

Application Development

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1. Introduction

The coursework is an individual course work for Clothing Store management system of “Application Development”. The Language used for Coding is C#. The Coding part and Designing part are done in Visual Studio platform. In this System the user of this system can add the selected item, its quantity and also can rate the condition of the product. Also the user can give the feedback in the various topic provided by the store. The user can view and save the data in csv format. The user also can select the date of purchase if needed.

Current Scenario

The trend of this type of system is not common in Nepal. Only the few companies use this type of software, however these are not well popular in between the public. This system will definitely help to digitalise the future market of clothing as now a days people are aware that the record keeping is much more easier in this type of software rather than manual system or computer entry. This type of software covers overall requirements from record keeping to rating of their products.

Proposed System

This system is a fully digital system developed specifically for the management of clothing store user feedback and rating. Its aim is to produce an overall feedback based on the service and to maintain the quality service of the company. The user admin can provide feedback and rate services by entering various requirements and customers can enter the feedback.

2. System Overview

2.1 Instruction Manual

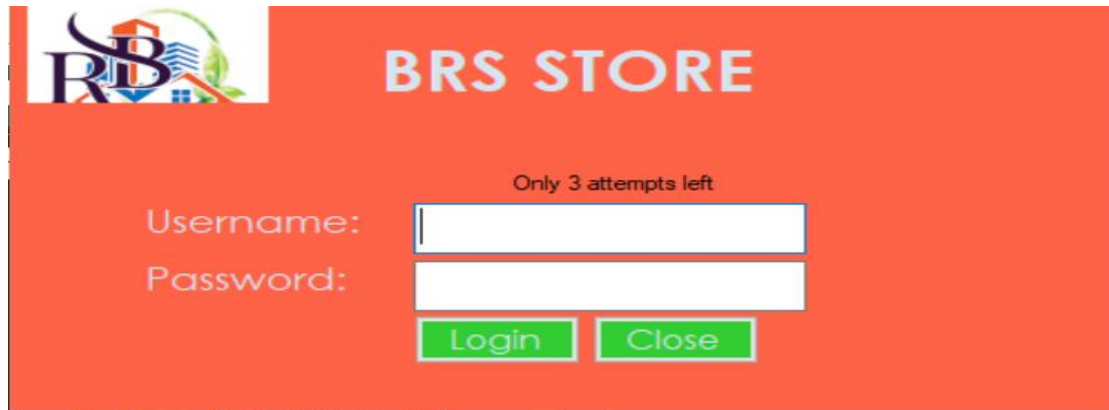
Opening a system

The system is made plain and simple in visual style. Tomato background colour is given as the system them colour. When the user first opens the software, the screen will looks exactly same as shown in the figure below.



Figure 1: Boot Start

After the boot start is finished, the login page will be shown in. where the user name is “BRS” and Password is “STORE”. The user enters the password for only 5 times. After that the user needs to restart the application. But if the user enters the correct user name and password the user will be directed to the Home page named as main menu.

*Figure 2: Incorrect password test**Figure 3: Login success message*

BRS STORE

Sunday, January 24, 2021

Item Name	Price	Quantity	Items Order	Qty	Amount	Rate
Aline dress	Rs. 125					
Tent dress	Rs. 140					
Yoke dress	Rs. 150					
Empire line dress	Rs. 120					
Shift dress	Rs. 140					
Dirndl dress	Rs. 200					
Sheath dress	Rs. 100					
Low or drop waist dress	Rs. 100					
Tunic dress	Rs. 350					
Shirt waist dress	Rs. 450					
Wrap around dress	Rs. 200					
Baby doll dress	Rs. 300					
Body con dress	Rs. 350					
Cocktail dress	Rs. 425					
Debutante dress	Rs. 125					
Skater dress	Rs. 125					
Camisole dress	Rs. 425					

Rate: Excellent, Good, Average, Dissatisfied

ADD

Total Amount: Rs. [] Reset

Save and Generate View Records View and Arrange Report

Feedback: As per Cloth quality, Staff friendliness

Feed Back Basis Feed Back

Save and Generate rating

Figure 4: Main Menu Page

In this page, there are the list of dresses categorized under the Item name. and their price is placed aside of it under the price label. There is also the Domain up down button with the help of which the user can increase or decrease the number of the item. There is also list box just below that domain up down button. Where user can select the condition of the cloth. User needs to press the ADD button to place the items in the list boxes placed just right to this button.

BRS STORE

Sunday, January 24, 2021

Item Name	Price	Quantity	Items Order	Qty	Amount	Rate
Aline dress	Rs. 125	2	Aline dress	1	125	Good
Tent dress	Rs. 140					
Yoke dress	Rs. 150					
Empire line dress	Rs. 120					
Shift dress	Rs. 140					
Dirndl dress	Rs. 200					
Sheath dress	Rs. 100					
Low or drop waist dress	Rs. 100					
Tunic dress	Rs. 350					
Shirt waist dress	Rs. 450					
Wrap around dress	Rs. 200					
Baby doll dress	Rs. 300					
Body con dress	Rs. 350					
Cocktail dress	Rs. 425					
Debutante dress	Rs. 125					
Skater dress	Rs. 125					
Camisole dress	Rs. 425					

Rate: Excellent, Good, Average, Dissatisfied

ADD

Total Amount: Rs. [] Reset

Save and Generate View Records View and Arrange Report

Feedback: As per Cloth quality, Staff friendliness

Feed Back Basis Feed Back

Save and Generate rating

Figure 5: Adding items to the list boxes

After entering all the data to the list box. The user also can generate the total sum of the amount by just clicking the button named as Total Sum. Or the user can reset all the values if needed.

The screenshot shows the BRS STORE application interface. It features a list of dresses on the left, a quantity selector in the center, a feedback section, and a total amount calculation area.

Item Name	Price	Quantity	Items Order	Qty	Amount	Rate
Aline dress	Rs. 125	2	Aline dress	1	125	Good
Tent dress	Rs. 140		Shift dress	2	280	Good
Yoke dress	Rs. 150					
Empire line dress	Rs. 120					
Shift dress	Rs. 140					
Dirndl dress	Rs. 200					
Sheath dress	Rs. 100					
Low or drop waist dress	Rs. 100					
Tunic dress	Rs. 350					
Shirt waist dress	Rs. 450					
Wrap around dress	Rs. 200					
Baby doll dress	Rs. 300					
Body con dress	Rs. 350					
Cocktail dress	Rs. 425					
Debutante dress	Rs. 125					
Skater dress	Rs. 125					
Camisole dress	Rs. 425					

The interface also includes a feedback section with a rating scale (Excellent, Good, Average, Dissatisfied) and a total amount calculation area showing a total of Rs. 405. Buttons for 'Save and Generate', 'View Records', and 'View and Arrange Report' are present.

Figure 6: Generating Total Sum

The user can then save the file and generate the CSV file by clicking the Save and Generate Button. Also, the user can view graph of the dresses by just clicking the View record button. The user also can view and arrange record by just clicking the arrange button on the right hand side of the window.

The screenshot shows the BRS STORE application window. A popup message box is displayed in the center-right, stating "Your records is saved successfully." with an "OK" button. The background interface includes a list of dress items with their prices, a quantity selector, a feedback dropdown, and buttons for "ADD", "Total Amount", "Save and Generate", "View Records", and "View and Arrange Report".

