

Online Shopping System

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A Project
in
The Department
of
Computer Science and Engineering



Presented in Partial Fulfillment of the Requirements
For the Degree of Master of Science in Computer Science and Engineering

United International University

Dhaka, Bangladesh

December, 2018

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Approval Certificate

This project titled "**Online Shopping System**" submitted by **Masuma Sultana**, Student ID: **012151023**, has been accepted as Satisfactory in fulfillment of the requirement for the degree of Master of Science in Computer Science and Engineering on 05/12/2018.

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Declaration

This is to certify that the work entitled “**Online Shopping System**” is the outcome of the research carried out by me under the supervision of Prof. Dr. Mohammad Nurul Huda.

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Abstract

Now days Electronic Commerce (E-Commerce) is one of the most valuable business use in Internet world. The main theme of an e-commerce site is to buy and sell products in online.

This project handles customer needs through developing a website for Online Shopping System. The products are categorized in a well-organized catalog; so the customer can choose available products in the store.

For complete purchasing; a User can choose product and add it in shopping cart. Here one can change the item numbers as necessary. And amount will be changed automatically. User can also edit any order before the final ordering process. Backend database is MY SQL, Apache Server is in Middle tier and PHP as server side scripting language and a web browser as the front end client makes this system a 3-tier approach.

This project combines some technologies like multi-tier architecture, client-server side scripting techniques, implementation technologies such as Apache Server, PHP as Scripting language and MySQL as relational database. To develop an e-commerce website, these Technologies must be studied and understood.

This project implements the objective to develop a website which provides the facility to a consumer with a shopping cart and to know the technologies related to develop the application.

In this document I will try to discuss each of the related tools and technologies in this Online Shopping website.

Acknowledgement

At first, I am grateful to almighty Allah who is the source of all power and knowledge. And I like to express my deepest gratitude and respect to my supervisor Prof. Dr. Mohammad Nurul Huda, Director of the MSCSE Program, UIU. His help and guidance was outstanding and it would be totally impossible for us to complete this research without his sincere advice and help. Without his encouragement we would never think of a research of this kind.

I like to thank my parents for their cordial support and help. Finally I like to thank my friends who gave me moral support and helped me.

Table of Contents

List of Tables	vi
List of Figures	vii
1. Introduction.....	1
2. Background and Literature Review.....	2
2.1 Tables	3
2.2 Figures.....	5
2.3 Actors of This Project.....	15
3. Tools and Technologies.....	16
3.1: HTML.....	16
3.2: CSS.....	16
3.3: JavaScript.....	16
3.4: PHP.....	17
3.5: Database.....	17
3.6: Server.....	17
4. Results.....	18
4.1: Required Software for Installation	18
4.2: Running the Software.....	18
5. Conclusion and Future Works.....	21
6. References.....	22

List of Tables

Table 1: admin 3

Table 2: products 3

Table 3: customer.....3

Table 4: customer_cart.....4

Table 5: orders.....4

Table 6: subscriber.....4

List of Figures

Figure 2.1: Use case Diagram	5
Figure 2.2: Activity Diagram.....	6
Figure 2.3: Data Flow Diagram: Add Item to Cart	6
Figure 2.4: Data Flow Diagram: Add Product/Brand/Item	7
Figure 2.5: Data Flow Diagram: Register.....	7
Figure 2.6: Data Flow Diagram: Login.....	7
Figure 2.7: User Interface: Home Page	8
Figure 2.8: User Interface: Customer Login.....	9
Figure 2.9: User Interface: Admin Login.....	9
Figure 2.10: User Interface: Shopping Cart.....	10
Figure 2.11: User Interface: Terms of Use and Service.....	10
Figure 2.12: User Interface: Inventory List.....	11
Figure 2.13: User Interface: Edit Inventory Item.....	11
Figure 2.14: User Interface: Order List.....	12
Figure 2.15: User Interface: Subscriber List.....	12
Figure 2.16: User Interface: New User Registration.....	13
Figure 2.17: User Interface: Edit User.....	13
Figure 2.18: User Interface: Product.....	14
Figure 2.19: User Interface: Contact... ..	14
Figure 4.1: Running the Software: Customer Login.....	18
Figure 4.2: Running the Software: Product Category (Watch).....	19
Figure 4.3: Running the Software: Shopping Cart.....	19
Figure 4.4: Running the Software: Order List.....	20

Chapter 1

Introduction

Online Business is a rapid growing platform in business area. E-commerce provides such kind of Business. Now a day's many business houses implements web sites which provide functionality in commercial transactions online.

