignIn_Click(object sender, EventArgs e)
{
    string emailcheck = "{";
    string passwordcheck = "{";
    bool flag = false;
    MySqlConnection connection = new MySqlConnection("datasource=127.0.0.1;port=3306;username=root;password=;database=eMart");
    MySqlCommand cmd;
    MySqlDataReader mdr;

    connection.Open();

    string query = "SELECT * FROM customers WHERE email='" + USERNAME.Text + "'";
    cmd = new MySqlCommand(query, connection);

    mdr = cmd.ExecuteReader();

    if (mdr.Read())
    {
        emailcheck = mdr.GetString("email");
        passwordcheck = mdr.GetString("password");
        flag = true;
    }
```

Chapter 6: Screen Snippets

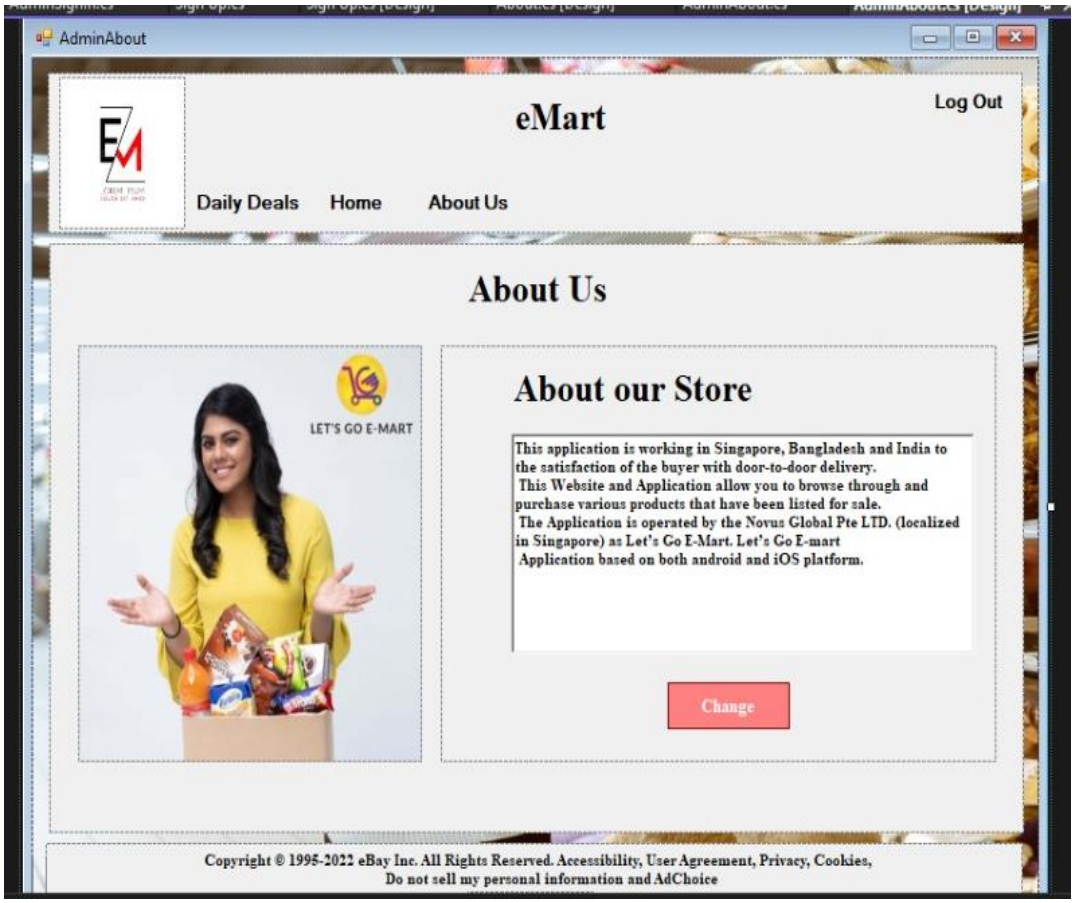
Admin Home



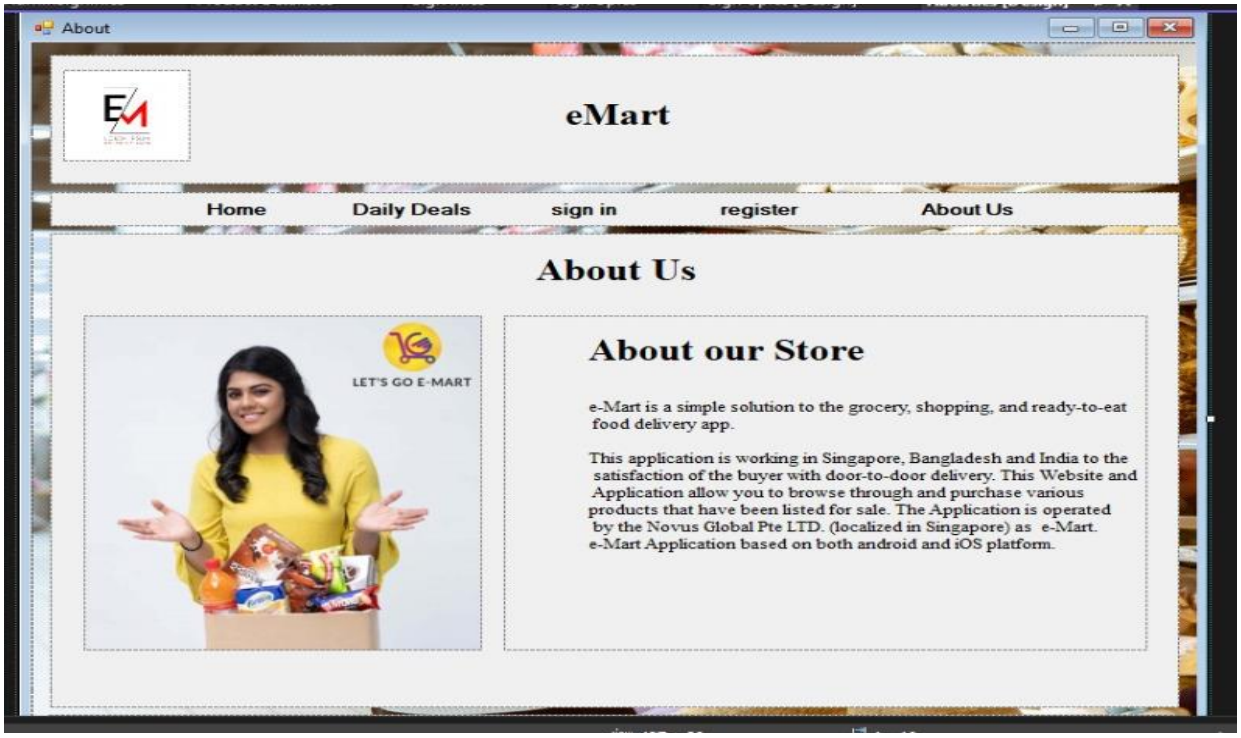
