

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION  
Federal State Autonomous Educational Institution of Higher Education  
**“South Ural State University (national research university)”**  
School of Electrical Engineering and Computer Science  
Department of Computer Science

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“ \_\_\_\_ ” \_\_\_\_\_ 2019

**DEVELOPMENT OF ONLINE FASHION  
SHOPPING WEBSITE**

GRADUATE QUALIFICATION WORK  
SUSU–02.04.02.2019.308-638.GQW

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“ \_\_\_\_ ” \_\_\_\_\_ 2019

Chelyabinsk–2019

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“ \_\_\_\_ ” \_\_\_\_\_ 2019

**TASK**

**of the master graduate qualification work**

for the student of the group CE-229

Abbas Noor Razzak Abbas

in master direction 02.04.02

“Fundamental Informatics and Information Technologies”

(master program “Database Technologies”)

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2. **The deadline for the completion of the work:** 05.06.2019.

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3.2. Official site of MySQL Server. [Electronic Resource] URL:

<http://dev.mysql.com/doc/refman/4.1/en/what-is-mysql.html> (the date of access: 25.10.2018).

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4.1. To study the problem statement and make the Comparative analysis between ASP.NET and PHP.

4.2. To develop the structure of the required database for the information website.

4.3. To design the web-application.

4.4. To implement the website.

4.5. To test the system.

**5. Issuance date of the task: 08.02.2019.**

**Supervisor**

Cand. Sci., Assoc. Prof.

S.A. Ivanov

**The task is taken to perform**

N.R.A. Abbas

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## **INTRODUCTION**

### **Topicality**

E-commerce refers to the process of buying and selling goods and services online. And it's important because it allows retailers to both better serve existing customers (by making shopping easier for them) and find totally new audiences.

Like any digital technology, e-commerce has evolved over the years and continues to advance rapidly. Electronic commerce was first introduced in the 1960s with the development of electronic data interchange (EDI), which allowed mail and fax to be delivered electronically. E-commerce grew as the internet became more accessible and expanded. Starting in the 1990s, e-commerce began to target a consumer market and retailers like Amazon and eBay started popping up. Now, almost any business owner can create an online store in minutes or sell through sites like Amazon, Etsy, or even Facebook [15].

Nowadays, shopping online is occupying an essential part of shopping, big and small companies or stores need to have its commercial website, any serious business can't be improved and reaches all over the world unless it has web site.

Having a web site gives people around the world opportunity to know your business or provided services. It can spread your business so fast, therefore you can achieve success. It's easier for everyone to do shopping online and buy what needed without moving from their home. Also another reason let people buy online, is that one line grocery stores have a wider range of products and various kinds of the same products whereas the online ones don't have [19].

So my project will be an electronic shopping system that meets the basic needs of the customer and will be available to all people.

### **Research goal and objectives**

The goal of the project is to develop website for shopping online.

In order to attain this goal, we must solve the following objectives.

1. To study the problem statement and make the Comparative analysis between ASP.NET and PHP.
2. To develop the structure of the required database for the information website.
3. To design the web-application.
4. To implement the website.
5. To test the system.

### **Structure of the thesis**

The thesis consists of four chapters, introduction, conclusion and reference list.

In the first chapter, the problem statement is given as well as the overview and Comparative analysis between PHP and Asp.net. Additionally, we describe the chosen Development technologies.

In chapter two, there is a description of functional and nonfunctional requirements use case diagram, database scheme and Development of the interfaces.

In chapter three, we show deployment of the system and several fragments of PHP-code for implementing the basic functionality of the system.

Chapter Four is devoted to the testing of the application and included Full implementation of the website with main interfaces and the used methods of testing.

The thesis has 44 pages; the list of references contains 21 resources.

# **1. THE ANALYSIS OF THE SUBJECT AREA**

## **1.1. The problem statement**

E-commerce is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business [12].

Next on the list of ecommerce benefits is that a new brand can sell to customers around the world easily. You have the ability to discover your audience whether they're in the U.K., South America, or neighboring countries.

One of the ecommerce benefits is that it has a lower startup cost. Physical retail stores have to pay up to thousands to rent one of their store locations. Also, they have several upfront costs such as store signs, store design, buying inventory, sales equipment, and more.

Ecommerce benefits like being able to easily display best-sellers makes it easier to show off products to customers. It's easier for a customer to find the best-sellers in an online store.

The reason why you want customers to buy your best-sellers is that they're proven. Other customers have already bought them and are happy with their purchase.

Website personalization, one of the online business advantages, can enhance the online shopping experience. Or segment email lists based on purchases made, location or even how much money a customer spent. You can also retarget a customer who visited your store showing them an ad for a product they added to their cart and forgot about.

Customers can enquire about a product or service and place orders anytime, anywhere from any location. Starting an online store might seem overwhelming, but it's really quite simple these days. With e-commerce platforms that provide store templates, it takes very little time to get a store up [15].



The Online Shopping System (OSS) is a web-based application. The purpose of the application is to automate and facilitate the whole process of shopping. This application fixes the limitation and problems of paper based processes.

The main goal to increase the quantity of sales by making the new technology of web pages design more attractive and to search a lot of customers and company to their location. By this system we can advertise and send procure to a lot of customer by sending email.

Where clothing is one of the basic needs of the individual that cannot be dispensed with. And clothing stores always have difficulty in presenting all models and measurements and colors and because of the lack of space enough. In particular the accessibility of some people to move (people with special needs) or some staff who suffers from time constraints because of the full-time system. Some people live far away from the city center.

All of these things make online shopping more successful and have become a good source of income for many individuals and bring more profits to many spenders and traders. The customer can know the details of the products easily and save time and effort so my project will be an electronic shopping system that meets the basic needs of the customer.

## **1.2. The used development tools**

I have chosen C# as a programming language for the implementation of my project.

C# is a general-purpose, modern and object-oriented programming language pronounced as “C sharp”.

It was developed by Microsoft led by Anders Hejlsberg and his team within the .Net initiative and was approved by the European Computer Manufacturers Association (ECMA) and International Standards Organization (ISO). C# is among the languages for Common Language Infrastructure.

C# is a lot similar to Java syntactically and is easy for users who have knowledge of C, C++ or Java [3].

C# is designed for Common Language Infrastructure (CLI), which consists of the executable code and runtime environment that allows use of various high-level languages on different computer platforms [18].

The following reasons make C# a widely used professional language.

1. It is a modern, general-purpose programming language
2. It is object oriented.
3. It is component oriented.
4. It is easy to learn.
5. It is a structured language.
6. It produces efficient programs.
7. It can be compiled on a variety of computer platforms.
8. It is a part of .Net Framework.

I have chosen ASP.NET as a platform for the implementation of my project.

ASP.NET is the .NET programming environment for building applications in HTML that run on the Web.

This topic provides introductory information about the major components of the ASP.NET architecture and explains how ASP.NET integrates with other programming models in the .NET framework [4].

Important advantages ASP.NET offers over other Web development models [8].

1. ASP.NET drastically reduces the amount of code required to build large applications.
2. With built-in Windows authentication and per-application configuration, your applications are safe and secured.

3. It provides better performance by taking advantage of early binding, just-in-time compilation, native optimization, and caching services right out of the box.
4. The ASP.NET framework is complemented by a rich toolbox and designer in the Visual Studio integrated development environment. WYSIWYG editing, drag-and-drop server controls, and automatic deployment are just a few of the features this powerful tool provides.
5. Provides simplicity as ASP.NET makes it easy to perform common tasks, from simple form submission and client authentication to deployment and site configuration.
6. The source code and HTML are together therefore ASP.NET pages are easy to maintain and write. Also the source code is executed on the server. This provides a lot of power and flexibility to the web pages.
7. All the processes are closely monitored and managed by the ASP.NET runtime, so that if process is dead, a new process can be created in its place, which helps keep your application constantly available to handle requests.
8. It is purely server-side technology so, ASP.NET code executes on the server before it is sent to the browser.
9. Being language-independent, it allows you to choose the language that best applies to your application or partition your application across many languages.
10. ASP.NET makes for easy deployment. There is no need to register components because the configuration information is built-in.
11. Easily works with ADO.NET using data-binding and page formatting features. It is an application which runs faster and counters large volumes of users without having performance problems.

I have chosen MySQL as DBMS for the implementation of my project. MySQL is the world's most popular open source database.

With its proven performance, reliability, and ease-of-use, MySQL has become the leading database choice for web-based applications, used by high profile web properties including Facebook, Twitter, YouTube, and all five of the top five websites.

Additionally, it is an extremely popular choice as embedded database, distributed by thousands of ISVs and OEMs [11].

MySQL is a database management system (DBMS) for relational databases (therefore, MySQL is an RDBMS). A database, in the simplest terms, is a collection of data, be it text, numbers, or binary files, stored and kept organized by the DBMS [10].

### **1.3. Comparative analysis between ASP.NET and PHP.**

When it comes to choosing programming languages, no one can make a certain or accurate suggestion on what programming language will be best suited for your application or problem. It always depends upon programmer to programmer, which includes the time the programmer can dedicate to that project, or the expertise that the programmer might have in that particular programming language, or the experience a programmer has in solving a certain type of problem [14].

Let's get started with discussing various points-to-be-noted for each, PHP and ASP.NET.

1. Features and Extend-ability: PHP and ASP.NET have more or less the same features and what can be done in PHP can be done in ASP.NET as well.

2. Security: Both the languages provide more or less the same level of security. It all depends upon the programmer to which extent the security is implemented.

3. Development Time: Development time is something that depends upon the expertise of the programmer. If the programmer is efficient in PHP, obviously the development time in PHP would be less as compared to the time in

ASP.NET. Though, for small projects, it is recommended that PHP be used so that the total cost incurred is less.

4. Framework: The number of frameworks available for PHP are a lot more than the ones available for ASP.NET.

5. The frameworks for ASP.NET are developed by Microsoft, while for PHP, anyone can develop a framework.

6. Cost: Ultimately, in most cases, cost is the deciding factor. Now here, the cost refers to the development cost and the maintenance cost. Clearly, the development and running cost for PHP is less than the cost for ASP.NET.

Due to the benefits discussed above, I decided to choose ASP.NET as framework for my project.

## **2. DESIGN OF MANAGEMENT INFORMATION SYSTEM FOR ONLINE SHOPPING**

### **2.1. Functional requirements**

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks. So, it's important to make them clear both for the development team and the stakeholders [1].

The features that are available for the administrator.

1. CRUD Item.
2. CRUD User.
3. CRUD Order.
4. CRUD Report.

The features that are available for the User (Customer).

1. Make order.
2. Make payment.
3. CRUD Account.

### **2.2. Non-functional requirements**

Non-functional requirements are usually called qualities of a system. Such as security and backup.

#### **Security**

In electronic commerce, security is a core issue that must be considered. Viruses and hacking are threatening e-commerce, thus requiring the network to provide a security solution. Including encryption, signature scheme, distributed security management, access control, firewall, secure Web servers, anti-virus protection [16].

#### **Backup**

Backup is useful in recovering your data in the event of an electronic disaster like hardware failure or a break-in that changes or otherwise damages your data. It copies of all the important computer files kept in another location. So if

the database is quite large that has to extract file first. That means, storage is the base of a backup system [16].