Online shopping has become a most popular phenomenon now days. The goal of this project is to provide a complete e-commerce store where a consumer can buy any product (such as Fashion Accessories, Home Decor etc.). And it gives the total comfort and pleasure in the whole process from giving order to get the item delivered.

A virtual store on the Web; where customers can view and choose products from catalog as their needs defines as an online store. Here one can view products and if anyone wants to buy product(s) then they have to be a registered customer. To be a registered customer; one have to fill up the registration form. In the registration form the basic information and the information for transaction is needed. These customers can select any kind of product item(s) from catalog and add them in shopping cart. Items in the shopping cart represent the order of a customer. The shopping process is done by the order placement of a customer. Then product(s) delivered to the customer(s) as per customer's requirement and payment method.

Chapter 2

Background and Literature Review

This project Background includes:

- Tentative work time schedule of 9 To 5. While the shopping mall remains open from 10 to 8.
- 24 hour open hence in market holidays.
- In the year of 2009 Bangladesh Bank approved online payment and the use of Debit and Credit card is approved in 2013 for online payment.

Literature Review includes:

- **High Interactivity** - Increased availability of information provided in the web site helps the customers to make better purchasing decision.
- **Perceived risk** – At time of online purchasing; customers can face some risk. For this reason they feel hesitate about if the displayed product in website will be same as the actual product.
- **Purchase Intention** – Customers purchase more knowing the feedback and user experience of a product.
- **Time saving** – Purchasing online saves time and energy.
- **Enjoyment and excitement** – Some people enjoy shopping offline while others enjoy shopping online. In online it depends on in the purchasing and delivery process.

2.1 Tables

Steps of creating a new table

Step #	Instruction
CREATE TABLE admin	CREATE TABLE admin (id int(11) NOT NULL, username varchar(24) NOT NULL UNIQUE, password varchar(24) NOT NULL, last_log_date date NOT NULL, PRIMARY KEY (id));
CREATE TABLE products	CREATE TABLE products (id int(11) NOT NULL, product_name varchar(255) NOT NULL UNIQUE, price float NOT NULL, details text not null, category varchar(16) NOT NULL, subcategory varchar(16) NOT NULL, date_added date NOT NULL, PRIMARY KEY (id));
CREATE TABLE customer	CREATE TABLE customer (id int(11) NOT NULL, login varchar(12) NOT NULL UNIQUE, password varchar(8) NOT NULL, name varchar(40) NOT NULL, mobile varchar(13) NOT NULL, security text NOT NULL, securityanswer text NOT NULL, email varchar(50) NOT NULL, address varchar(100) NOT NULL, city varchar(20) NOT NULL, state varchar(20) NOT NULL, pin varchar(20) NOT NULL, PRIMARY KEY (id));
CREATE TABLE customer_cart	CREATE TABLE customer_cart (cartid int(11) NOT NULL, productid int(11) NOT NULL, customerid int(11) NOT NULL, product_name varchar(255) NOT NULL

	UNIQUE, details text NOT NULL, price float NOT NULL, quantity int(11) NOT NULL, date_added date NOT NULL, PRIMARY KEY (cartid));
CREATE TABLE orders	CREATE TABLE orders (order_id int(11) NOT NULL, product_id int(11) , order_date date , securityanswer text , price decimal(10,2) , customer_id int(11), order_amount float , order_transaction varchar(255), order_status varchar(255), order_currency varchar(255), PRIMARY KEY (order_id));
CREATE TABLE subscriber	CREATE TABLE subscriber (id int(11) NOT NULL, email varchar(25), PRIMARY KEY (id));

2.2 Figures

Figure 2.1 is a Use case Diagram which represents the graphical view of all actors.