Admin Deals



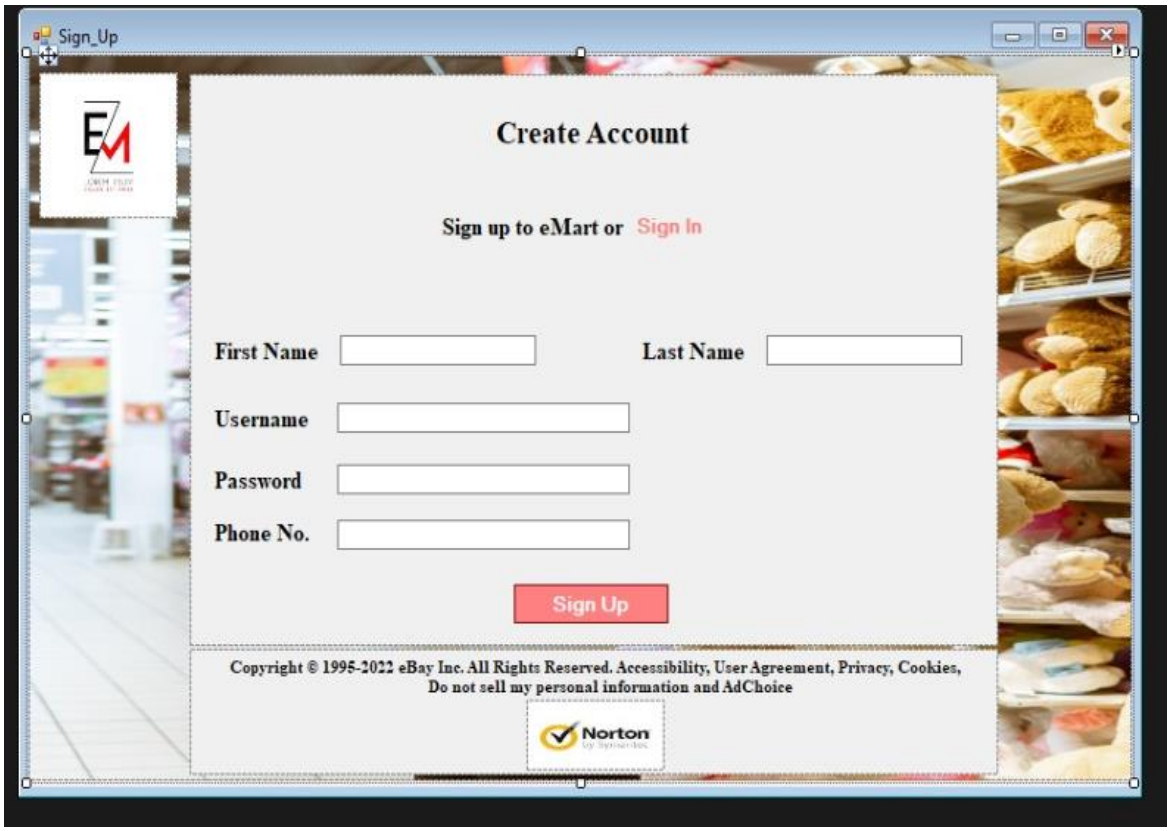
Admin About us



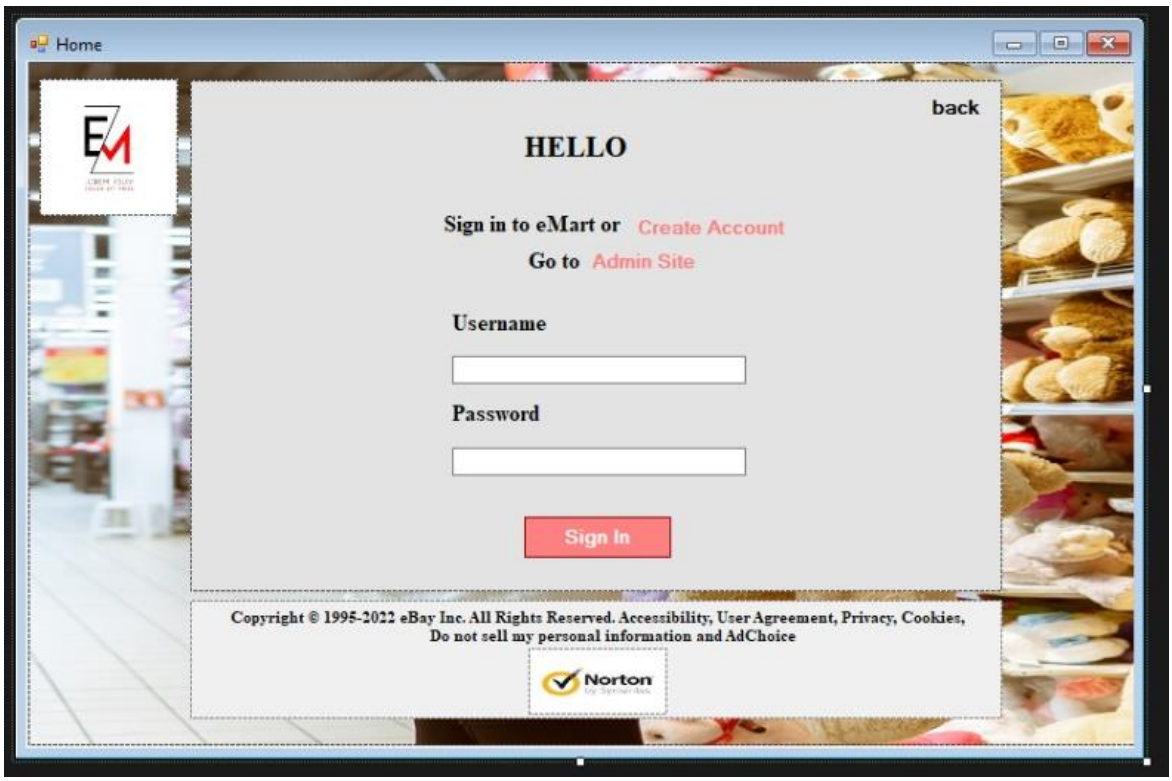
About us



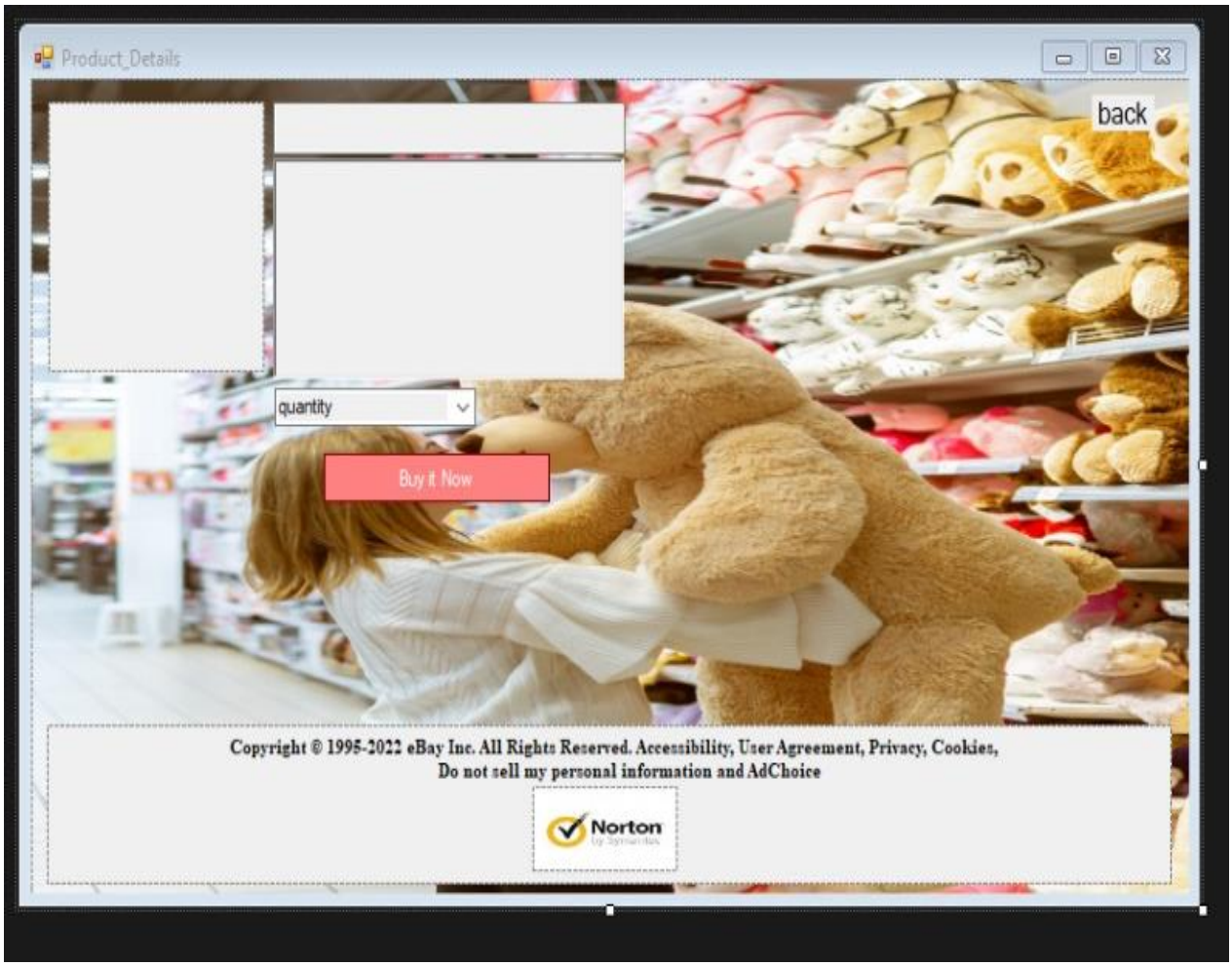
Sign Up



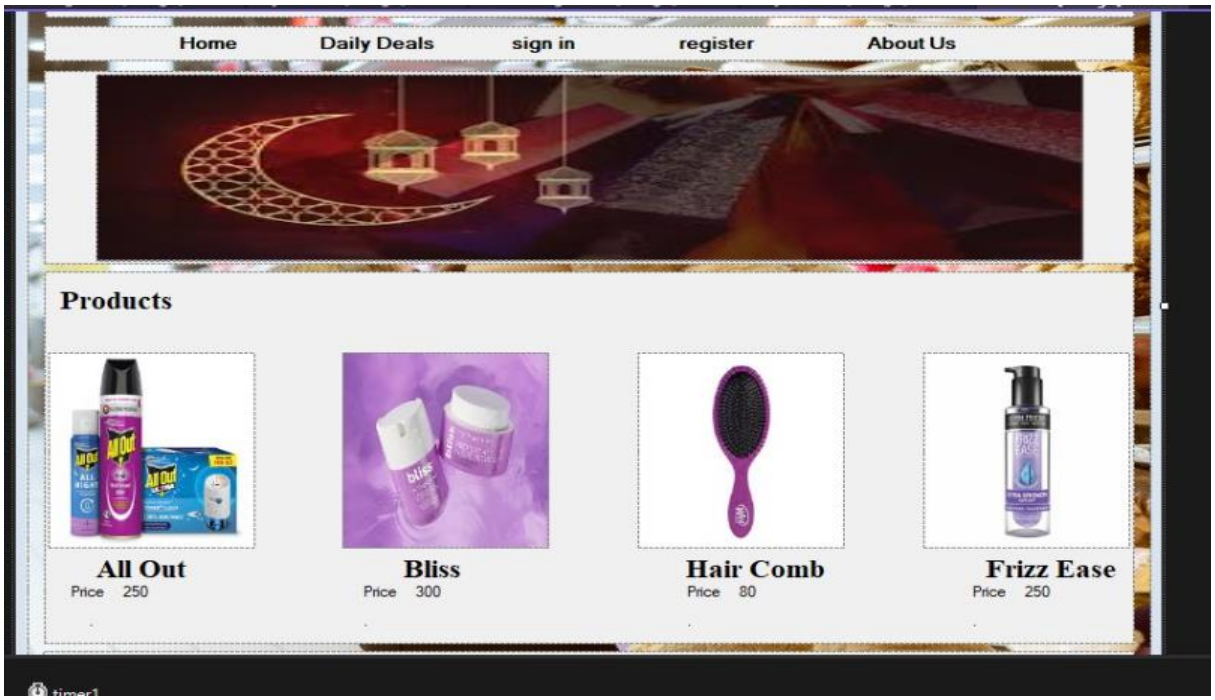
Sign In



Product Details

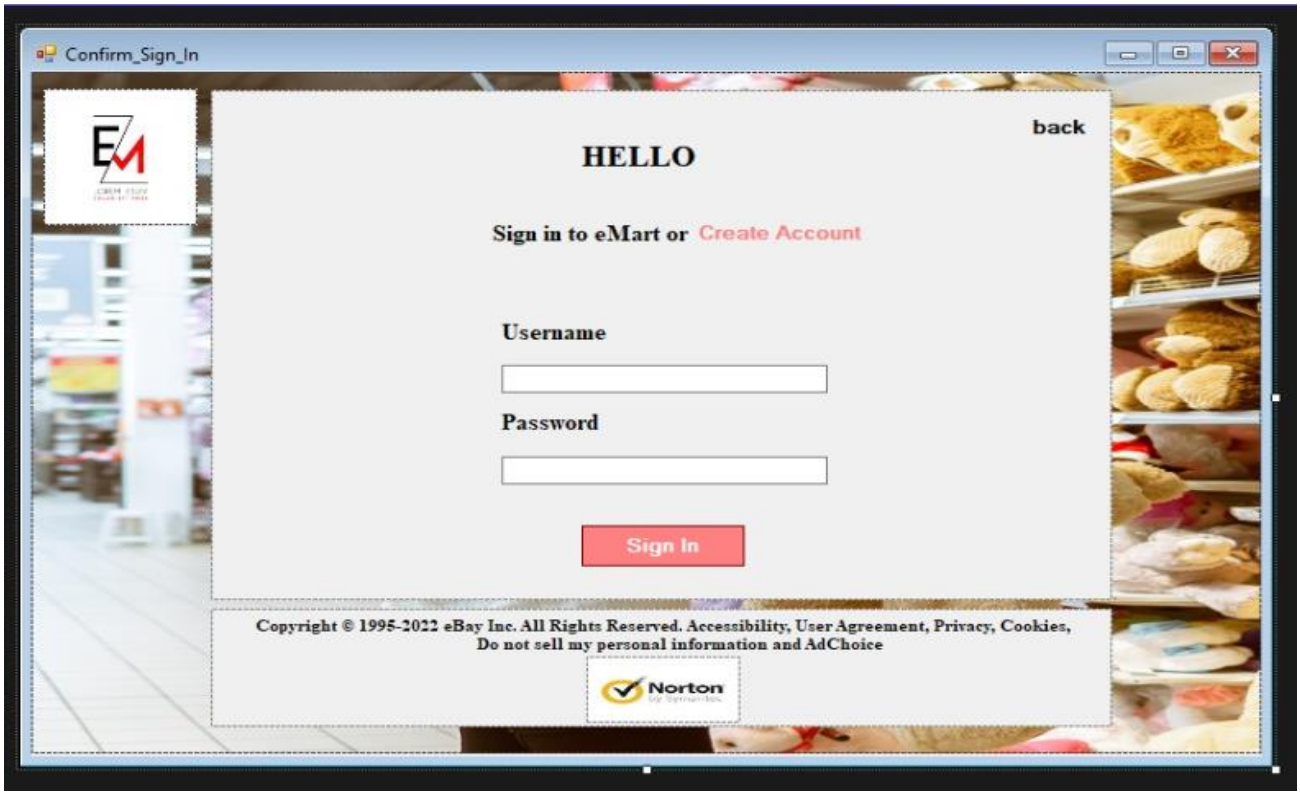


Home

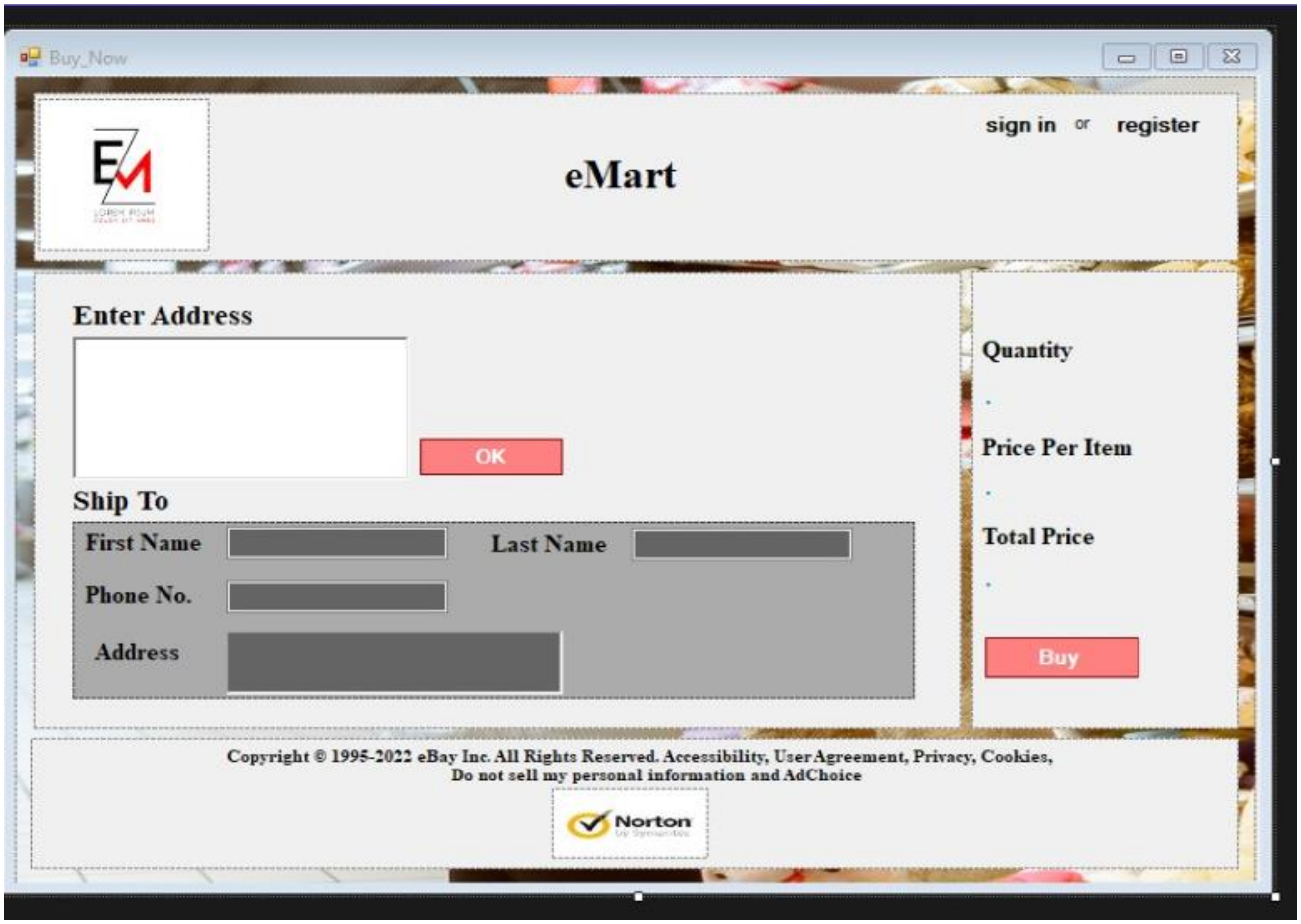


Daily Deals