### 2.3 Use case diagram for design system functions requirement

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal [13].

The purpose of a use case diagram in UML is to demonstrate the different ways that a user might interact with a system. Create a professional diagram for nearly any use case using our UML diagram tool [9].

Fig. 1 shows usecase diagram for our system.

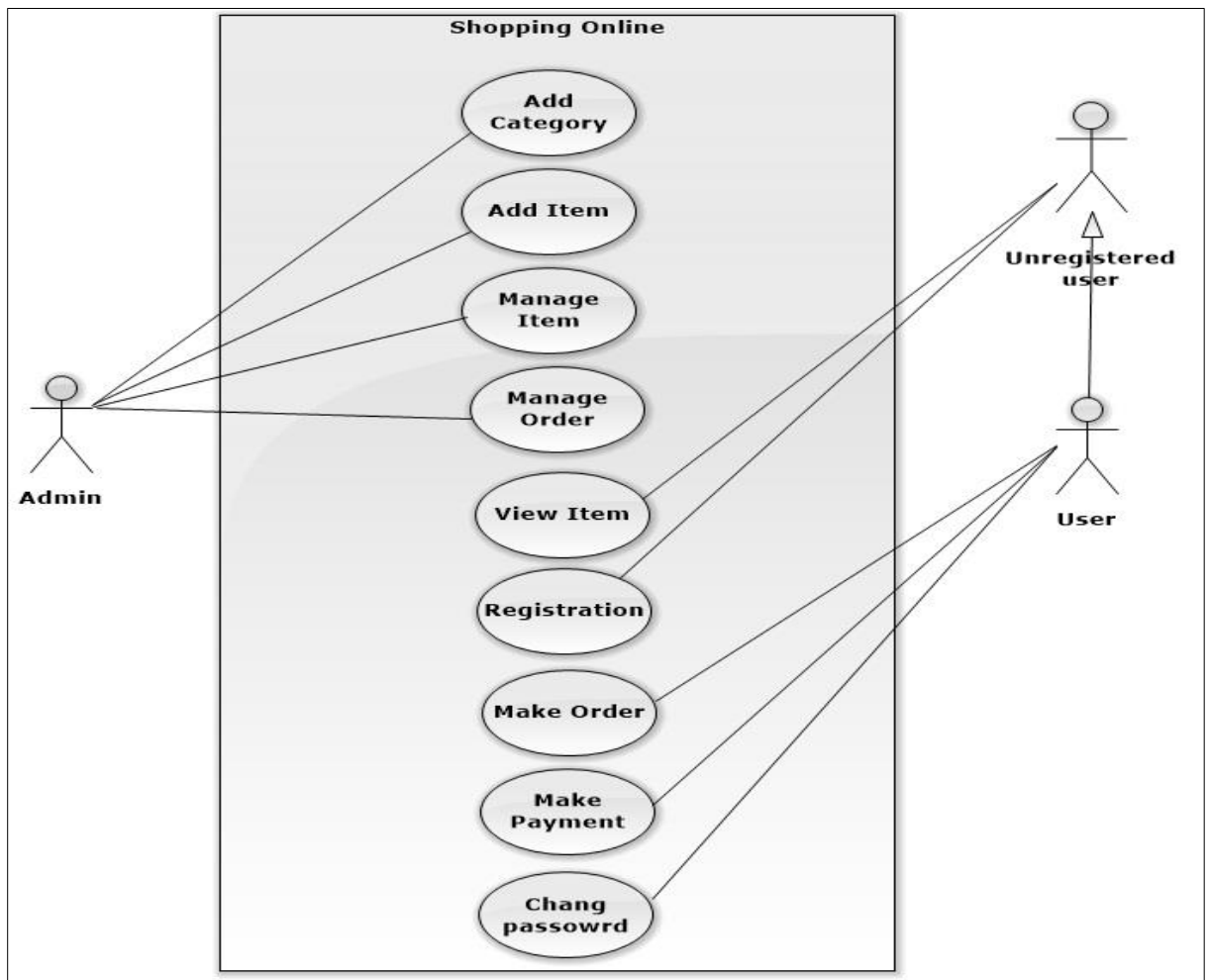


Fig. 1. Use case diagram

## **2.4. Development of the database**

Databases are where all your data is stored. It's like a bunch of filing cabinets with folders filled with files. Databases come mainly in two flavors: SQL and NoSQL [33]. In common parlance, the term database refers to a collection of data that is managed by a DBMS.

A DBMS generally manipulates the data itself, the data format, field names, record structure and file structure. It also defines rules to validate and manipulate this data. A DBMS relieves users of framing programs for data maintenance.

Database refers to a collection of electronic records that could be processed to produce useful information.

The data can be accessed, modified, managed, controlled and organized to perform various data-processing operations [2].

A DBMS generally manipulates the data itself, the data format, field names, record structure and file structure. It also defines rules to validate and manipulate this data. A DBMS relieves users of framing programs for data maintenance. From the domain of problem, we have six objects for our projects.

1. Users table.
2. Admins tables.
3. Items tables.
4. Order tables.
5. Payment tables.
6. Category tables.
7. Feedback tables.



The scheme of the database consists of 7 tables as in the fig. 2.

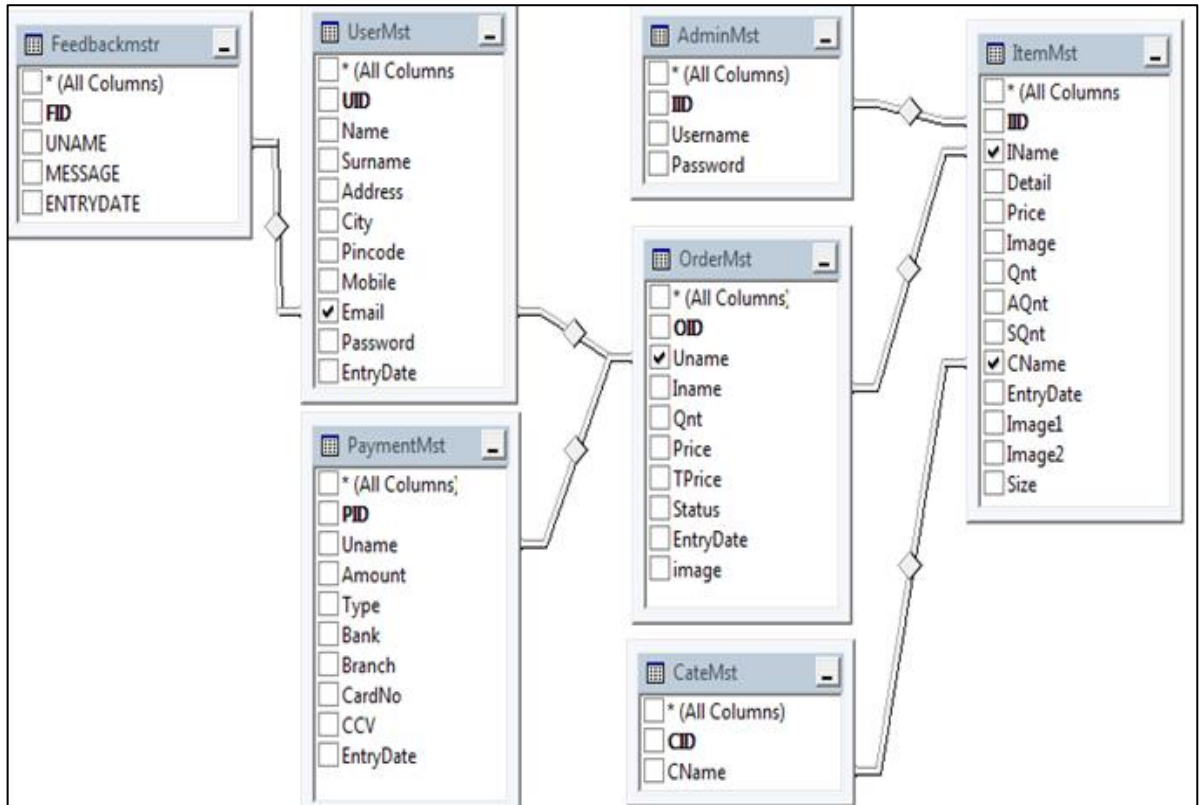


Fig. 2. Structure of database scheme

The table “User” contains the information of the User in the website. It consists of 9 fields as in the fig. 3.

|    | Column Name | Data Type    | Allow Nulls                         |
|----|-------------|--------------|-------------------------------------|
| PK | UID         | int          | <input type="checkbox"/>            |
|    | Name        | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Surname     | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Address     | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | City        | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Pincode     | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Mobile      | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Email       | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Password    | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | EntryDate   | datetime     | <input checked="" type="checkbox"/> |

Fig. 3. Structure of the table “User”

The table “admin” contains the information of the admin in the website. It consists of 3 fields as in the fig. 4.

|    | Column Name | Data Type    | Allow Nulls                         |
|----|-------------|--------------|-------------------------------------|
| PK | IID         | int          | <input type="checkbox"/>            |
|    | Username    | nvarchar(50) | <input checked="" type="checkbox"/> |
|    | Password    | nvarchar(50) | <input checked="" type="checkbox"/> |

Fig. 4. Structure of the table “admin”

The table “Category” contains the information of the Category which will create in the website. It consists of 2 fields as in the fig. 5.

|    | Column Name | Data Type    | Allow Nulls                         |
|----|-------------|--------------|-------------------------------------|
| PK | CID         | int          | <input type="checkbox"/>            |
|    | CName       | nvarchar(50) | <input checked="" type="checkbox"/> |

Fig. 5. Structure of the table “Category”

The table “Item” contains the information of the clothes which will sell in the website. It consists of 12 fields as in the fig. 6.

|    | Column Name | Data Type     | Allow Nulls                         |
|----|-------------|---------------|-------------------------------------|
| PK | IID         | int           | <input type="checkbox"/>            |
|    | IName       | nvarchar(50)  | <input checked="" type="checkbox"/> |
|    | Detail      | nvarchar(500) | <input type="checkbox"/>            |
|    | Price       | float         | <input checked="" type="checkbox"/> |
|    | Image       | nvarchar(200) | <input checked="" type="checkbox"/> |
|    | Qnt         | int           | <input checked="" type="checkbox"/> |
|    | AQnt        | int           | <input checked="" type="checkbox"/> |
|    | SQnt        | int           | <input checked="" type="checkbox"/> |
|    | CName       | nvarchar(50)  | <input checked="" type="checkbox"/> |
|    | EntryDate   | datetime      | <input checked="" type="checkbox"/> |
|    | Image1      | nvarchar(500) | <input checked="" type="checkbox"/> |
|    | Image2      | nvarchar(500) | <input checked="" type="checkbox"/> |
|    | Size        | int           | <input checked="" type="checkbox"/> |

Fig. 6. Structure of the table “Item”

The table “Feedback” contains the information of the Feedback which will write in the website. It consists of 4 fields as in the fig. 7.