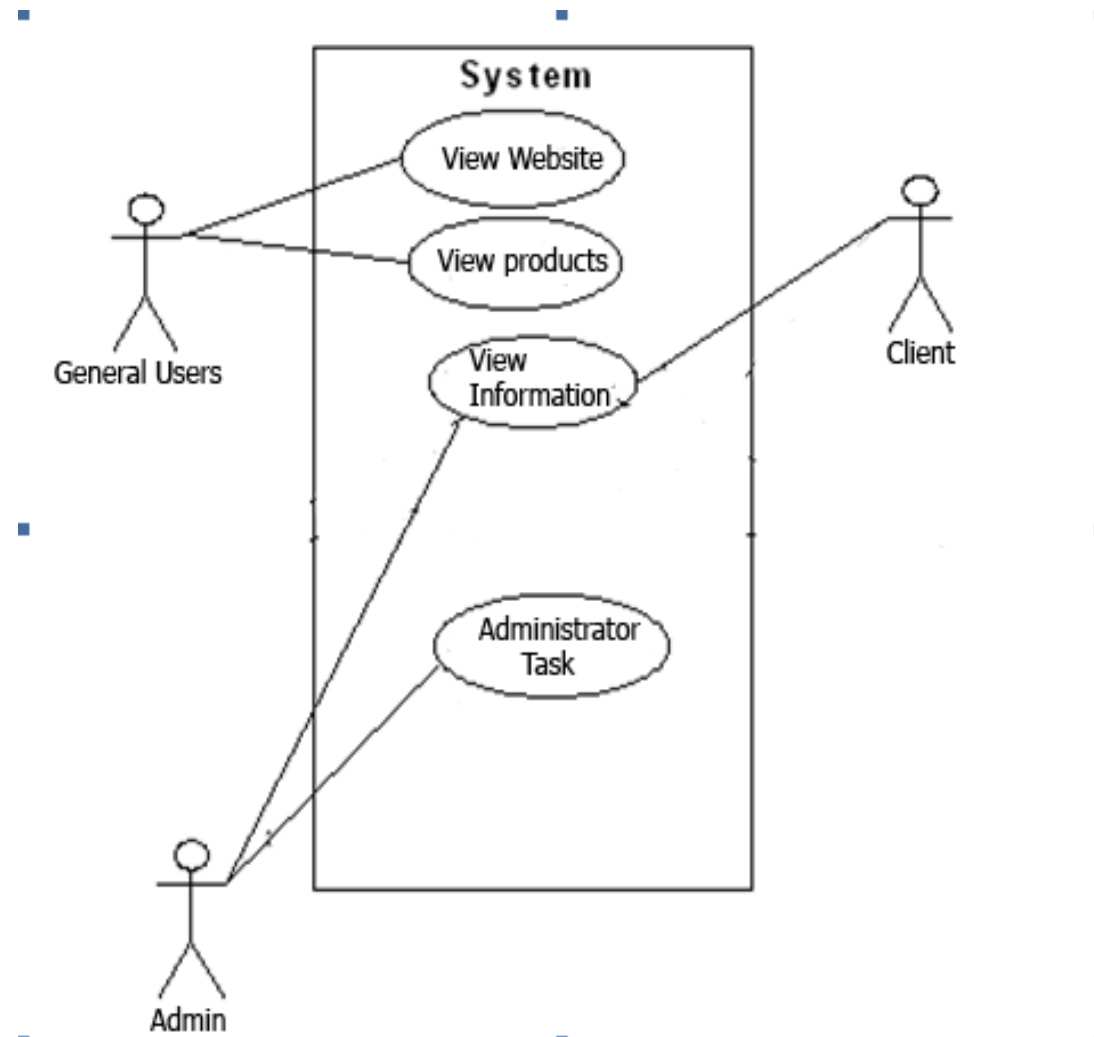


Figure 2.1: Use Case diagram

Figure 2.2 is an activity diagram, which represents the work flow of project.