Item Name	Price
Aline dress	Rs. 125
Tent dress	Rs. 140
Yoke dress	Rs. 150
Empire line dress	Rs. 120
Shift dress	Rs. 140
Dirdal dress	Rs. 200
Sheath dress	Rs. 100
Low or drop waist dress	Rs. 100
Tunic dress	Rs. 350
Shirt waist dress	Rs. 450
Wrap around dress	Rs. 200
Baby doll dress	Rs. 300
Body con dress	Rs. 350
Cocktail dress	Rs. 425
Debutante dress	Rs. 125
Skater dress	Rs. 125
Camisole dress	Rs. 425

Figure 7: Pup up message for Saved notification



Figure 8: Graph View

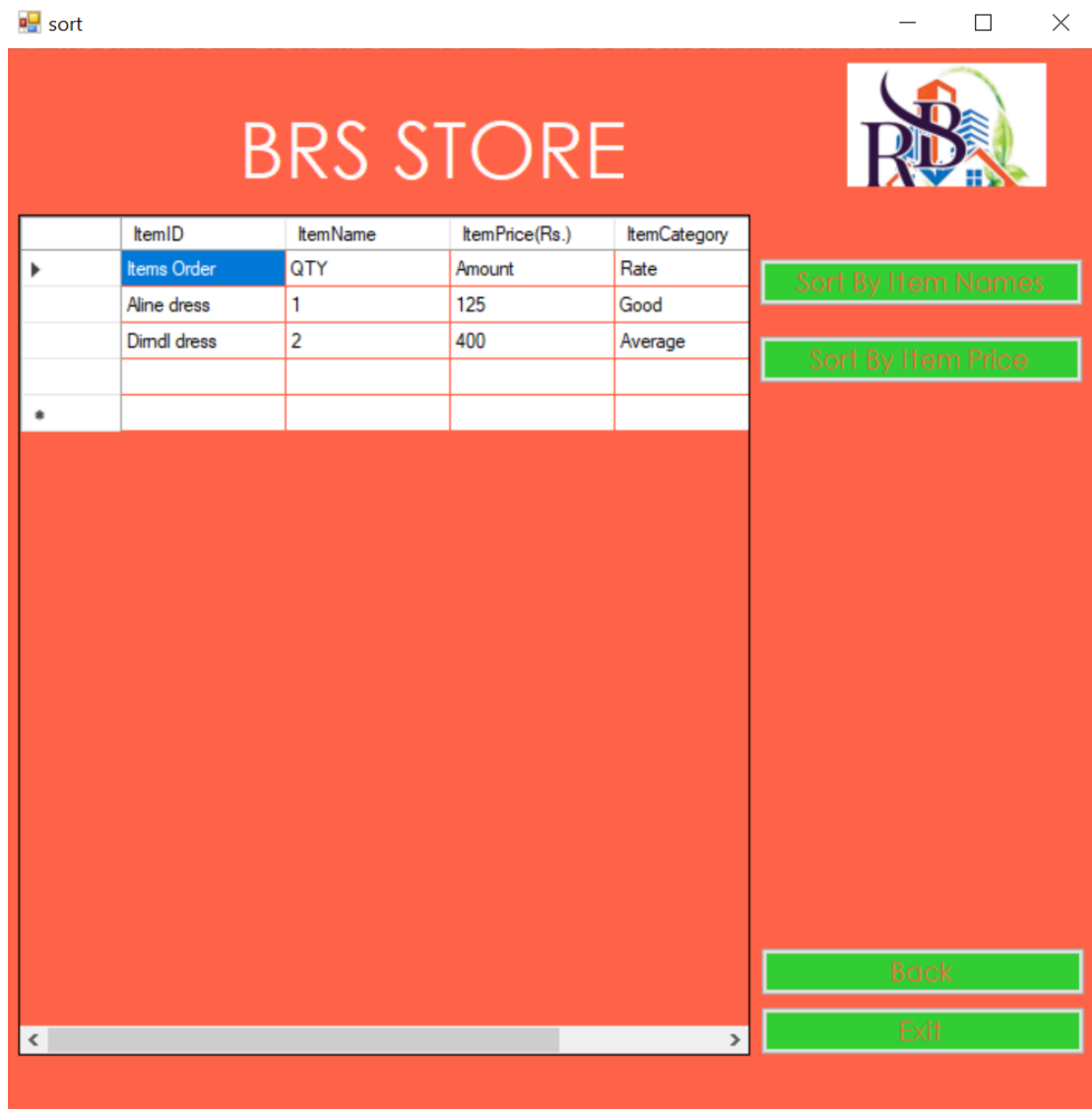


Figure 9: View and Arrange report Button and shorting

The user can get to the main menu any time by just clicking the back button or the user can quit the program by just clicking the Exit button where the user will be asked to confirm the exit command and can exit through the program.

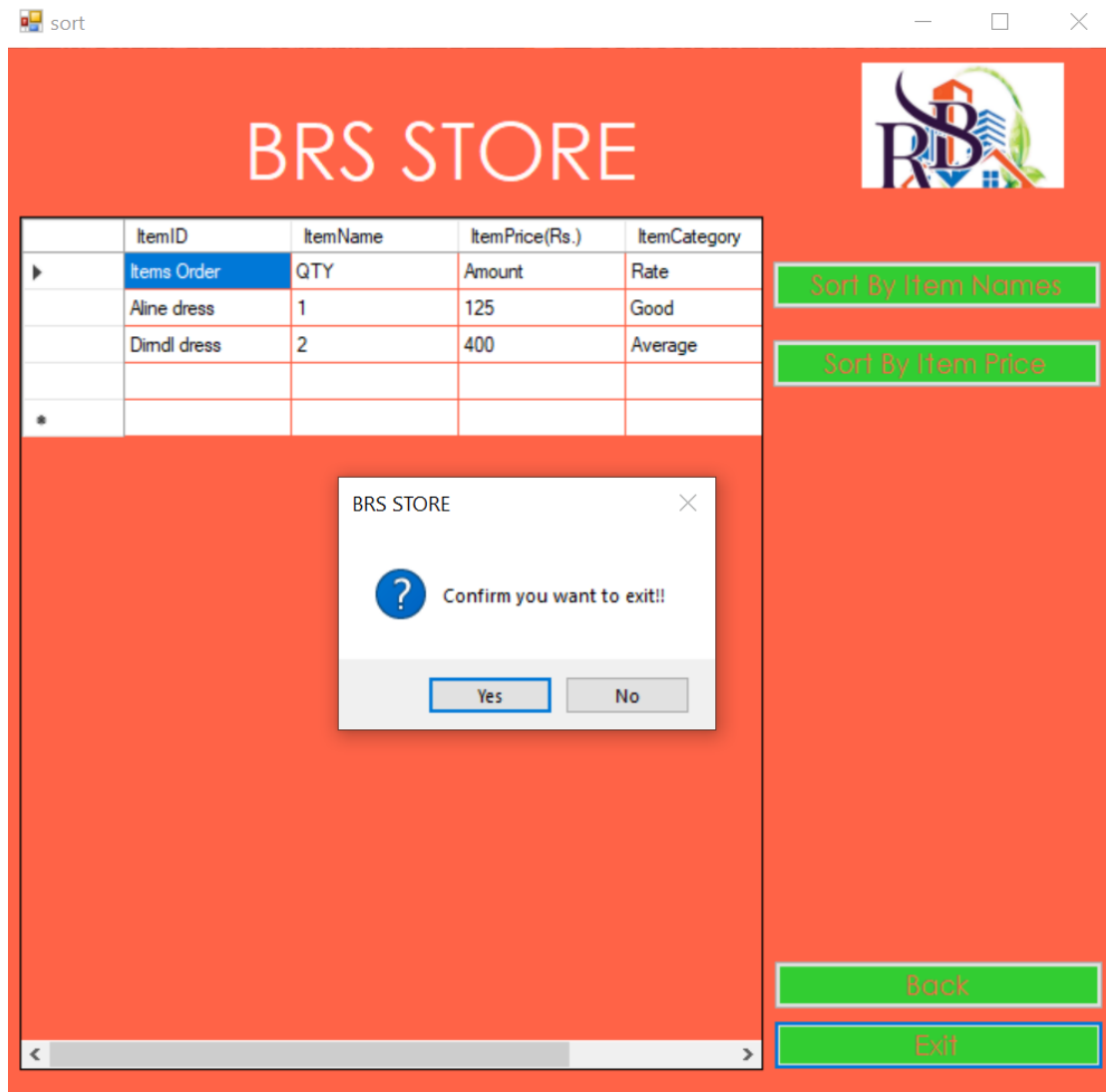


Figure 10: Button exit work

There is also the feedback system inbuilt in this application. The user also can give the feedback depending upon the various categories. Like as per cloth quality, staff friendliness etc. The user need to select the items in the box and click the add button.