|   | Column Name | Data Type    | Allow Nulls                         |
|---|-------------|--------------|-------------------------------------|
| ▶ | FID         | int          | <input type="checkbox"/>            |
|   | UNAME       | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | MESSAGE     | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | ENTRYDATE   | datetime     | <input checked="" type="checkbox"/> |

Fig. 7. Structure of the table “Item”

The table “Order” contains the information of the Orders which will make by the user in the website. It consists of 9 fields as in the fig. 8.

|   | Column Name | Data Type     | Allow Nulls                         |
|---|-------------|---------------|-------------------------------------|
| ▶ | OID         | int           | <input type="checkbox"/>            |
|   | Uname       | nvarchar(50)  | <input checked="" type="checkbox"/> |
|   | Iname       | nvarchar(50)  | <input checked="" type="checkbox"/> |
|   | Qnt         | int           | <input checked="" type="checkbox"/> |
|   | Price       | float         | <input checked="" type="checkbox"/> |
|   | TPrice      | float         | <input checked="" type="checkbox"/> |
|   | Status      | int           | <input checked="" type="checkbox"/> |
|   | EntryDate   | datetime      | <input checked="" type="checkbox"/> |
|   | image       | nvarchar(500) | <input checked="" type="checkbox"/> |

Fig. 8. Structure of the table “Order”

The table “Payment” contains the information of the Payments in the website. It consists of 9 fields as in the fig. 9.

|   | Column Name | Data Type    | Allow Nulls                         |
|---|-------------|--------------|-------------------------------------|
| ▶ | PID         | int          | <input type="checkbox"/>            |
|   | Uname       | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | Amount      | float        | <input checked="" type="checkbox"/> |
|   | Type        | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | Bank        | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | Branch      | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | CardNo      | nvarchar(50) | <input checked="" type="checkbox"/> |
|   | CCV         | int          | <input checked="" type="checkbox"/> |
|   | EntryDate   | datetime     | <input checked="" type="checkbox"/> |

Fig. 9. Structure of the table “Payment”

## 2.5. Development of the interface

User Interface Design focuses on anticipating what users might need to do and ensuring that the interface has elements that are easy to access, understand, and use to facilitate those actions.

UI brings together concepts from interaction design, visual design, and information architecture [20].

Each website contains many interfaces and allows the user to move between the interfaces and to summarize the interfaces in our website this tree and it's a Schema of available interfaces for admin, user and it contains all the elements in the website and also explains the process of moving from one to another shown below fig. 11 and fig. 10.

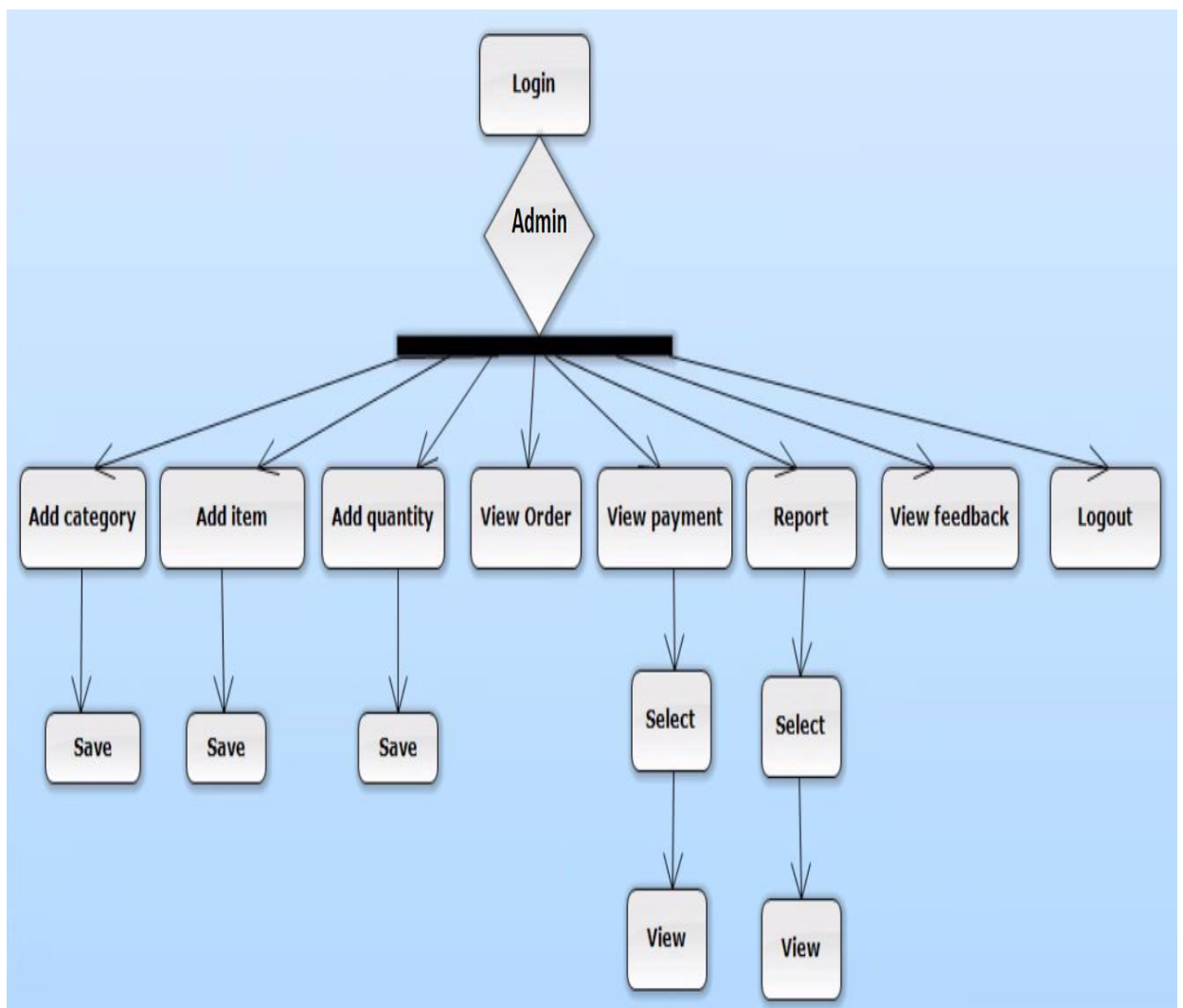


Fig. 10. Schema of available interfaces for administrator

Fig. 11 shows the schema of available interfaces for user.

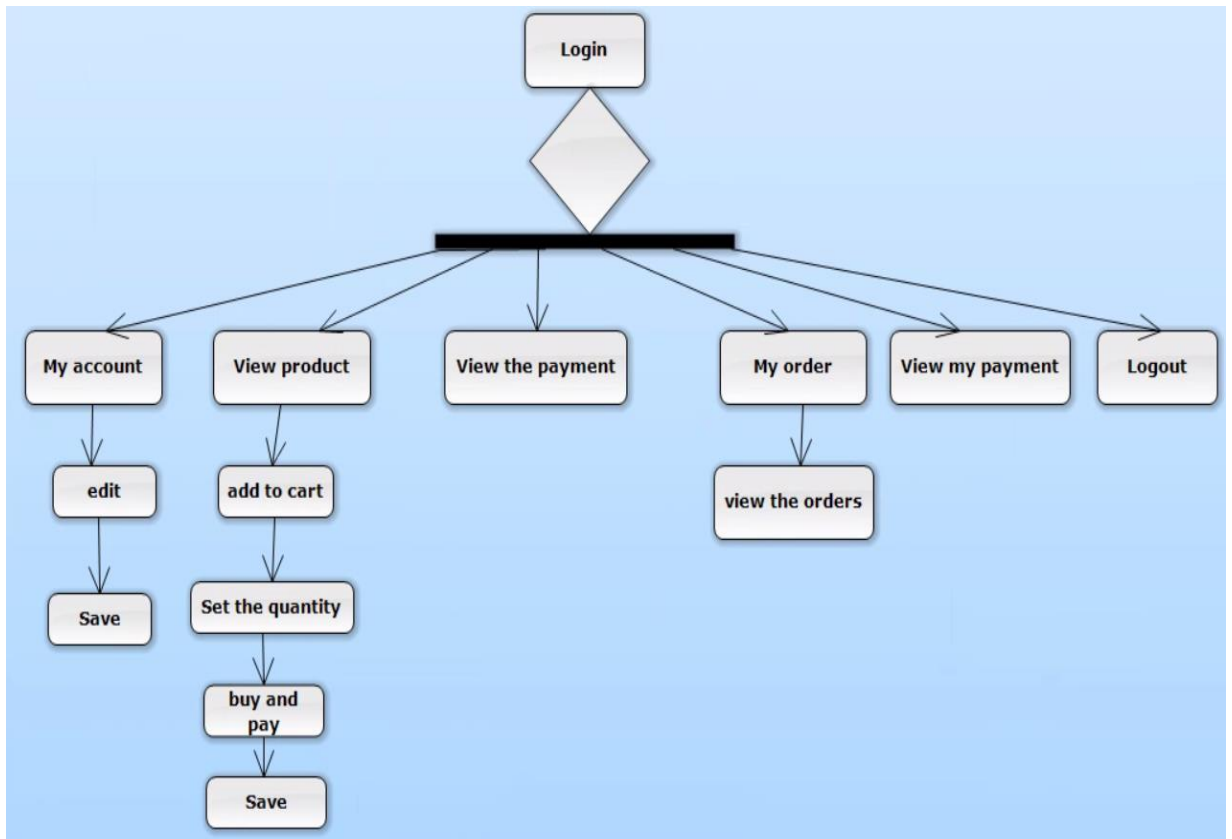


Fig. 11. Schema of available interfaces for teacher and student

### 3. IMPLEMENTATION OF THE WEBSITE APPLICATION

#### 3.1. Architecture of the system

In the context of the Unified Modeling Language (UML), a deployment diagram falls under the structural diagramming family because it describes an aspect of the system itself. In this case, the deployment diagram describes the physical deployment of information generated by the software program on hardware components. The information that the software generates is called an artifact.

Deployment diagrams are made up of several UML shapes. The three-dimensional boxes, known as nodes, represent the basic software or hardware elements, or nodes, in the system. Lines from node to node indicate relationships, and the smaller shapes contained within the boxes represent the software artifacts that are deployed.

Fig. 12 shows deployment diagram that describe our system.