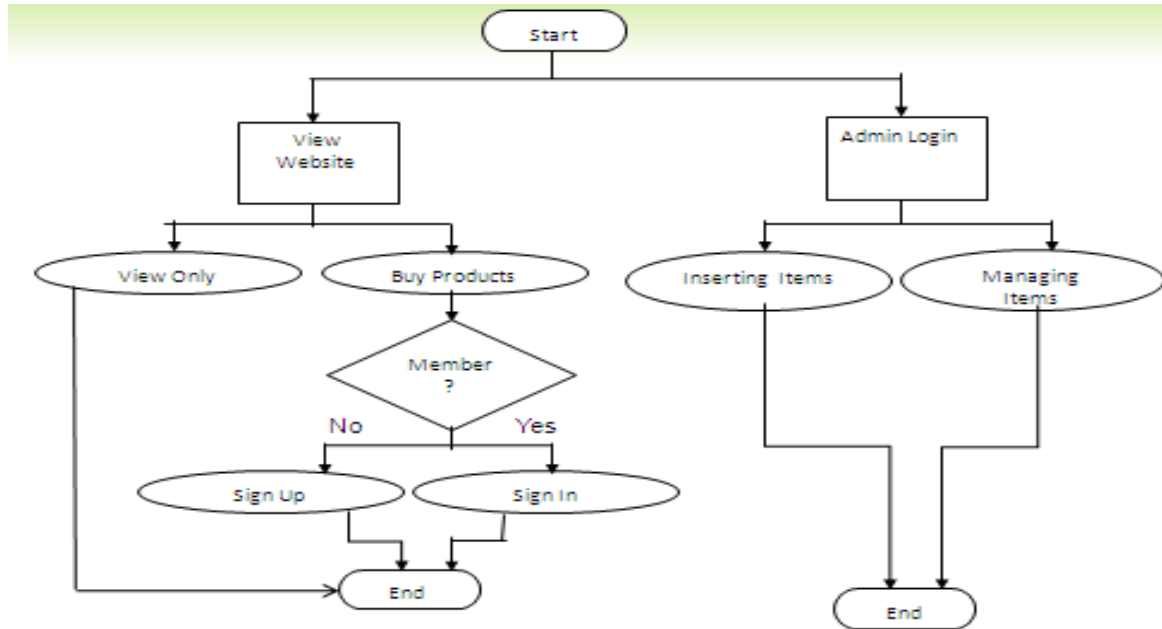


Figure 2.2: Activity Diagram

Figures 2.3 to 2.6 represents Data Flow Diagrams (DFDs) which show graphical representation of data, where the input and output data and the data processing is illustrated. However, this presentation does not illustrate about the operation, sequence and timing of process(s). The figures show the DFD of Online Shopping System.