BRS STORE

Sunday, January 24, 2021

Item Name	Price	Quantity	Items Order	Qty	Amount	Rate
Aline dress	Rs. 125	2	Aline dress	1	125	Good
Tent dress	Rs. 140		Sheath dress	2	200	Good
Yoke dress	Rs. 150					
Empire line dress	Rs. 120					
Shift dress	Rs. 140					
Dirndl dress	Rs. 200					
Sheath dress	Rs. 100					
Low or drop waist dress	Rs. 100					
Tunic dress	Rs. 350					
Shirt waist dress	Rs. 450					
Wrap around dress	Rs. 200					
Baby doll dress	Rs. 300					
Body con dress	Rs. 350					
Cocktail dress	Rs. 425					
Debutante dress	Rs. 125					
Skater dress	Rs. 125					
Camisole dress	Rs. 425					

Feedback

Store Ambiance: Excellent, Good, Average, Dissatisfied

Value for money: Excellent, Good, Average, Dissatisfied

Feed Back Basis: As per Cloth quality, Store Ambiance

Feed Back: Excellent, Good

Buttons: ADD, Total Amount: Rs. [input], Reset, Save and Generate, View Records, View and Arrange Report, Save and Generate rating

Figure 11: Feedback data insert

The user can save and generate the rating csv file by clicking the respected button. As shown in the figure below.

BRS STORE

Sunday, January 24, 2021

Item Name	Price	Quantity	Items Order	Qty	Amount	Rate
Aline dress	Rs. 125	2	Aline dress	1	125	Good
Tent dress	Rs. 140		Sheath dress	2	200	Good
Yoke dress	Rs. 150					
Empire line dress	Rs. 120					
Shift dress	Rs. 140					
Dirndl dress	Rs. 200					
Sheath dress	Rs. 100					
Low or drop waist dress	Rs. 100					
Tunic dress	Rs. 350					
Shirt waist dress	Rs. 450					
Wrap around dress	Rs. 200					
Baby doll dress	Rs. 300					
Body con dress	Rs. 350					
Cocktail dress	Rs. 425					
Debutante dress	Rs. 125					
Skater dress	Rs. 125					
Camisole dress	Rs. 425					

Feedback

Store Ambiance: Excellent, Good, Average, Dissatisfied

Value for money: Excellent, Good, Average, Dissatisfied

Feed Back Basis: As per Cloth quality, Store Ambiance

Feed Back: Excellent, Good

Buttons: ADD, Total Amount: Rs. [input], Reset, Save and Generate, View Records, View and Arrange Report, Save and Generate rating

Popup: Your records is saved successfully. OK

Figure 12: pup up for feedback record

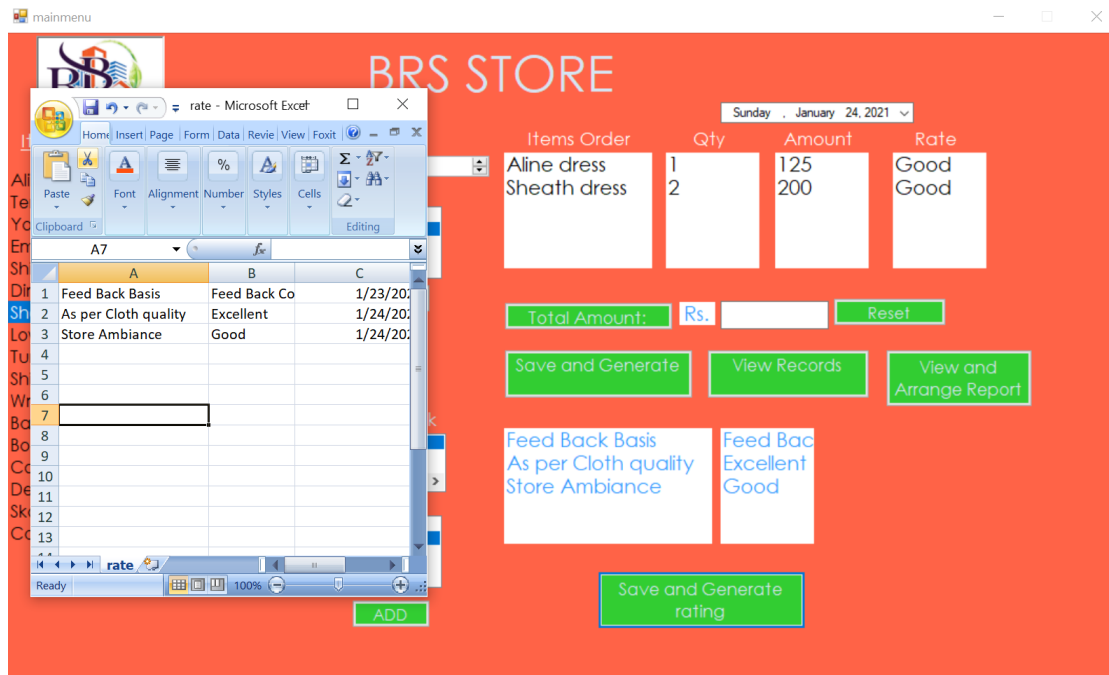


Figure 13: Feedback data entry in csv file opened in excel

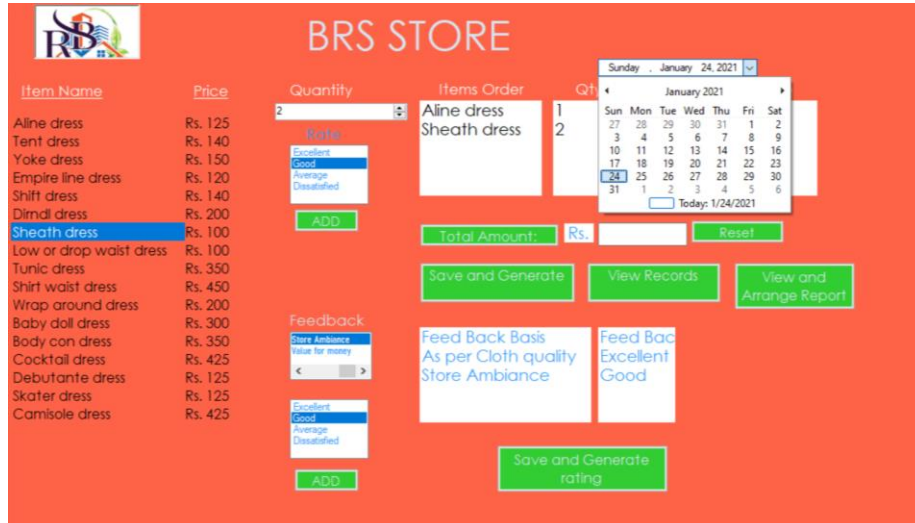


Figure 14: Date change

Beside the exit button the close button on the top right of this window will also terminate the application and close it.