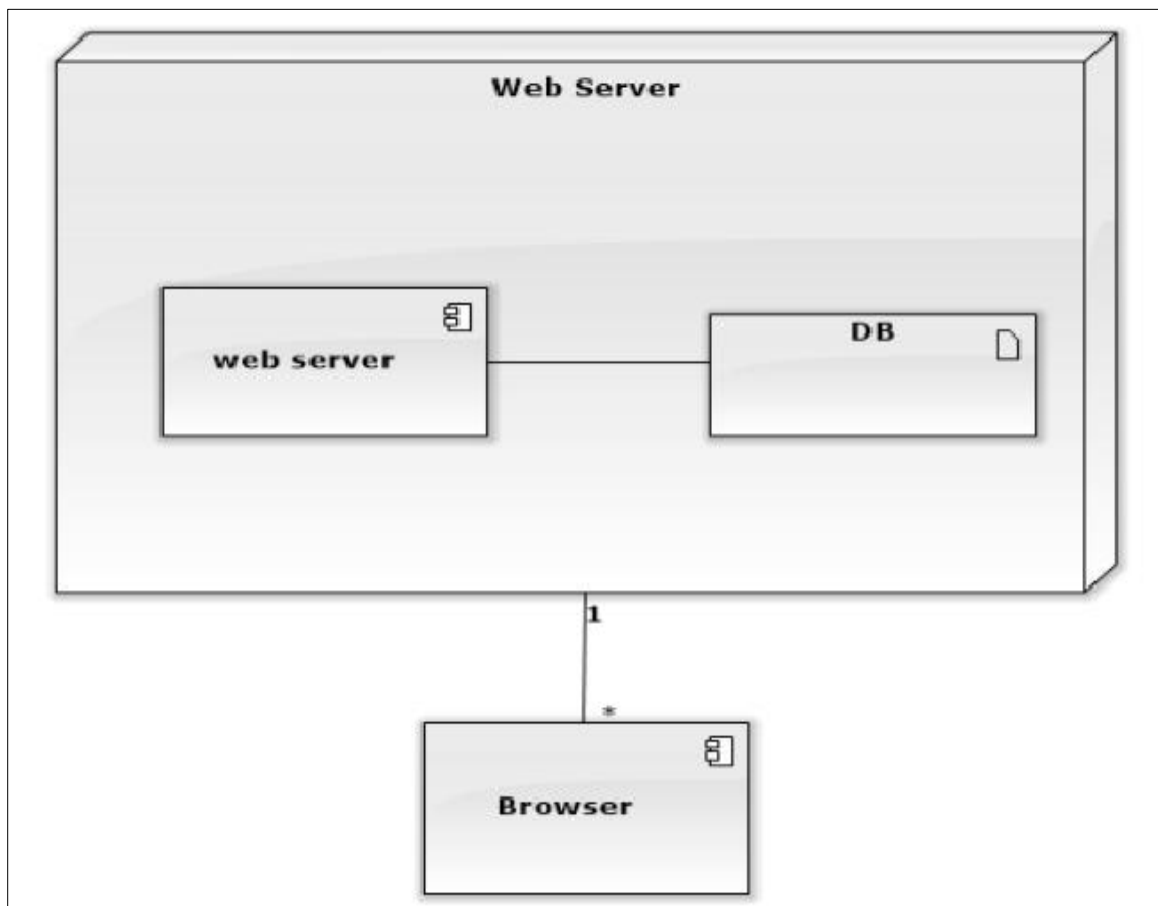


Fig. 12. UML deployment Diagram

### 3.2. Several fragments of PHP-code for implementing the basic functionality

In this part I will view several fragments of C#-code for implementing that includes the main functions.

**Register in the system.** Fig. 13 shows the function for the user to register in the system by entering his information like his “First Name”, “Last Name”, “Mobile number”, “Address” and “password” .

```
protected void Page_Load(object sender, EventArgs e)
{
    if (!IsPostBack)
        Label1.Visible = false;
}
protected void Button3_Click(object sender, EventArgs e)
{
    DataSourceSelectArguments sr = new DataSourceSelectArguments();
    DataView dv = (DataView)SqlDataSource1.Select(sr);
    if (dv.Count > 0)
    {
        Label1.Visible = true;
    }
    else
    {
        SqlDataSource1.InsertParameters["EntryDate"].DefaultValue = DateTime.Now.ToString();
        SqlDataSource1.Insert();
        Response.Redirect("Login.aspx");
    }
}
protected void Button2_Click(object sender, EventArgs e)
{
}
```

Fig. 13. Report order code

**Login to the system.** Fig. 14 shows the function for the already registered user to login in the system by enter his user name and password.

```
protected void Page_Load(object sender, EventArgs e)
{
    if (Session["uname"] == null)
    {
        Response.Redirect("../Login.aspx");
    }
    else
    {
        if (Session["name"].ToString() == "cate")
        {
            string cname = Request.QueryString["name"].ToString();
            //SqlDataSource1.SelectParameters["Iname"].DefaultValue = cname;
            //SqlDataSource1.Select();
            IDT = IAdapter.Select_BY_CNAME(cname);
            DataList1.DataSource = IDT;
            DataList1.DataBind();
            lblsearch.Text = "(" + DataList1.Items.Count.ToString() + ")";
        }
        else if (Session["name"].ToString() == "search")
        {

```

Fig. 14. Login function code

**Add category.** (fig. 15). Shows the function for the Adding category after the admin login to the website by entering his special email and password he will can add new category to the website by entering the name of category.

```
protected void Page_Load(object sender, EventArgs e)
{
    if (Session["admin"] == null)
    {
        Response.Redirect("~/admin/login.aspx");
    }
    else
    {
        if (Page.IsPostBack == false)
        {
            CDT = CAdapter.select();
            GridView1.DataSource = CDT;
            GridView1.DataBind();
        }
    }
}
```

Fig. 15. Add category code

**Add item.** (fig. 16). Shows the function for the Adding item after the admin login to the website he will can add new items to the website.

```
FileUpload1.SaveAs(Server.MapPath("~/img/") + FileUpload1.FileName);
FileUpload2.SaveAs(Server.MapPath("~/img/") + FileUpload2.FileName);
FileUpload3.SaveAs(Server.MapPath("~/img/") + FileUpload3.FileName);
SqlDataSource2.InsertParameters["SQnt"].DefaultValue = 0.ToString();
SqlDataSource2.InsertParameters["Image"].DefaultValue = "~/img/" + FileUpload1.FileName.ToString();
SqlDataSource2.InsertParameters["EntryDate"].DefaultValue = DateTime.Now.Date.ToString();
SqlDataSource2.InsertParameters["Image1"].DefaultValue = "~/img/" + FileUpload2.FileName.ToString();
SqlDataSource2.InsertParameters["Image2"].DefaultValue = "~/img/" + FileUpload3.FileName.ToString();
SqlDataSource2.Insert();
lblmsg.Text = "Items are Added";
}

private void bindgrid()
{
    IDT = DsAdapter.select();
    GridView1.DataSource = IDT;
    GridView1.DataBind();
}
```

Fig. 16. Add item code



**View order.** (fig. 17). Shows the function for the viewing order, the admin can view all orders which made by the user, the admin can select any order and view all orders of this user.

```
        {
            ODT = OAdapter.SELECT_DISTINCT();
            DropDownList1.DataSource = ODT;
            DropDownList1.DataTextField = "uname";
            DropDownList1.DataValueField = "oid";
            DropDownList1.DataBind();
        }
    }

protected void GridView1_SelectedIndexChanged(object sender, EventArgs e)
{

}

protected void Button9_Click(object sender, EventArgs e)
```

Fig. 17. View order code

## 4. TESTING OF THE WEB APPLICATION

### 4.1. Full implementation of the website

Fig. 18 shows the homepage for visitor.

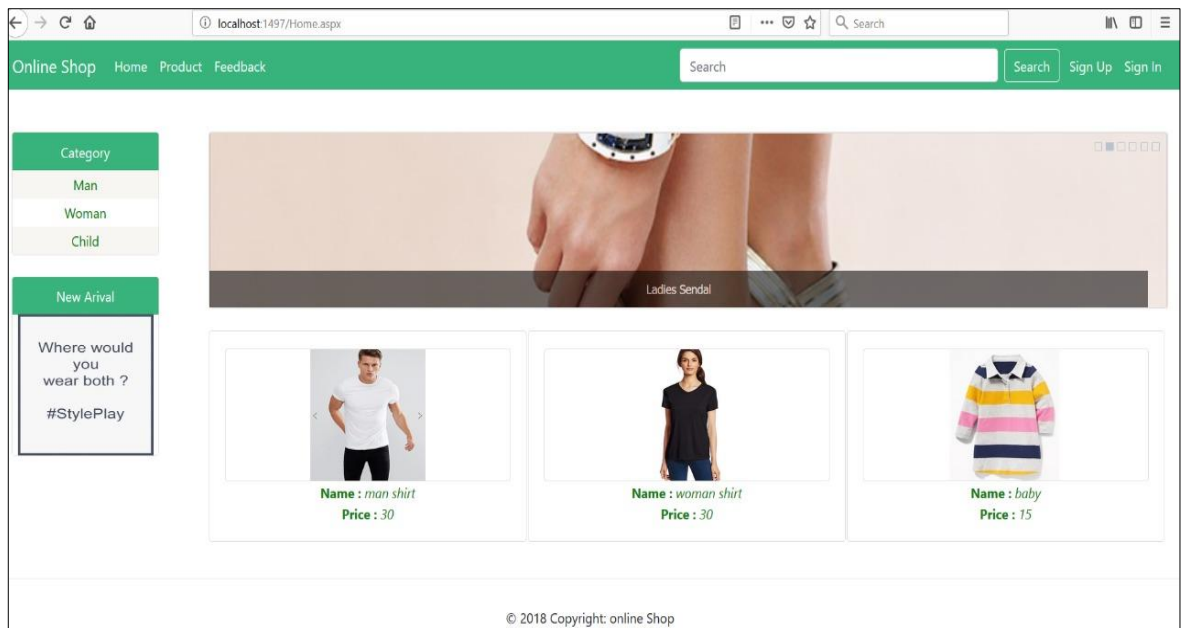


Fig. 18. The home page for visitor

The admin can login to the website by entering his special email and password to login to the website as shown in the fig. 19.

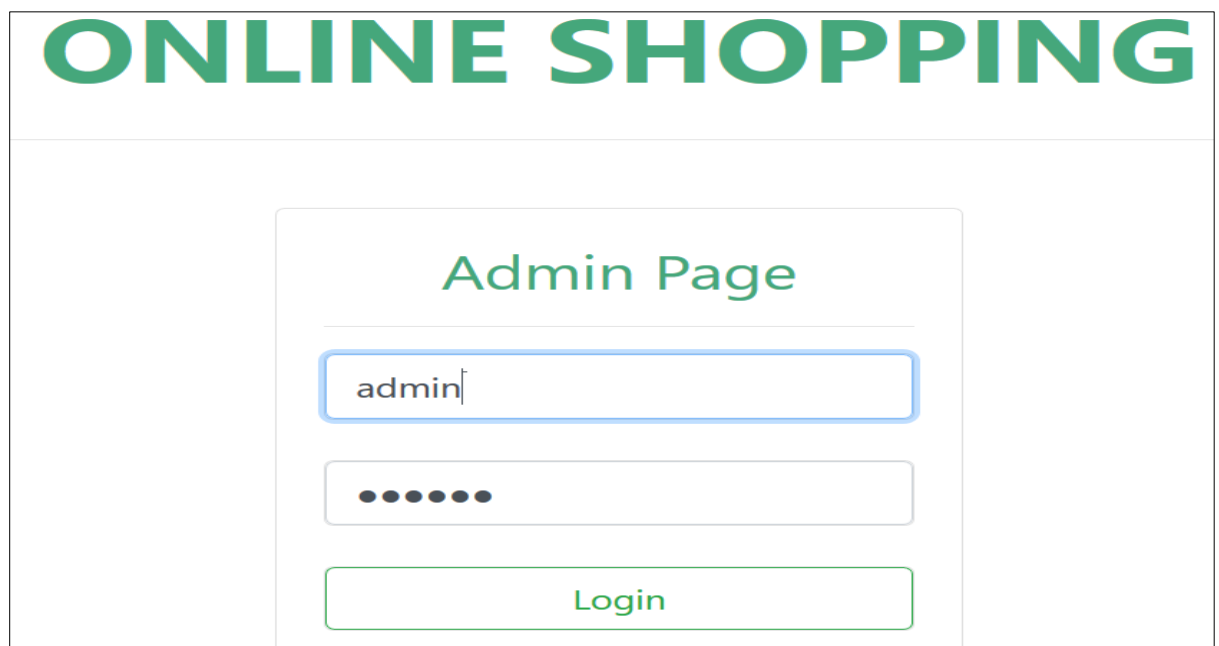


Fig. 19. The login page

After the admin login to the website by entering his special email and password he will see the homepage as shown in the fig. 20.