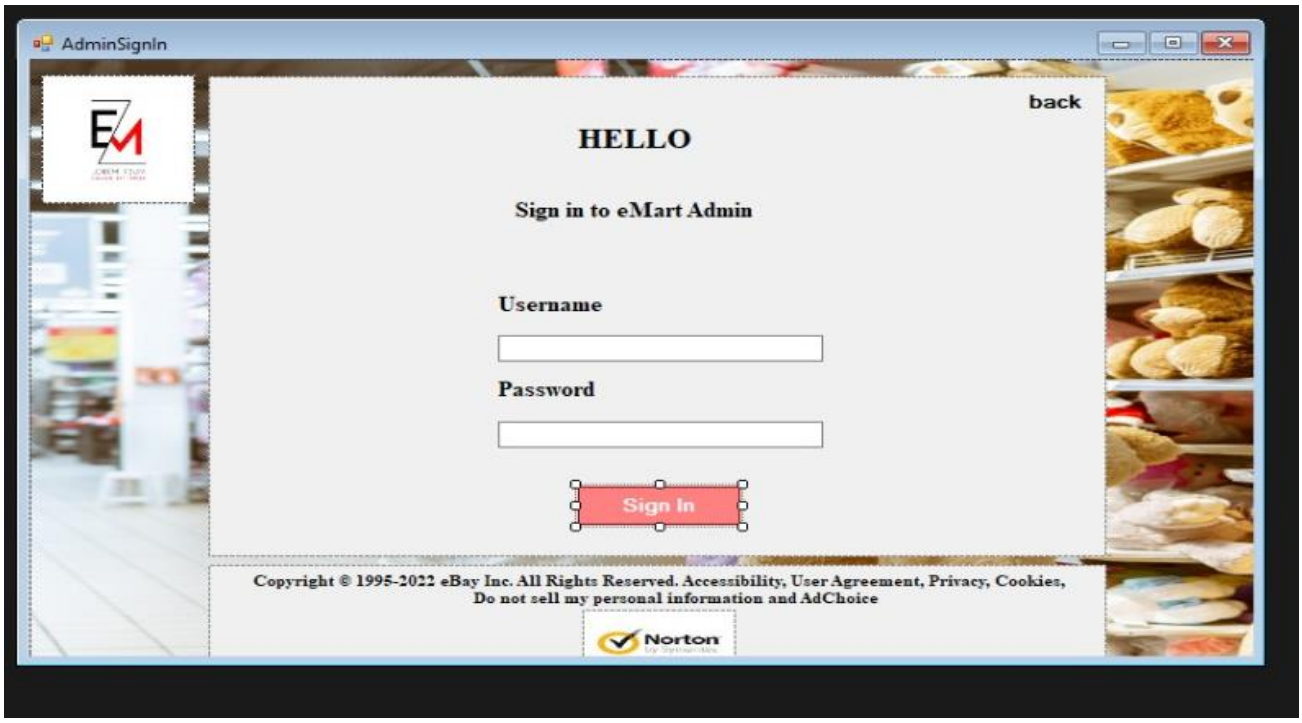
Confirm Sign in



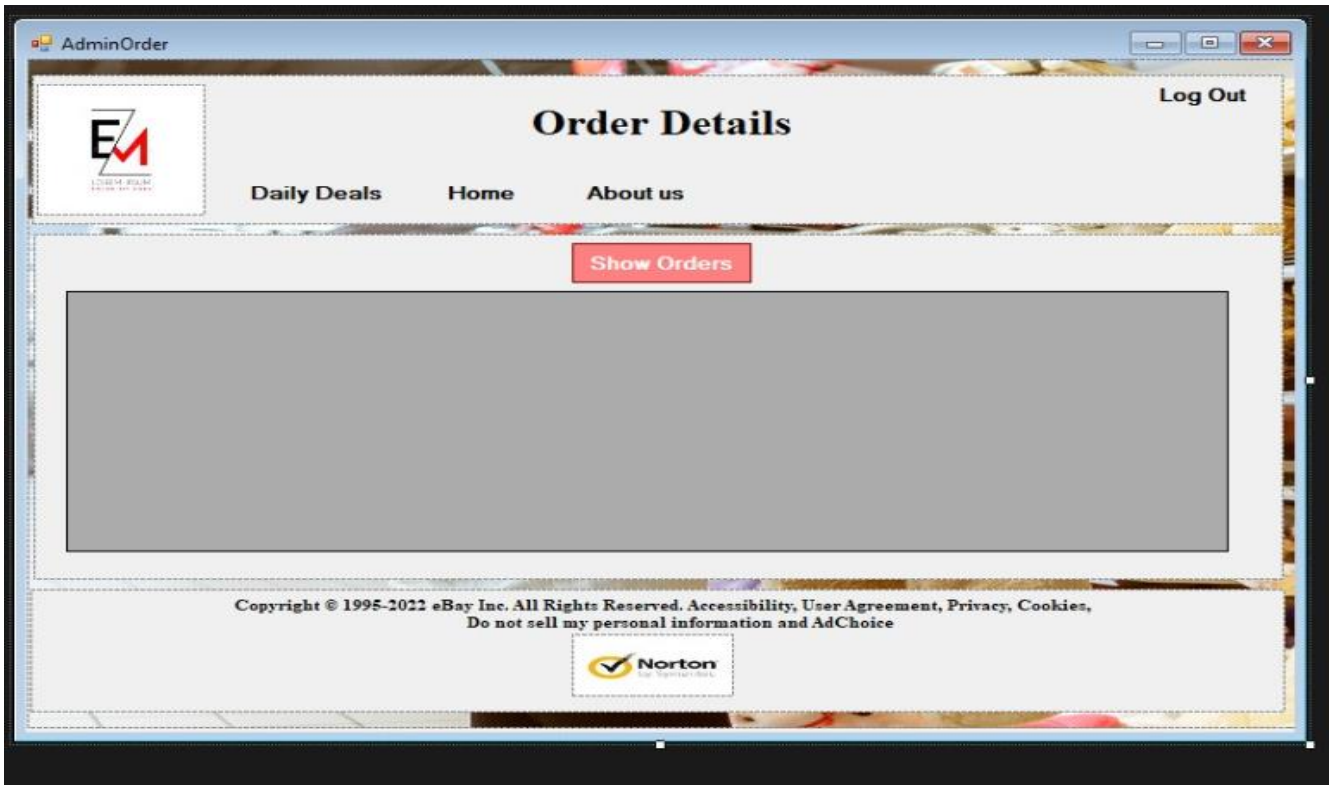
Buy



Admin Sign In



Show Orders


AdminOrder
Log Out
Order Details
Daily Deals
Home
About us
Show Orders
Copyright © 1995-2022 eBay Inc. All Rights Reserved. Accessibility, User Agreement, Privacy, Cookies,
Do not sell my personal information and AdChoice
Norton

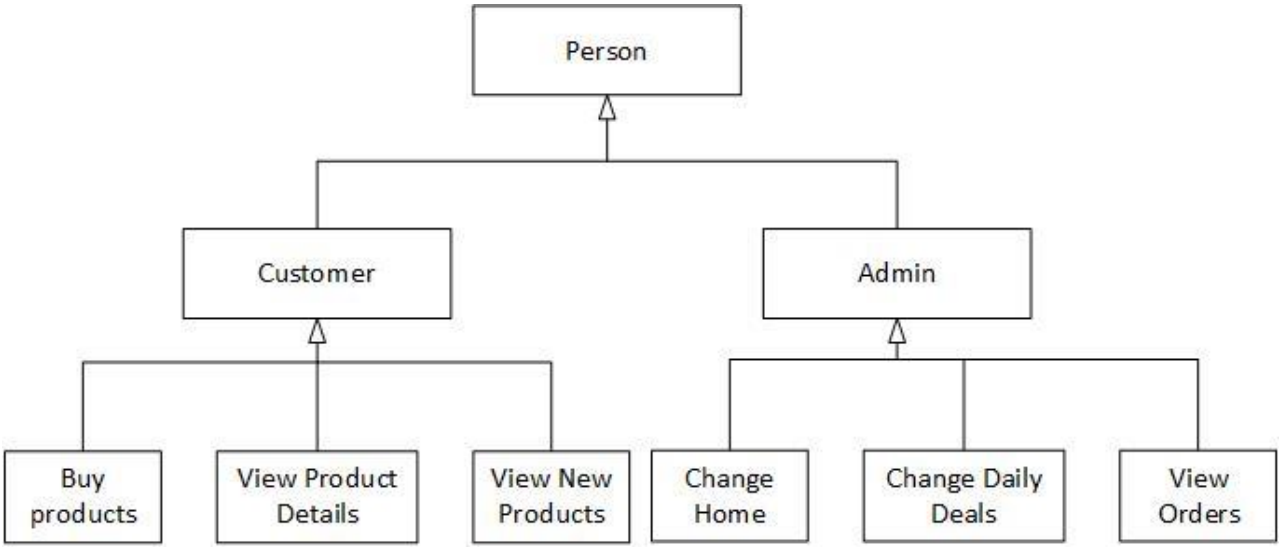