2.2. Architecture

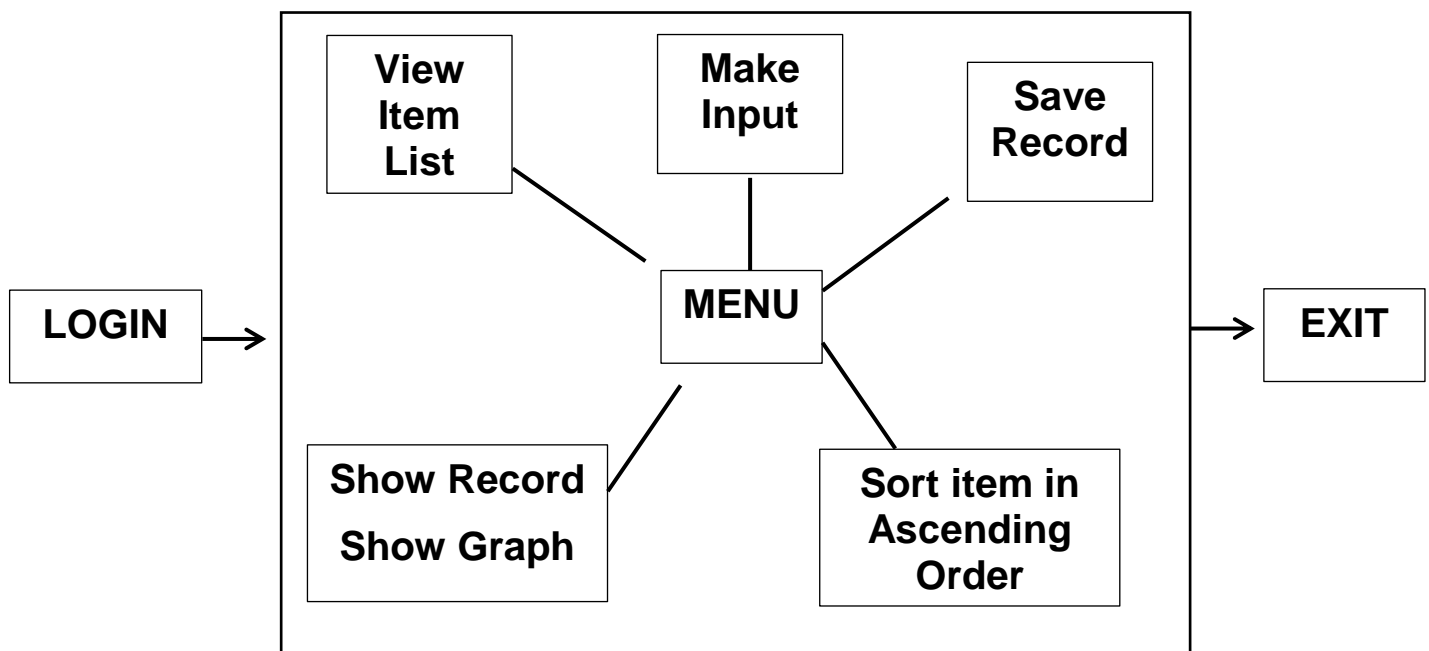


Figure 15: Architecture for Clothing store

This is the clothing store architecture of BRS Store. The user is allowed to get access if the user name and password is entered correctly in the login stage. Then the main menu is accessed from where various activities can be done in the figure tips. After using the application one can get out of the system by just clicking the exit button.

2.3 Functionality

This application is .exe which means a windows pc is needed to run this software. PC with minimum requirement is also able to handle this software.

2.4 Class Diagram

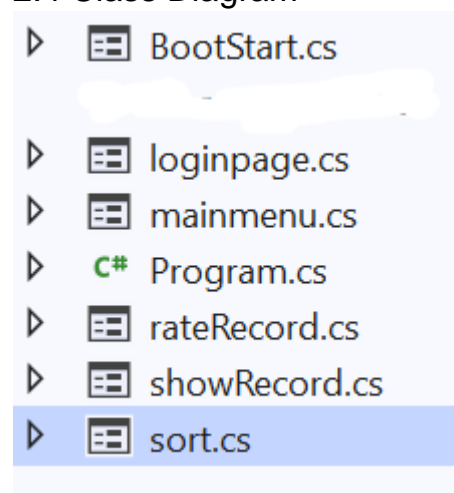


Figure 16: Classes used in this project

BootStart

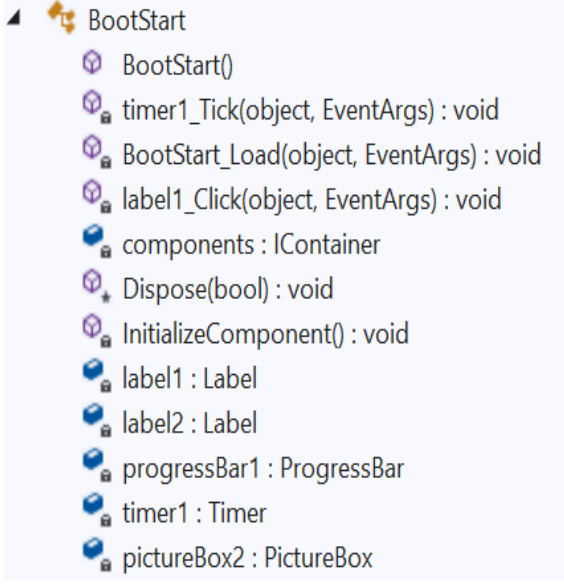
Methods	Description	 <pre> classDiagram class BootStart { BootStart() timer1_Tick(object, EventArgs) : void BootStart_Load(object, EventArgs) : void label1_Click(object, EventArgs) : void components : IContainer Dispose(bool) : void InitializeComponent() : void label1 : Label label2 : Label progressBar1 : ProgressBar timer1 : Timer pictureBox2 : PictureBox } </pre>
Timer1_Tick	Sets time for a certain period.	

Figure 5.2.2: Class Diagram of Splash Screen

Login Page

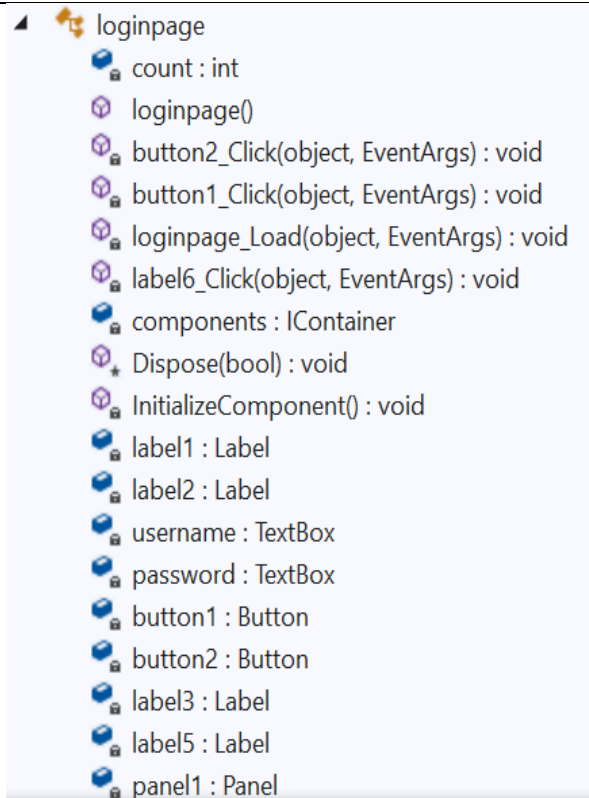
Methods	Description	 <pre> classDiagram class loginpage { count : int loginpage() button2_Click(object, EventArgs) : void button1_Click(object, EventArgs) : void loginpage_Load(object, EventArgs) : void label6_Click(object, EventArgs) : void components : IContainer Dispose(bool) : void InitializeComponent() : void label1 : Label label2 : Label username : TextBox password : TextBox button1 : Button button2 : Button label3 : Label label5 : Label panel1 : Panel } </pre>
Button1_Click	This is login button and on clicking this, main menu is displayed.	
Button2_Click	This is exit button and on clicking the system exists.	
Label6_Click	When the username and password is incorrect label is displayed with message.	