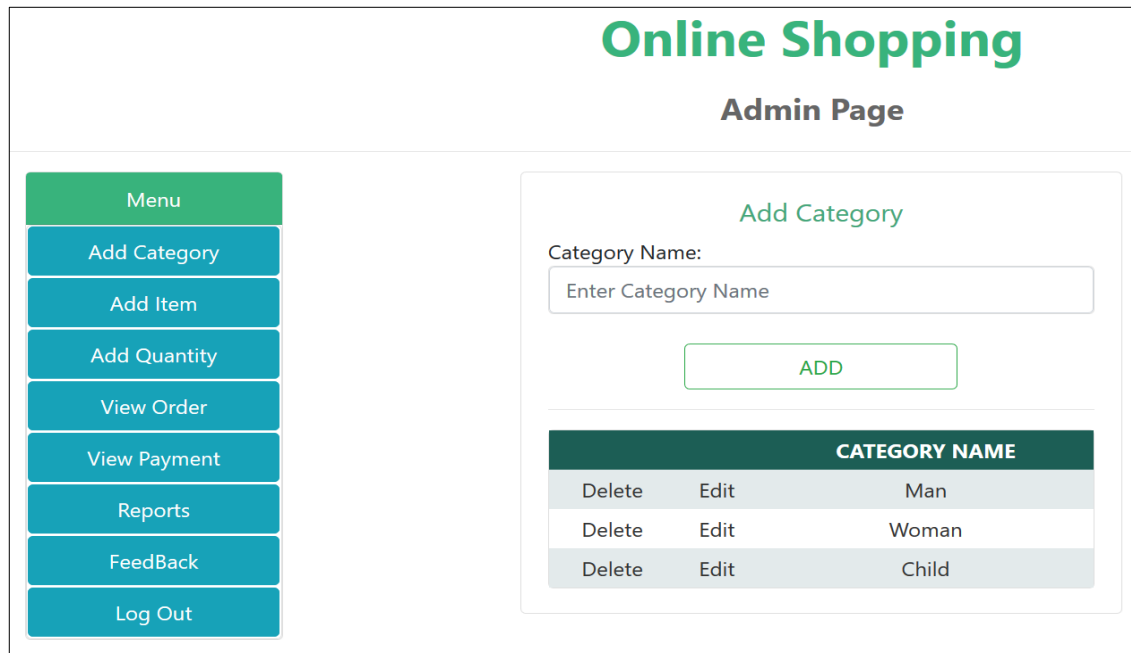


Fig. 20. The home page

After the admin login to the website by entering his special email and password he will can add new category to the website by entering the name of category and click on the bottom “ADD” and also the admin can edit and delete the category which already added in the website as shown in the fig. 21.

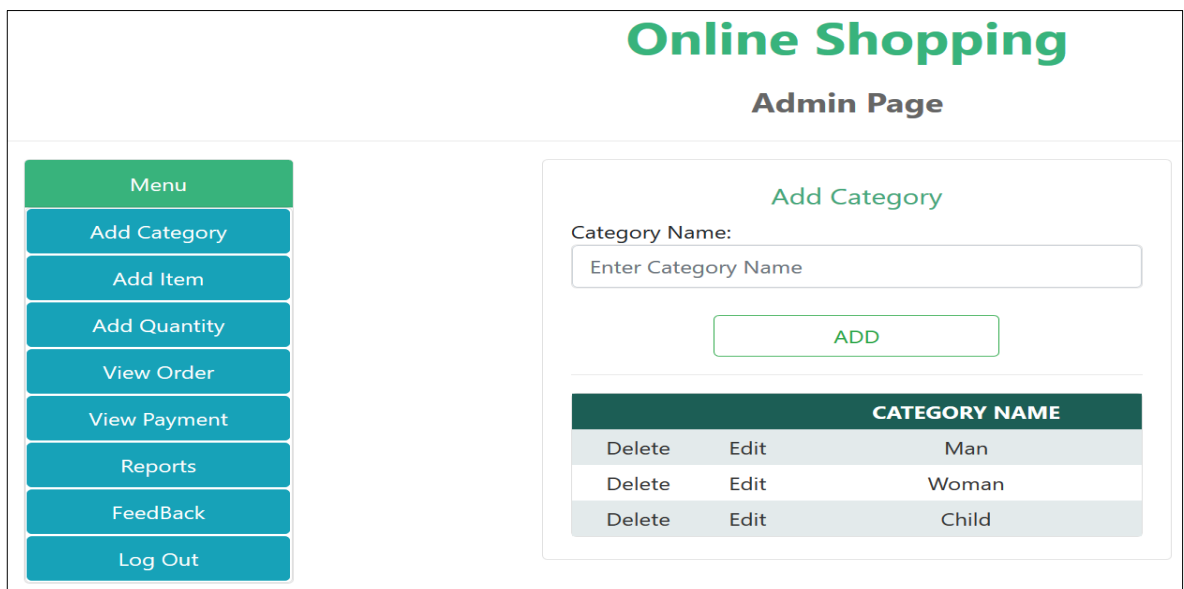


Fig. 21. The Add Category page

After the admin login to the website he can add new items to the website by entering the following requirement:

- 1) name of the item;
- 2) description of the item;
- 3) price of the item;
- 4) image for first section;
- 5) image for second section;
- 6) image for third section;
- 7) the size of the thus item;
- 8) Select In which category will appear.

At last click on the bottom “ADD” and also the admin can edit and delete the items which already added in the website as shown in the fig. 22.

Add Item

Name:

Description:

Price:

Quantity:

image:  
 No file selected.

Image1:  
 No file selected.

Image2:  
 No file selected.

Size:

Category Name:

ADD

|        |      | ITEM NAME   | PRICE |
|--------|------|-------------|-------|
| Delete | Edit | man shirt   | 30    |
| Delete | Edit | woman shirt | 30    |
| Delete | Edit | baby        | 15    |

Fig. 22. The Add Item page

After the admin login to the website he will can add new quantity to the items which already in the website by selecting the name of items and enter the number of new quantity and click on the bottom “ADD” as shown in the fig. 23.

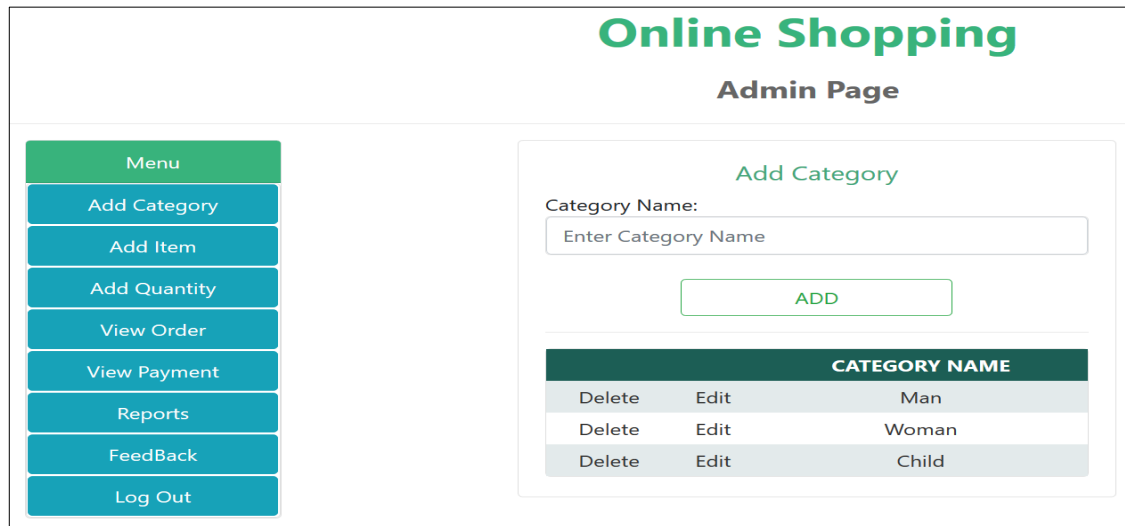


Fig. 23. The Add Quantity page

The admin can view all orders which made by the user, the admin can select any order and view all orders of this user and also can see two types of orders pending and complete as shown in the fig. 24.

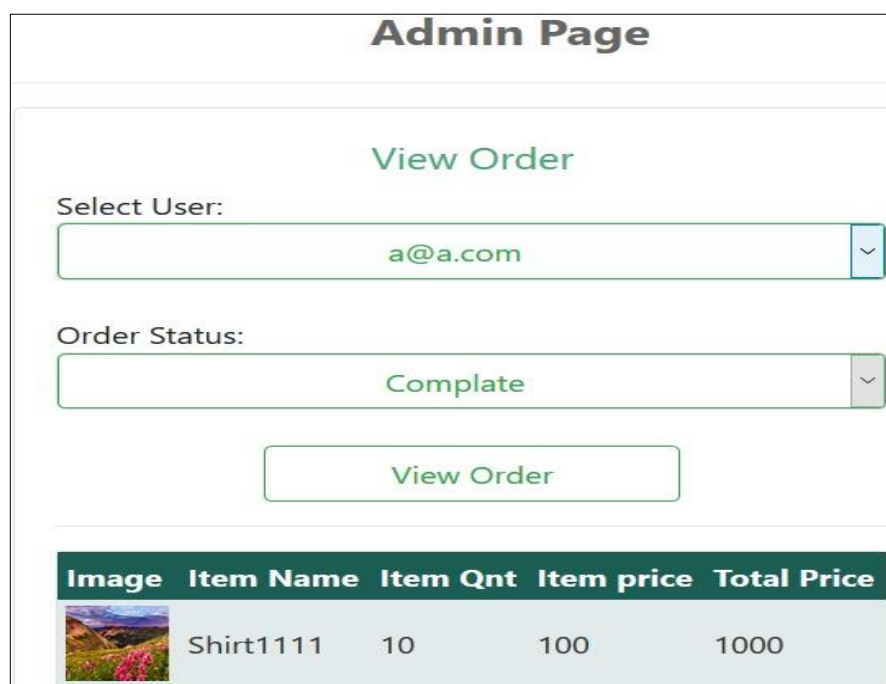


Fig. 24. The view order page

The admin can view payment report of all users by selecting the address of users and click on bottom “VIEW”, at last the admin can get the report of any users as shown in the fig. 25.