Chapter 7: Design Patterns

Many Design Patterns are used in this system. Following are the design patterns used in this system;

- **Player Role Pattern**
- **Singleton Pattern**
- **Observer Pattern**

Player Role Pattern

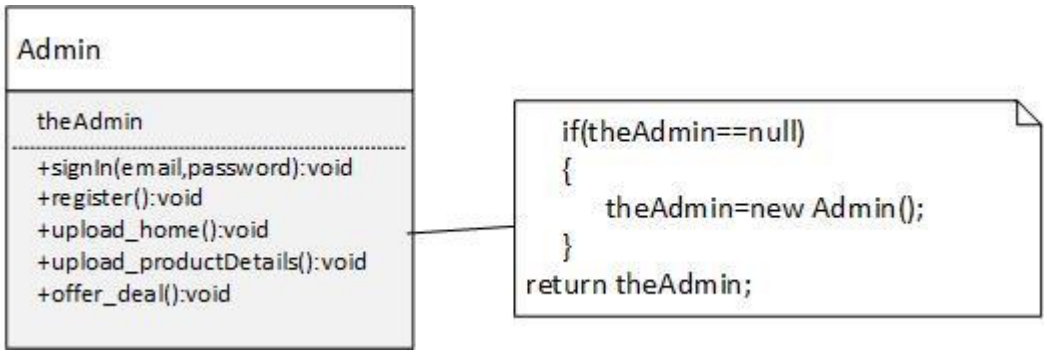
Customers and Admins are playing multiple roles so player role pattern can be successfully applied on this system.