Figure 17: Class Diagram for Login

Main Menu page

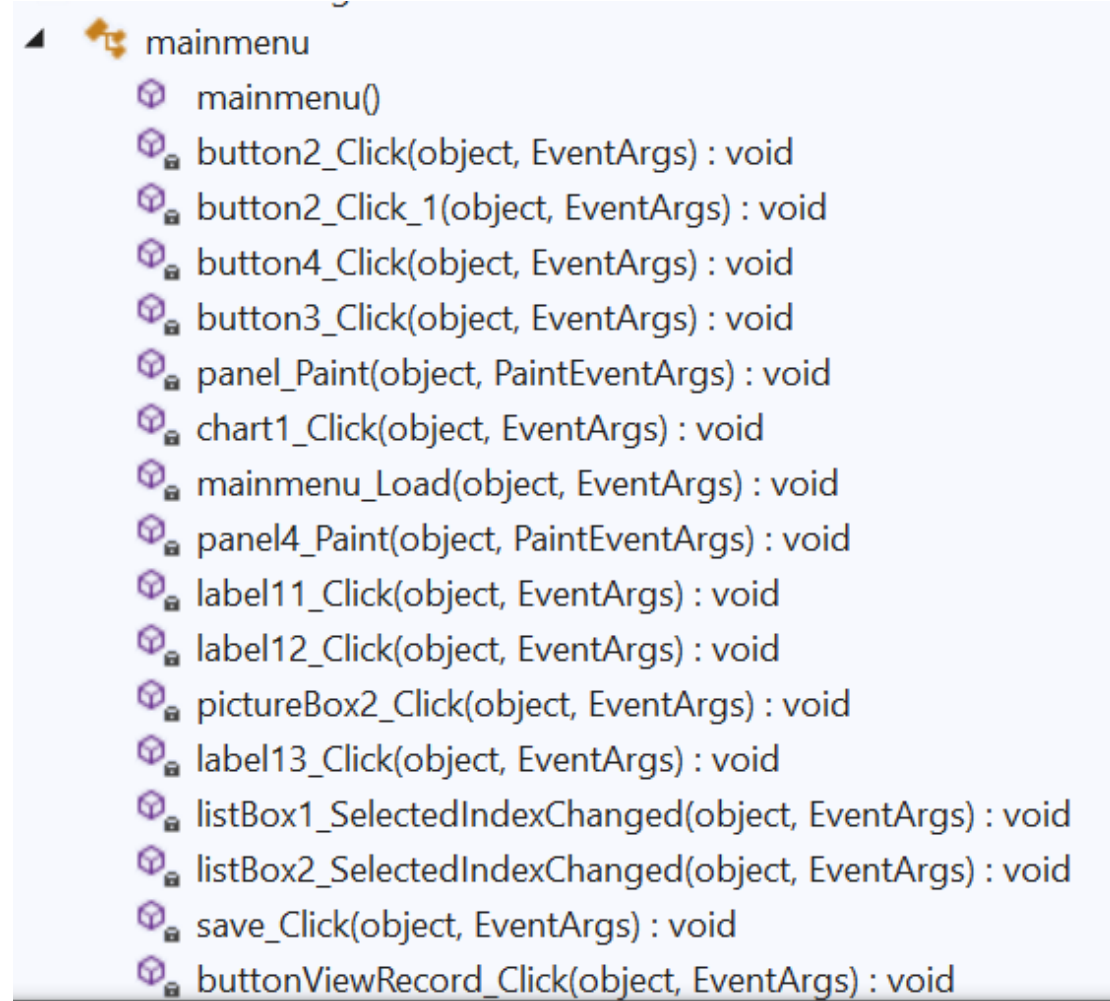
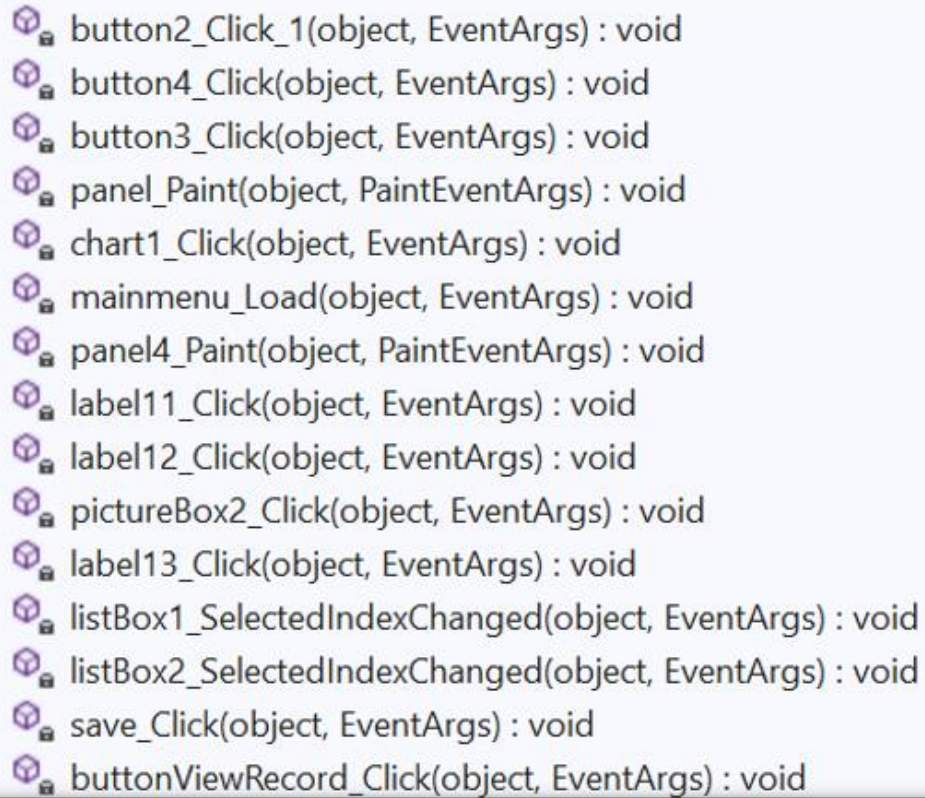


Figure 18: Main Menu Class Diagram



```
button2_Click_1(object, EventArgs) : void
button4_Click(object, EventArgs) : void
button3_Click(object, EventArgs) : void
panel_Paint(object, PaintEventArgs) : void
chart1_Click(object, EventArgs) : void
mainmenu_Load(object, EventArgs) : void
panel4_Paint(object, PaintEventArgs) : void
label11_Click(object, EventArgs) : void
label12_Click(object, EventArgs) : void
pictureBox2_Click(object, EventArgs) : void
label13_Click(object, EventArgs) : void
listBox1_SelectedIndexChanged(object, EventArgs) : void
listBox2_SelectedIndexChanged(object, EventArgs) : void
save_Click(object, EventArgs) : void
buttonViewRecord_Click(object, EventArgs) : void
```