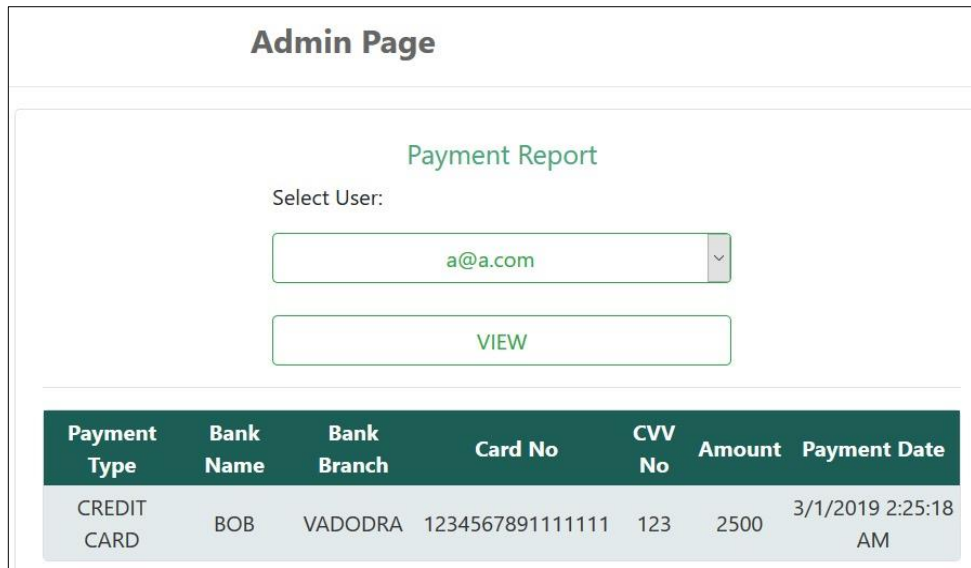


Fig. 25. The view order page

The admin can make report about all items by selecting the name of this item and click on bottom “VIEW”, at last the admin can get the report this item with all details as shown in the fig. 26.

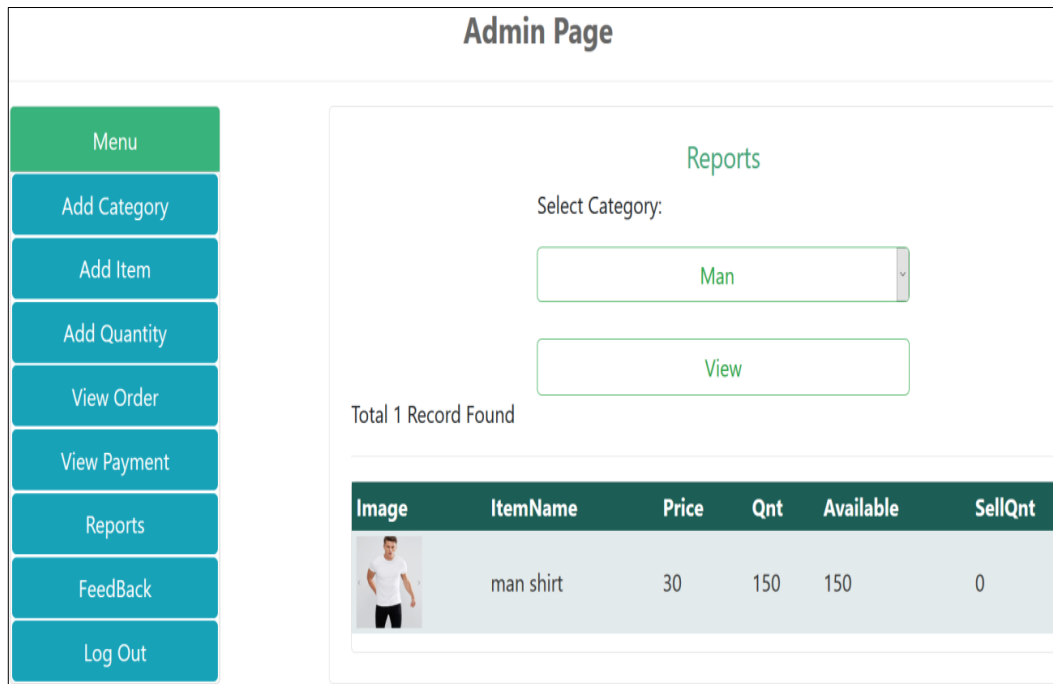


Fig. 26. The report page

The admin can view all feedbacks which sent by the users that may include some problems or some complement as shown in the fig. 27.

| Menu         | Feedback   |              |                  |                     |
|--------------|------------|--------------|------------------|---------------------|
| Add Category | <b>FID</b> | <b>UNAME</b> | <b>MESSAGE</b>   | <b>ENTRYDATE</b>    |
| Add Item     | 1          | Noor         | There is problem | 3/1/2019 2:19:58 AM |
| Add Quantity | 2          | Noor         | There is problem | 3/1/2019 2:20:41 AM |
| View Order   | 3          | Aiham        | Hello            | 3/1/2019 2:20:54 AM |
| View Payment |            |              |                  |                     |
| Reports      |            |              |                  |                     |
| FeedBack     |            |              |                  |                     |
| Log Out      |            |              |                  |                     |

Fig. 27. The feedback page

The admin can sign up to the website by entering the entering the following:

- 1) name of the user.
- 2) sure name of the user.
- 3) address of the user.
- 4) the city of the user.
- 5) pin code of the user.
- 6) the gander of the user.
- 7) the mobile number of the user.
- 8) the email address of the user.
- 9) the password and confirm it.

At last enter click on bottom “Register” as shown in the fig. 28.

The registration form is titled "Check Out Order" in green text. It contains several input fields with the following labels and values:

- Name:** Noor
- SurName:** GGG
- Address:** Iraq
- City:** Baghdad
- Pincode:** 123456
- Mobile:** 0770709154

At the bottom of the form is a green button labeled "Edit Detail".

Fig. 28. The registration page

The user can login to the website by entering his special email and password to login to the website and access the home page as shown in the fig. 29.

The login form is titled "Login" in green text. It contains the following elements:

- An email input field containing "noor@noor.com".
- A password input field represented by three dots.
- A green button labeled "Login".
- Two links at the bottom: "New User" and "Forgot Password", both in green text.

Fig. 29. The login page



Fig. 30 shows the structure of the homepage for user.

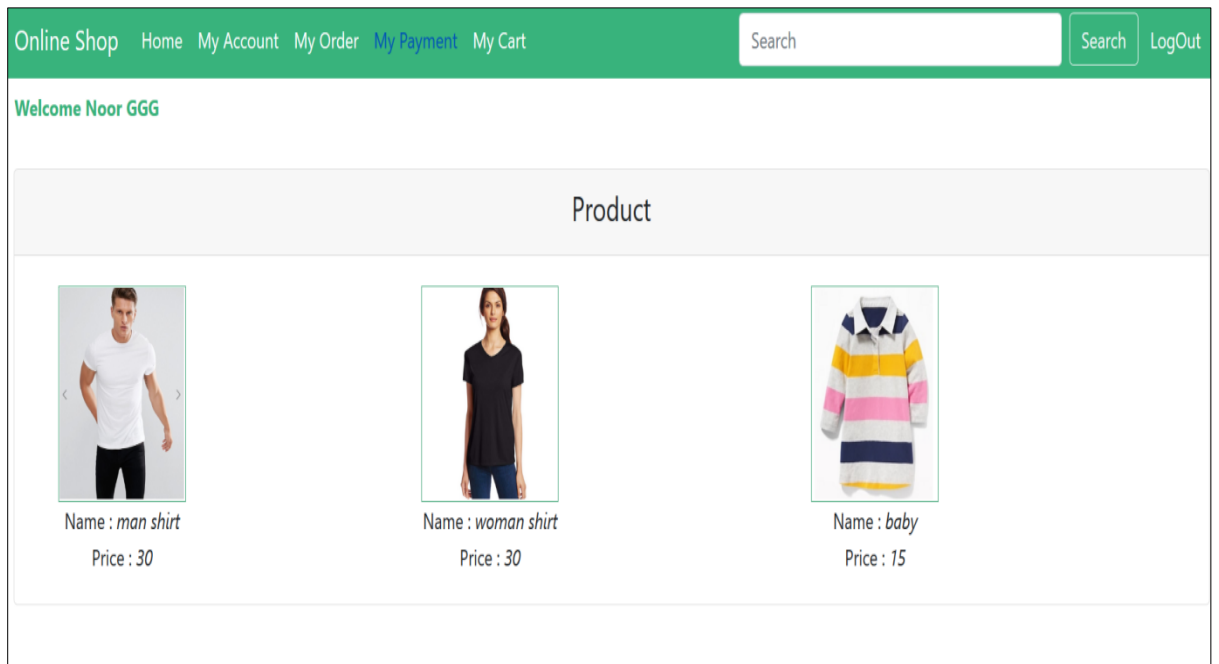


Fig. 30. The home page for user

After the user login to the website he can view his account and edit his information as shown in the fig. 31.

|                             |            |
|-----------------------------|------------|
| <b>Name:</b>                | Noor       |
| <b>SurName:</b>             | GGG        |
| <b>Address:</b>             | Iraq       |
| <b>City:</b>                | Baghdad    |
| <b>Pincode</b>              | 123456     |
| <b>Mobile</b>               | 0770709154 |
| <a href="#">Edit Detail</a> |            |

Fig. 31. The My account page

The user can view the details about some product and add this item to the card shopping by clicking on the bottom “Add Cat” to buy it as shown in the fig. 32.

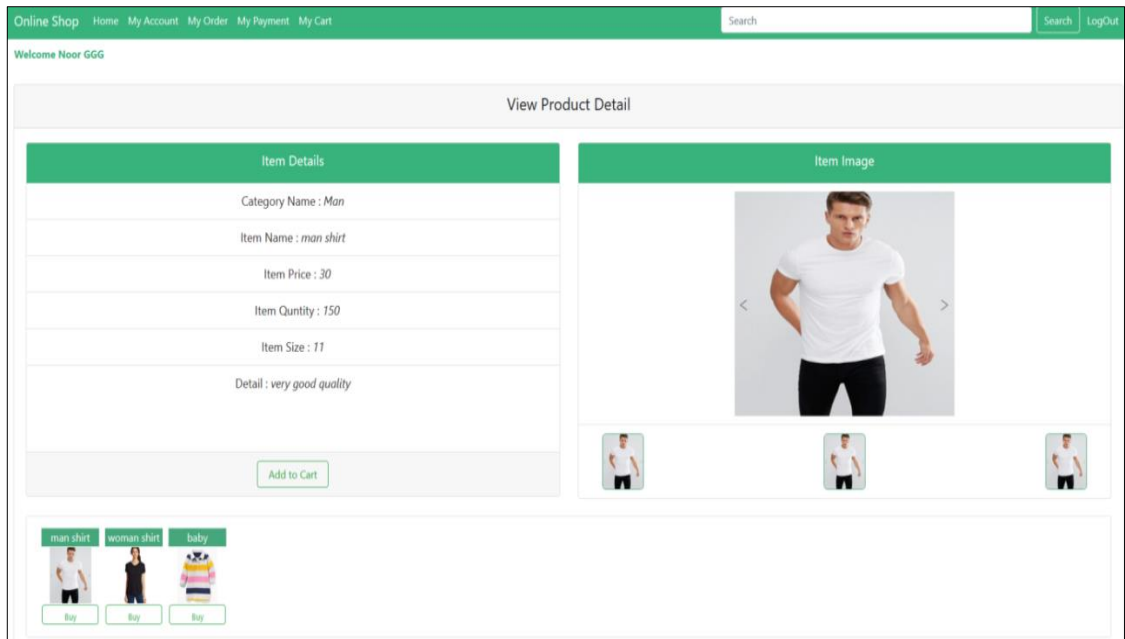


Fig. 32. The view product details page

The user can view items which added to the shopping card and set the number of quantity after that click on the bottom “check out” to get the total payment as shown in the fig. 33.