Following diagram clearly shows the players and their roles;



Singleton Pattern

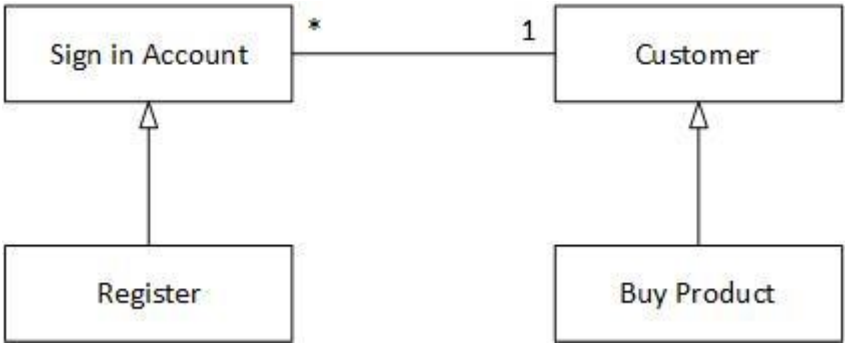
Singleton pattern tells us that only one instance should exist.

So, in our system, only one Admin class instance will create because one system will be managed by only one Admin.
Following is the diagram of the singleton pattern according to our system;



Observer Pattern

According to Observer pattern, if one class is used then other class must be used.
In our system, if we have to buy the product then we must login to the account that shows that buy class is used if sign in class is used.
Following is the diagram of Observer pattern according to our system;



Chapter 8: Conclusion

At the end, we want to thanks to our teacher **“Mr. Zeeshan Ramzan”** who allowed us consent to work on such a project that enhanced our knowledge. This project compels us to discover more about c# because it has very demand in future. Inshaa Allah we will research in this field by using our present knowledge and will come to know about more things.

********** **JAZAK ALLAH!!!** **********