Figure 19: Main Menu Class Diagram

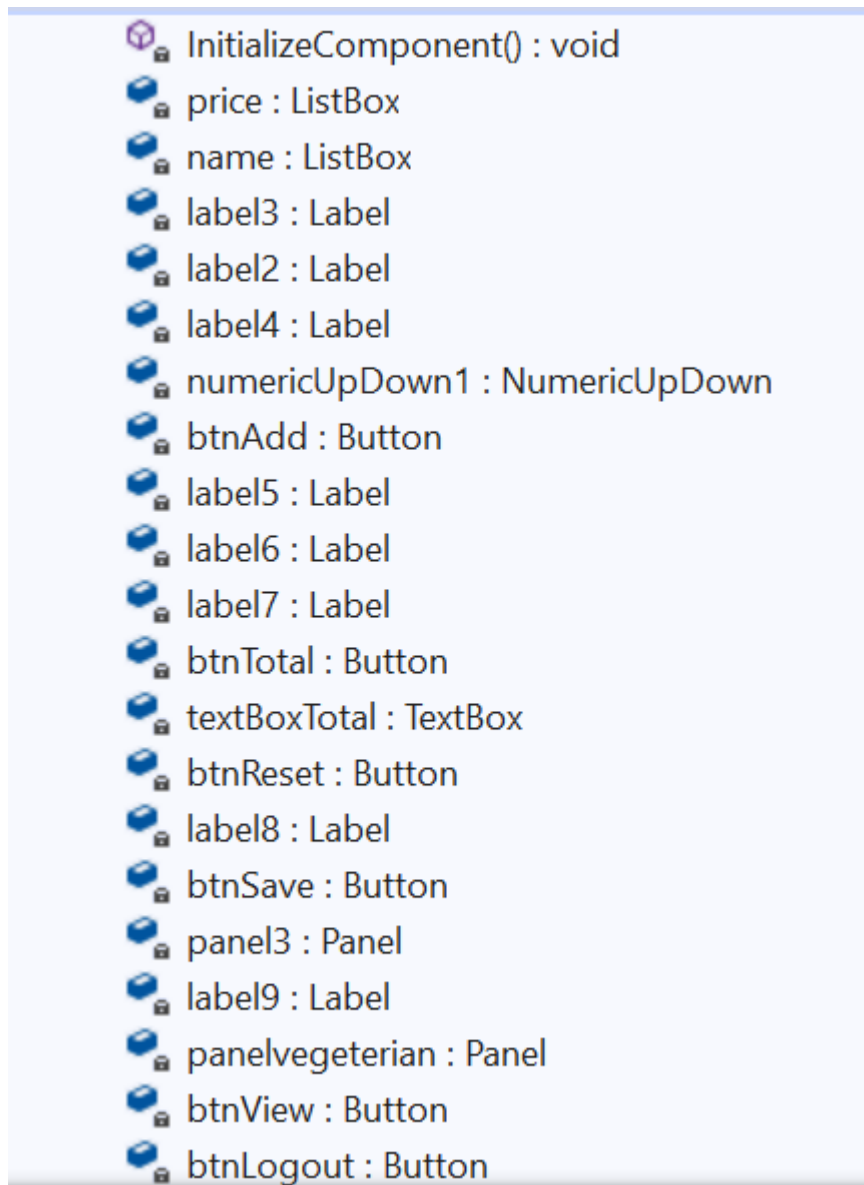


Figure 20: Main Menu Class Diagram

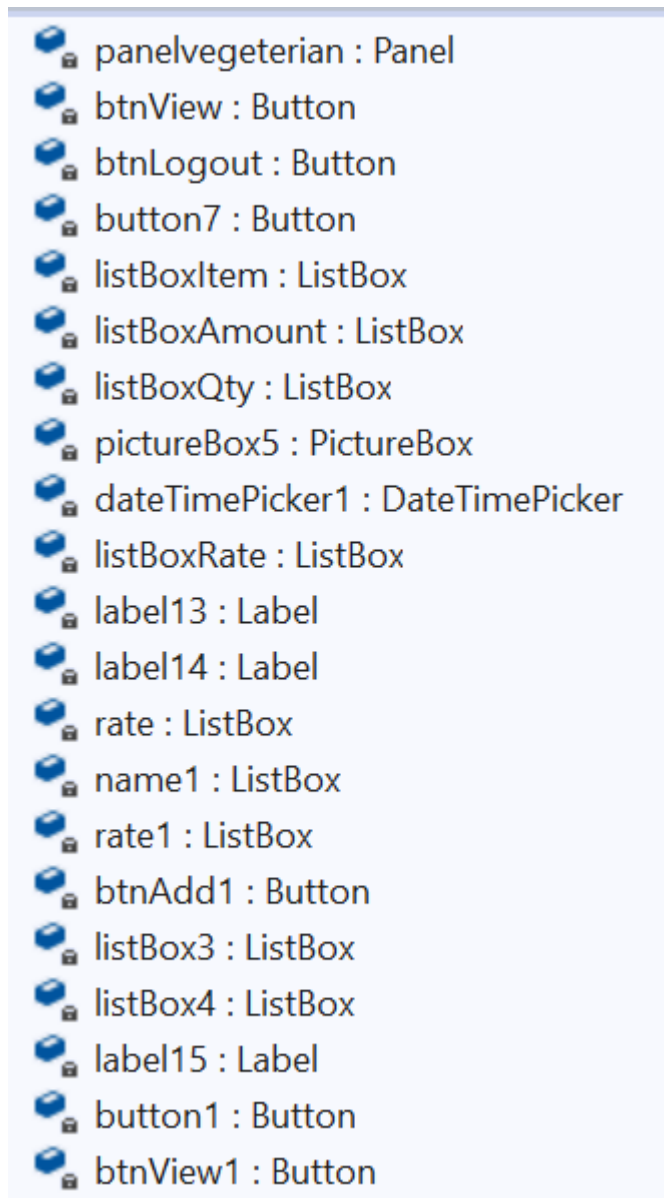


Figure 21: Main menu Class Diagram

Program page

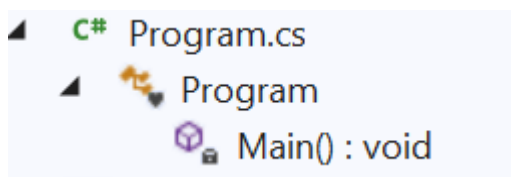


Figure 22: Class Diagram of Program

Rate Record

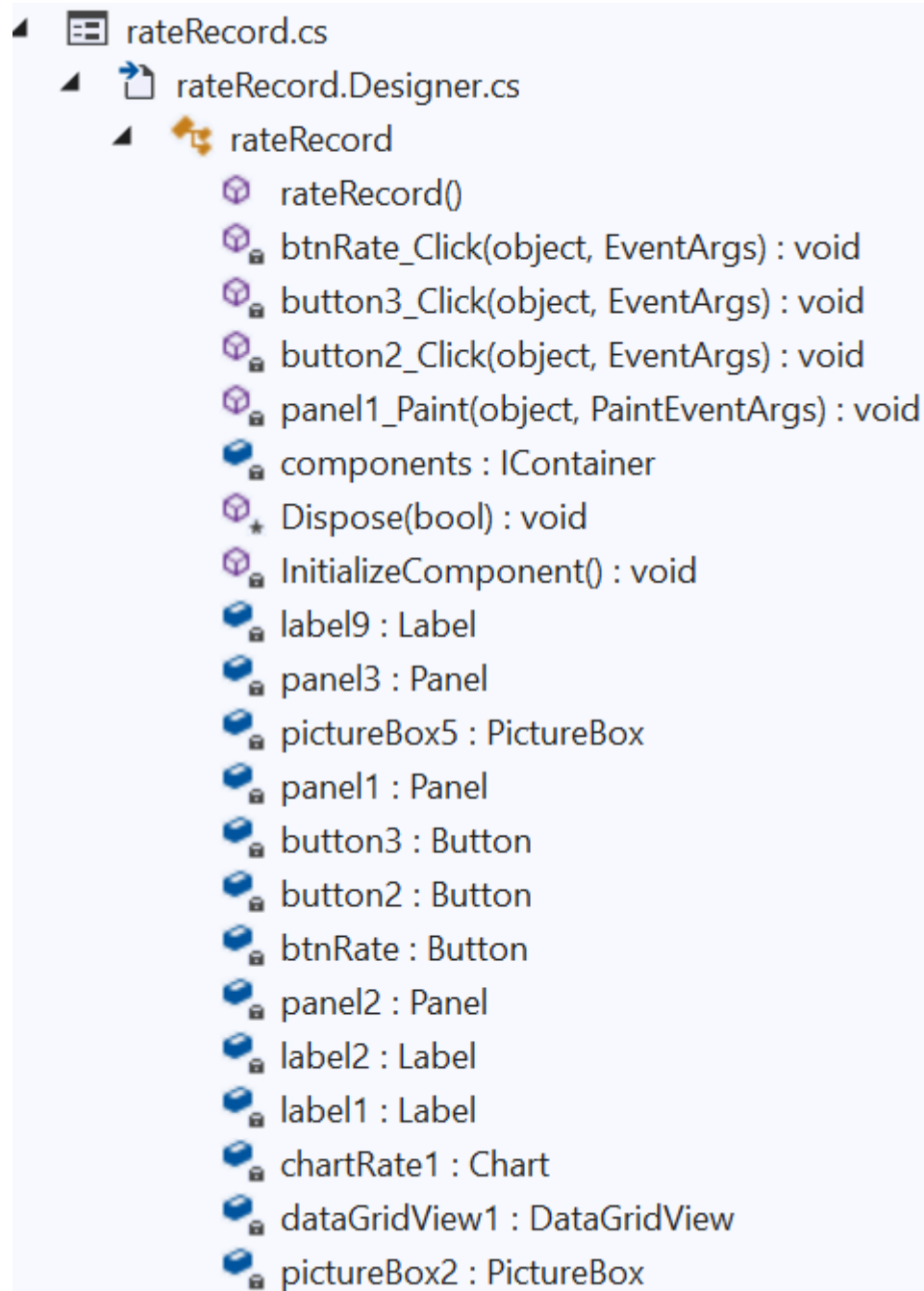


Figure 23: Rate Record Class Diagram

Show Record Page

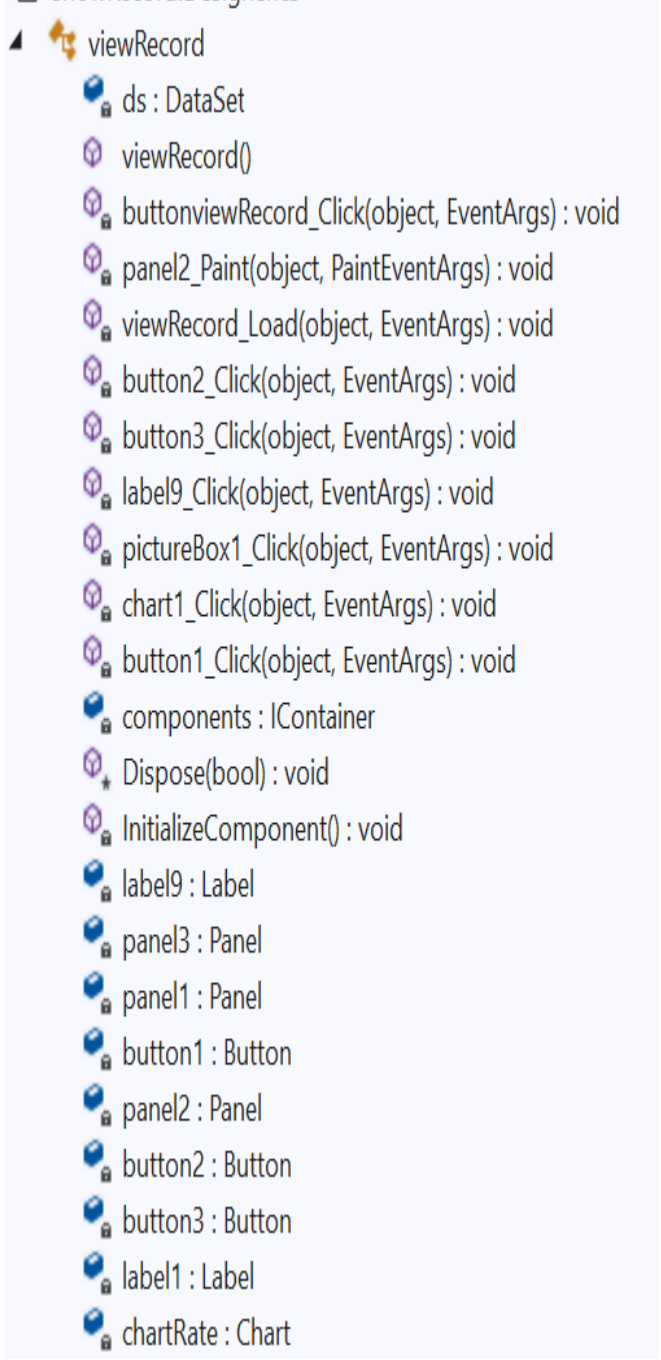
Methods	Description	
Button1_Click	Shows the graph of the data stored.	 <pre> viewRecord ds : DataSet viewRecord() buttonviewRecord_Click(object, EventArgs) : void panel2_Paint(object, PaintEventArgs) : void viewRecord_Load(object, EventArgs) : void button2_Click(object, EventArgs) : void button3_Click(object, EventArgs) : void label9_Click(object, EventArgs) : void pictureBox1_Click(object, EventArgs) : void chart1_Click(object, EventArgs) : void button1_Click(object, EventArgs) : void components : IContainer Dispose(bool) : void InitializeComponent() : void label9 : Label panel3 : Panel panel1 : Panel button1 : Button panel2 : Panel button2 : Button button3 : Button label1 : Label chartRate : Chart </pre>
Button2_Click	On clicking this button the system exits.	
Button3_Click	It gets back to main menu page.	

Figure 24: Class Diagram of Show Record

Sorting Page

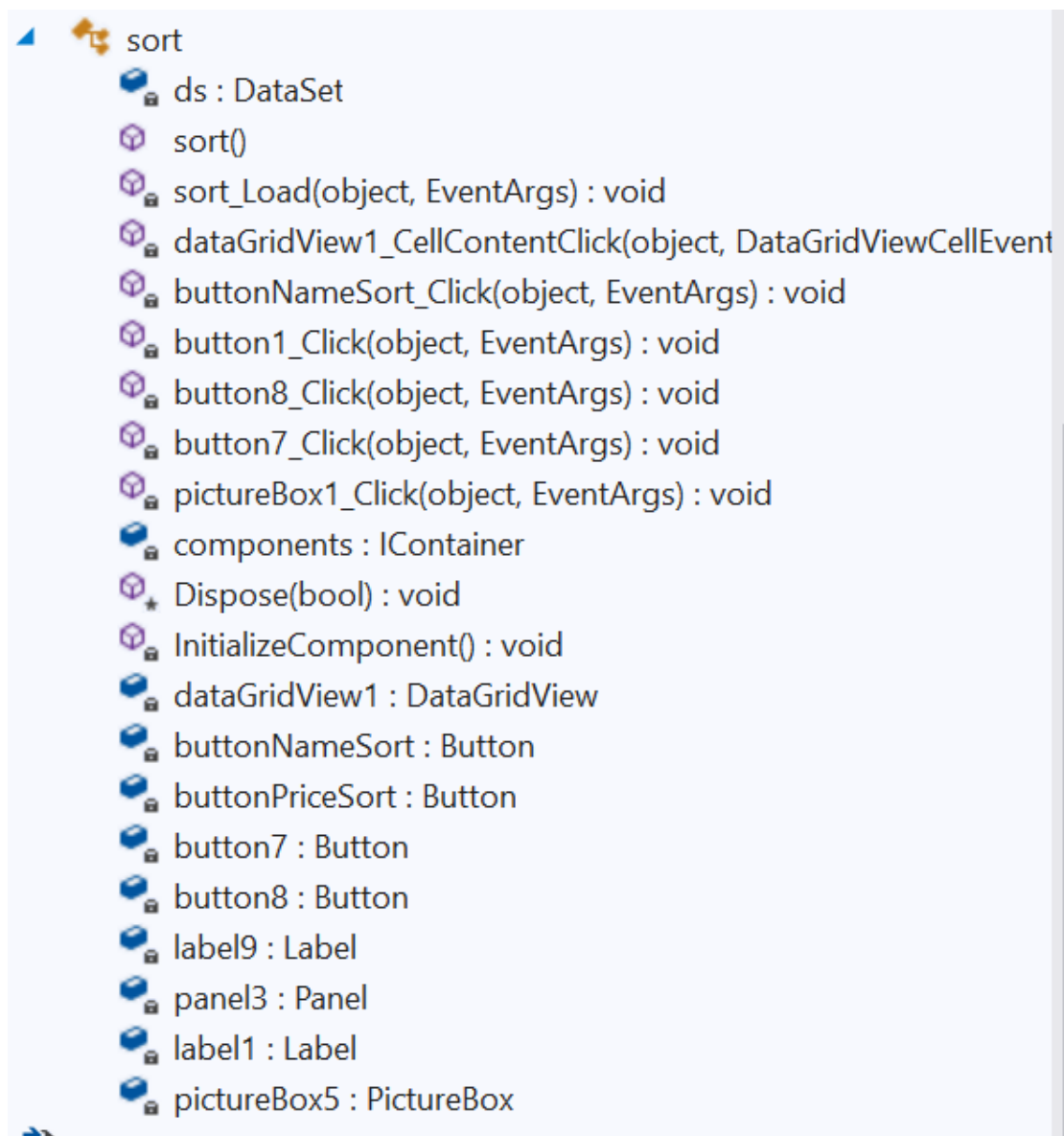


Figure 25: Class Diagram of Sort

3. Testing

After system completion, testing is carried out. It is tested to achieve or not the expected features in the system. Additional improvements would be made if the system has not been found to function properly. The following are some tests for this system:

Test 1:

Objective: To check Login Button:

Result: Login successful when entered right username and password. Login failed when entered wrong username and password.



The screenshot shows the BRS STORE login interface. The background is orange. In the top left corner is a logo with the letters 'RBS' and a stylized building. The text 'BRS STORE' is displayed in large white letters. Below this, the text 'Only 5 attempts left' is shown in a small font. The login form consists of two input fields: 'Username:' with the text 'hhhh' and 'Password:' with four black dots. Below the password field are two green buttons labeled 'Login' and 'Close'.

Figure 26: Login Test with wrong Userpass



The screenshot shows the BRS STORE login interface. The background is orange. In the top left corner is a logo with the letters 'RBS' and a stylized building. The text 'BRS STORE' is displayed in large white letters. Below this, the text 'You have only 4 attempt left.' is shown in a small font. The login form consists of two input fields: 'Username:' with the text 'BRS' and 'Password:' with five black dots. Below the password field are two green buttons labeled 'Login' and 'Close'.