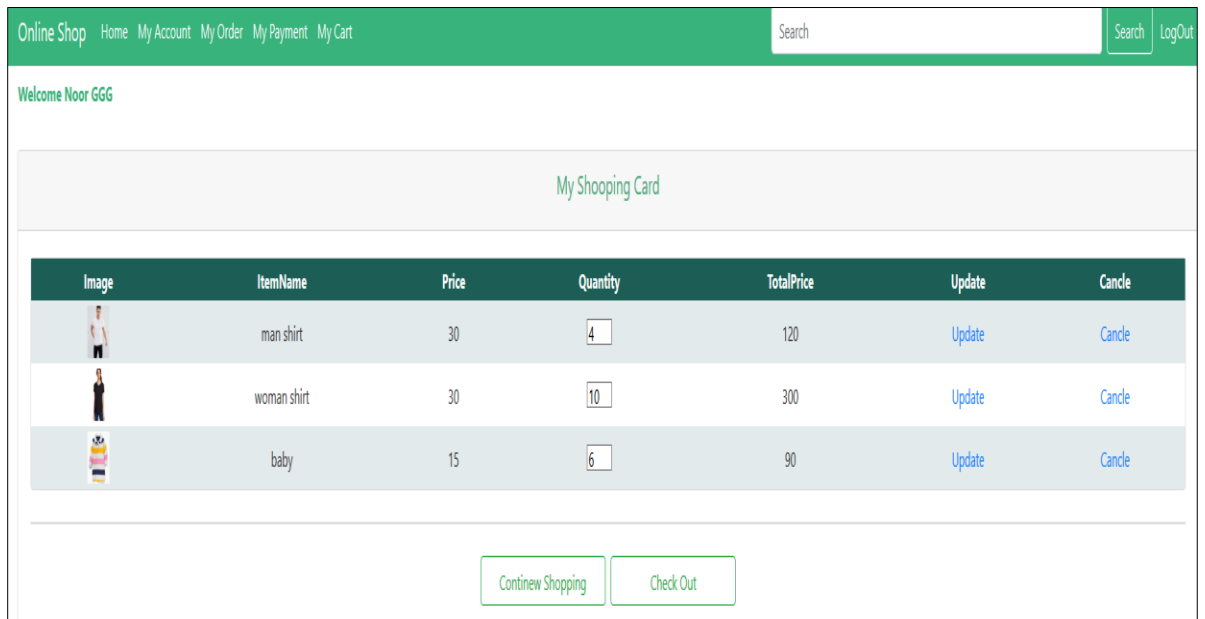
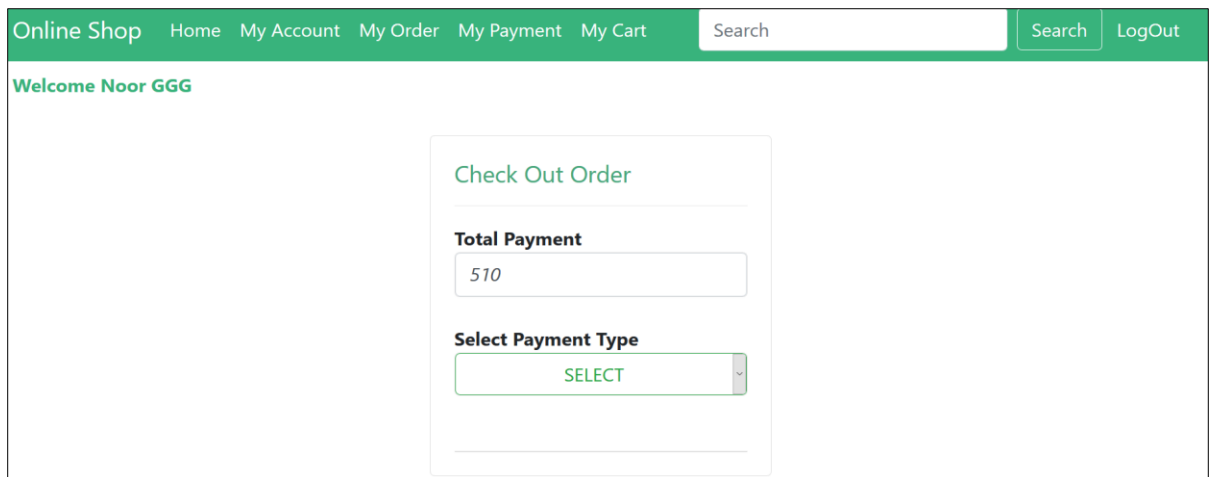


Fig. 33. The shopping card page

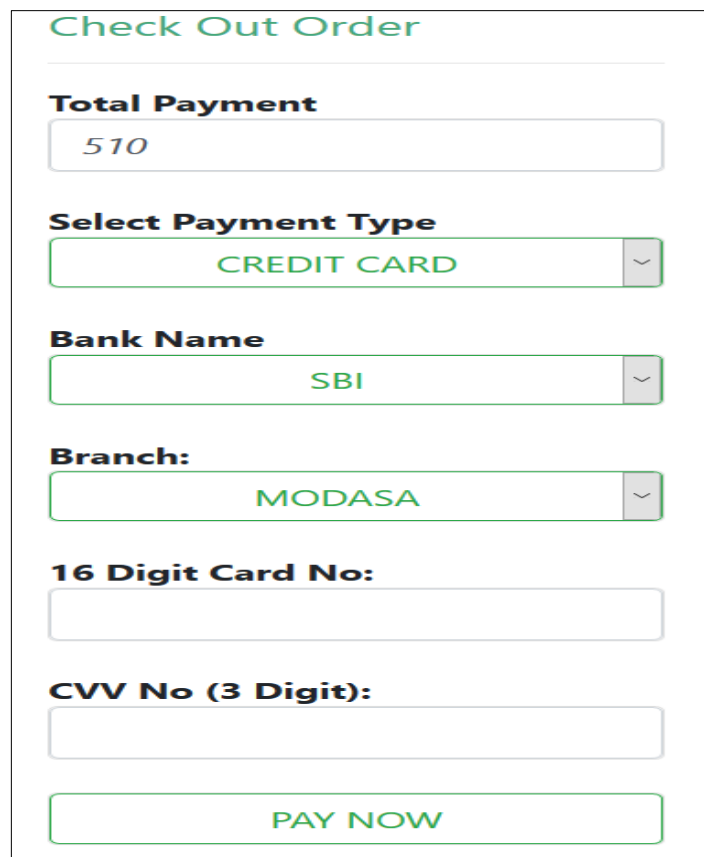
After the user clicked on the bottom “checkout ” he will to get the total payment the how can he pay ,there are two types of payment by using card or cash on delivery as shown in the fig. 34.



The screenshot shows a web application interface for checkout. At the top, there is a green navigation bar with links for 'Online Shop', 'Home', 'My Account', 'My Order', 'My Payment', and 'My Cart'. A search bar and a 'LogOut' button are also present. Below the navigation bar, a green message says 'Welcome Noor GGG'. The main content area features a white box titled 'Check Out Order'. Inside this box, the 'Total Payment' is displayed as '510'. Below that, there is a dropdown menu for 'Select Payment Type' with the word 'SELECT' visible.

Fig. 34. The checkout order page

Fig. 35. Shows the user can pay by using the card.



This image provides a detailed view of the 'Check Out Order' form for card payment. The form includes the following fields and options: 'Total Payment' (510), 'Select Payment Type' (CREDIT CARD), 'Bank Name' (SBI), 'Branch:' (MODASA), '16 Digit Card No:', and 'CVV No (3 Digit):'. A 'PAY NOW' button is located at the bottom of the form.

Fig. 35. Payment by card page

After the user completed the process of payment he will get the notice with done shopping as shown in the fig. 36.

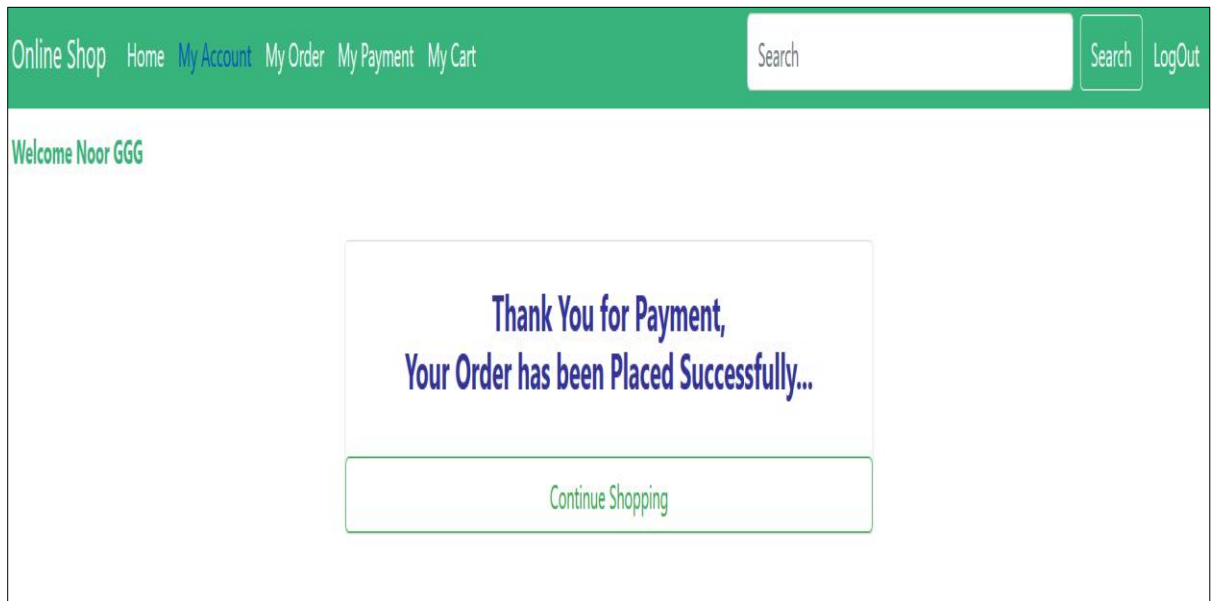


Fig. 36. Payment by card page

The user can view all old orders which made by his with all details as shown in the fig. 37.

The screenshot shows the 'My Order' page with a table of past orders. The table has five columns: 'Image', 'Item Name', 'Item Qty', 'Item price', and 'Total Price'. There are three rows of data.




| Image   | Item Name | Item Qty | Item price | Total Price |
|---|-----------|----------|------------|-------------|
|  | Shirt1111 | 3        | 100        | 300         |
|  | Shirt3    | 1        | 1800       | 1800        |
|  | Shirt1111 | 1        | 100        | 100         |

Fig. 37. The view older page

The user can view all previous payment that explains how he paid and which date as shown in the fig. 38.

| Payment Type     | Bank Name | Bank Branch | Card No          | CVV No | Amount | Payment Date        |
|------------------|-----------|-------------|------------------|--------|--------|---------------------|
| CASH ON DELIVERY |           |             |                  | 0      | 2100   | 3/1/2019 2:11:42 AM |
| CASH ON DELIVERY |           |             |                  | 0      | 200    | 3/1/2019 2:15:12 AM |
| CREDIT CARD      | SBI       | MODASA      | 1234567891111111 | 123    | 100    | 3/1/2019 2:17:19 AM |

Fig. 38. The view payment page

The user can search about something by typing the name as shown in the fig. 39.

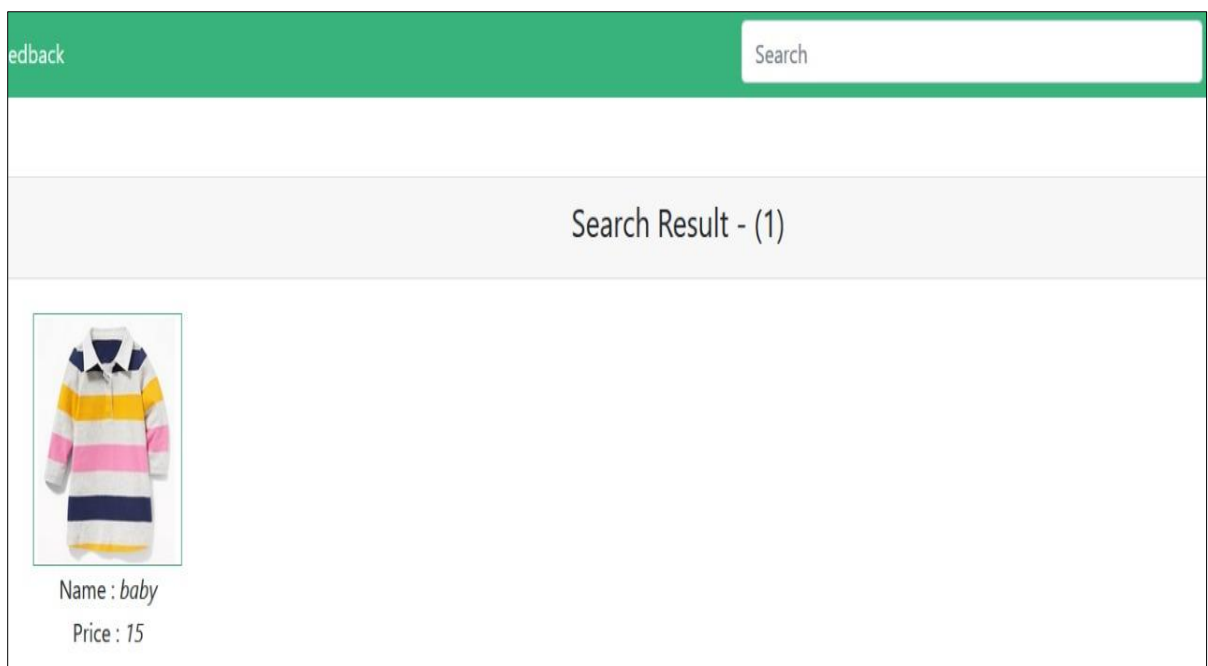
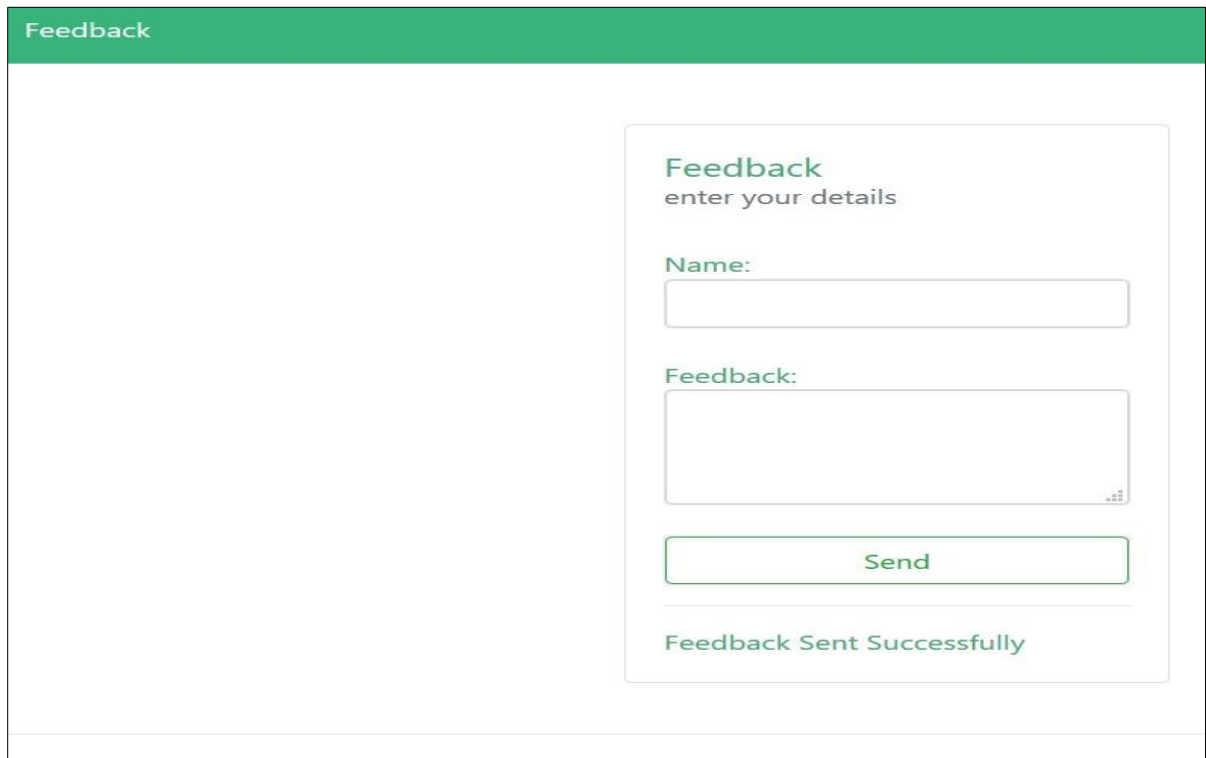


Fig. 39. The searching page

The user can send some feedback to the admin about the website as shown in the fig. 40.



The image shows a web page with a green header labeled 'Feedback'. Below the header is a white box containing a feedback form. The form has a title 'Feedback' and a subtitle 'enter your details'. It includes a 'Name:' label followed by a text input field, a 'Feedback:' label followed by a larger text area, a 'Send' button, and a confirmation message 'Feedback Sent Successfully'.

Fig. 40. The feedback page

#### 4.2. The used methods of testing

Software testing is the art of investigating software in a systematic fashion so as to find deep-rooted defects in it.

In addition to that, software testing also checks the quality and correctness of the software. After the errors are identified, it becomes easier to develop bug-free and user-friendly software [5].

As software applications get ever more complex and intertwined and with the large number of different platforms and devices that need to get tested.

It is more important than ever to have a robust testing methodology for making sure that software products/systems being developed have been fully tested to make sure they meet their specified requirements and can successfully operate in all the anticipated environments with the required usability and security [7].

**Table 1. The functional testing of users.**

| <b>No.</b> | <b>Function</b>                         | <b>Expected result</b>  | <b>Obtained result</b>  | <b>Result</b> |
|------------|---|---|---|---------------|
| 1.         | login to the website by the admin       | The admin can login to the website and access to the page of Administration | The admin can login to the website and access to the page of Administration | work          |
| 2.         | adding category by Administrator        | The admin can add category  | The admin can add category  | work          |
| 3.         | adding items by Administrator           | The admin can add items   | The admin can add items   | work          |
| 4.         | adding quantity by Administrator        | The admin can add quantity  | The admin can add quantity  | work          |
| 5.         | viewing order by Administrator          | The admin can view order  | The admin can view order  | work          |
| 6.         | viewing payment report by Administrator | The admin can view payment report   | The admin can view payment report   | work          |
| 7.         | making report by Administrator          | The admin can make report   | The admin can make report   | work          |
| 8.         | viewing feedback by Administrator       | The admin can viewing feedback  | The admin can viewing feedback  | work          |
| 9.         | viewing feedback by User                | The user can view feedback  | The user can view feedback  | work          |
| 10.        | login to the                            | The user can login  | The user can login  | work          |

| <b>No.</b> | <b>Function</b>   | <b>Expected result</b>  | <b>Obtained result</b>  | <b>Result</b> |
|------------|---|---|---|---------------|
|            | website by User   | to the website  | to the website  |               |
| 11.        | Viewing the details about some items and buys it by User. | The user can View the details about some items and buys it    | The user can View the details about some items and buys it    | work          |
| 12.        | Setting the number of quantity and buying for it by User. | The user can setting the number of quantity and buying for it | The user can setting the number of quantity and buying for it | work          |
| 13.        | Viewing the all orders by User.                           | The user can View the all orders                              | The user can View the all orders                              | work          |
| 14.        | Viewing the all payment by User.                          | The user can View the all payment                             | The user can View the all payment                             | work          |
| 15.        | for search  | The user can search about something by typing the name        | The user can search about something by typing the name        | work          |
| 16.        | sending feedback  | The user can send feedback                                    | The user can send feedback                                    | work          |



## CONCLUSION

The Internet has revolutionized the way we shop, because of the numerous advantages and benefits, more and more people these days prefer buying things online on the conventional method of going into stores, for these reasons that many people love online shopping, convenience is the biggest perk in the online shopping, where else can you comfortably shop at midnight while in your pajamas, more variety the choices online are amazing, one can get several brands and products from different sellers all in one place, price comparisons: comparing and researching products and their prices is so much easier online.

To achieve this target, it's important to build online shopping portal that could be used by all visitors for this web site to buy and sell any products.

This what we could do it by development of this project. For the reaching this goal we resolved following objectives

- 1) the problem statement and make the Comparative analysis between ASP.NET and PHP are studied;
- 2) the structure of the required database for the information website are developed;
- 3) the web-application were designed;
- 4) implemented the website;
- 5) the system were tested.

Future development and improvement.

For future development and improvement for the project could do by:

- 1) provide ability to send and receive email for user to see his orders and price;
- 2) improvement in home page design.

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