Figure 27: Login Test using Right user pass

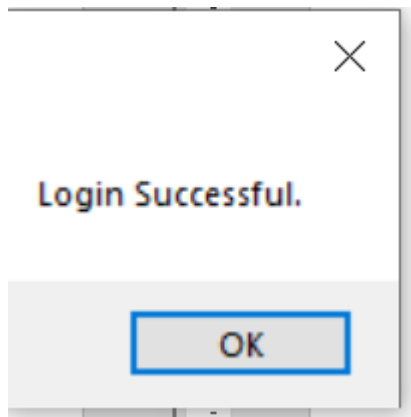


Figure 28: Login success prompt message

Test 2:

Objective: To check if ADD button is working or not.

Result: The items and the corresponding values are added as selected in the list.



Figure 29: Adding items in the list

Test 3:

Objective: To check the Arrange Button

Result: After clicking the Arrange Button next page is opened and after clicking the sort by price, items are placed in ascending order.

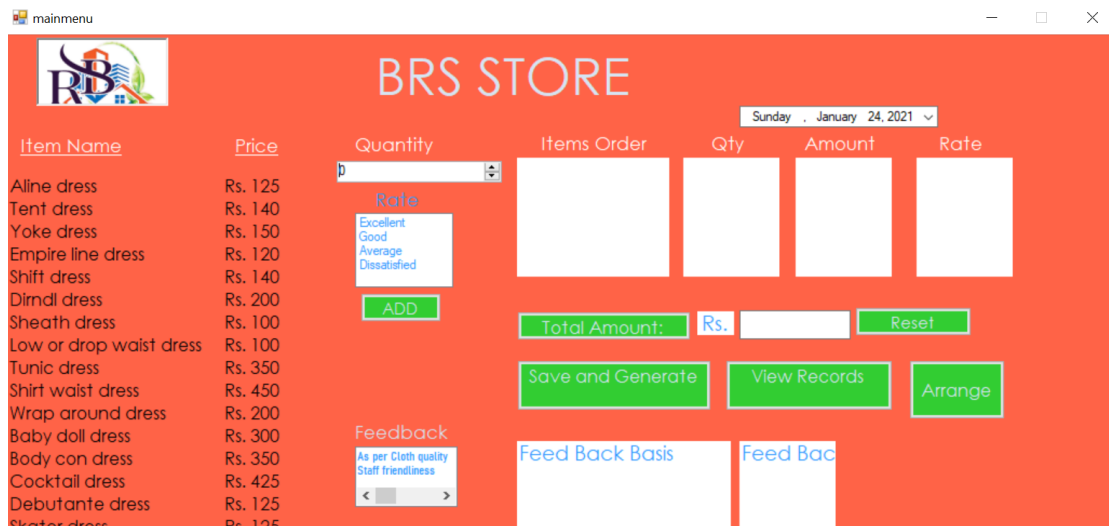


Figure 30: Check of Arrange button



Figure 31: Items are arranged in ascending order

Test 4:

Objective: Changing the Date:

Result: The date is changed as required.

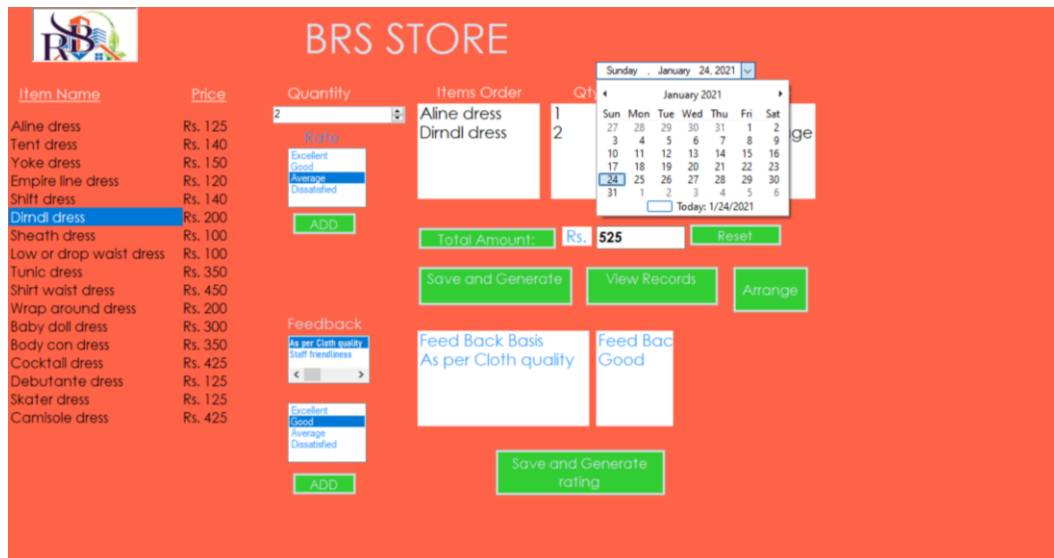


Figure 32: Changing Date

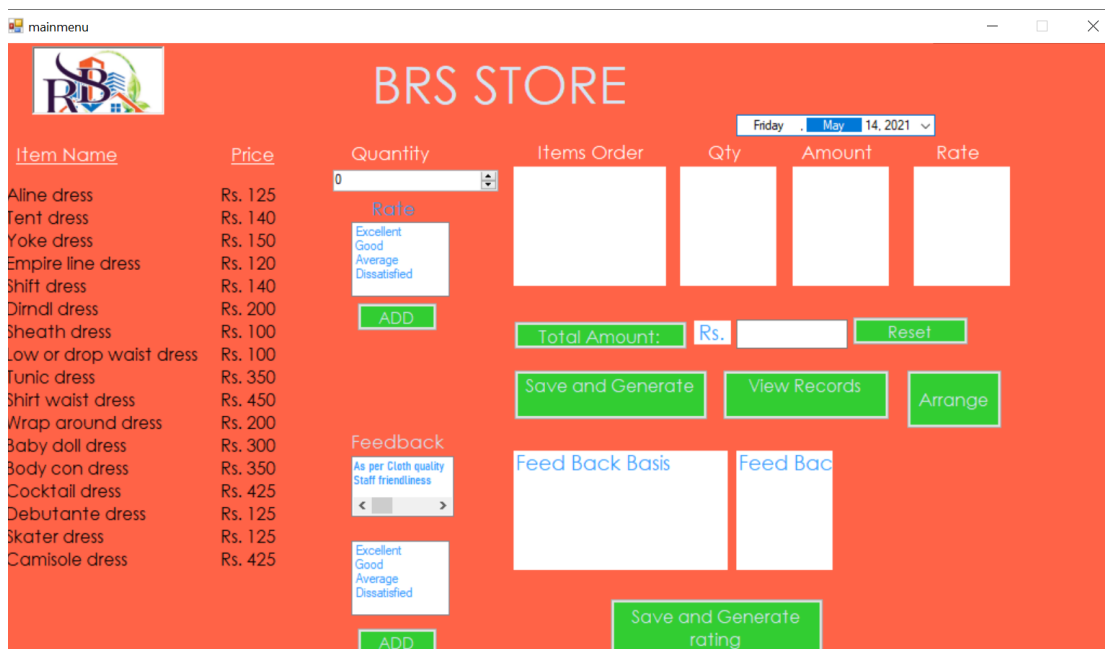


Figure 33: Changing Date

4. Reflection

This was totally a new experience in building an desktop application for me. Visual studio and c# were used to develop the GUI part and Back end part of this application. I tried my best to make the design as simple as possible so that my app can be very user friendly.

This system I now ready to carry out all the task given to us for the completion of cw1 in application development. I got new ideas about how the programmes works and how the things work in real life. Connecting the GUI part to the csv

file was a little bit hard for me. But with the help of our lecture slides and some research on the internet I was able to figure it out how actually it's done.

After analysing the task, A level of confidence is developed within me. I am now able to think about the program in different way. Overall the project was very fruitful in my case that helped me to increase the coding skill and understanding level about program and programming.

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