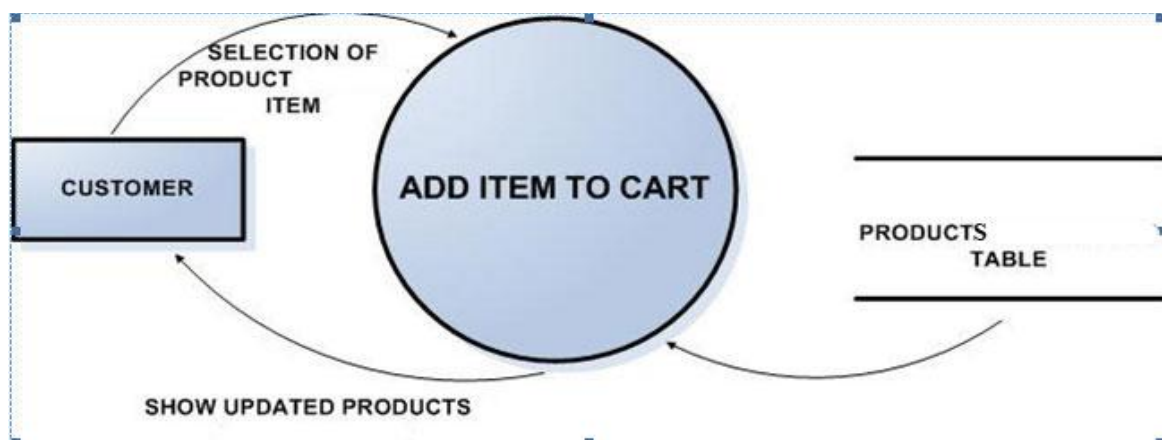


Figure 2.3: Data Flow Diagram: Add Item to Cart



Figure 2.4: Data Flow Diagram: Add Product/Brand/Item

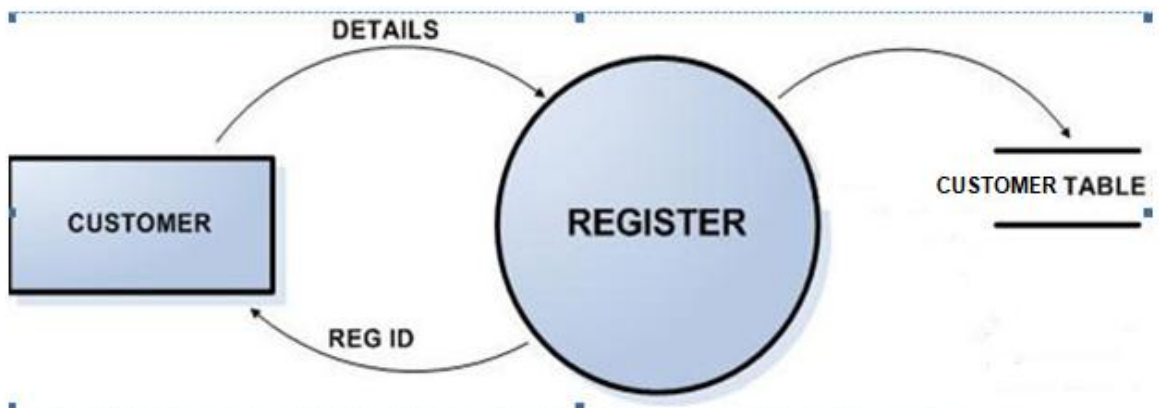


Figure 2.5: Data Flow Diagram: Register

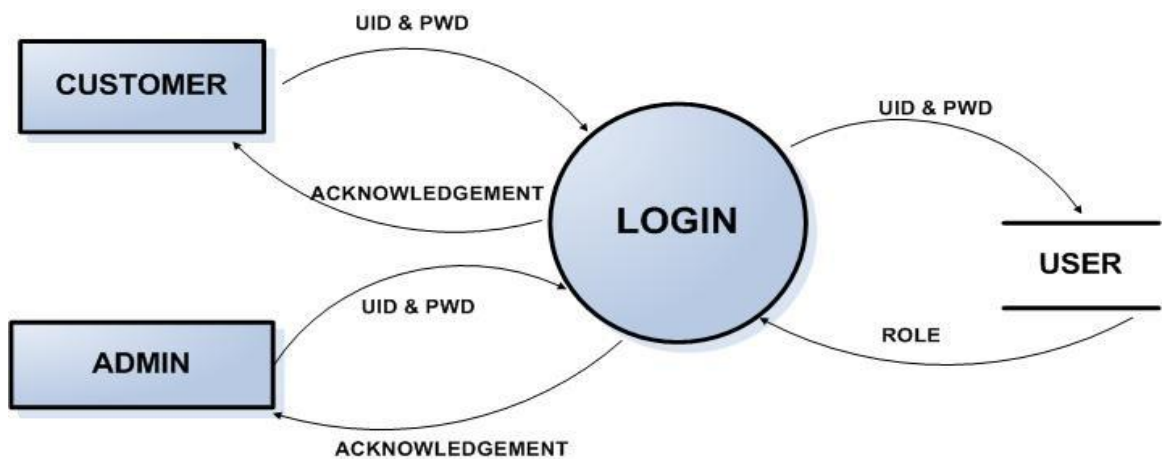


Figure 2.6: Data Flow Diagram: Login

Figure 2.7 to 2.19 represents User Interface. In this project user interface designed more logical. The user interface of OSS is designed in such a way that anyone can show the latest products of InOrbit after opening home page.

Everyone can know about the company information and can be a member on providing information. Any registered user can buy products on request after choosing the product. The site maintains a list of all the requests which submitted by a single user.

Home page:

This page allows user to view latest products any of OSS. Also one can see company information, User agreement, Privacy policy, Categories, Contact Information

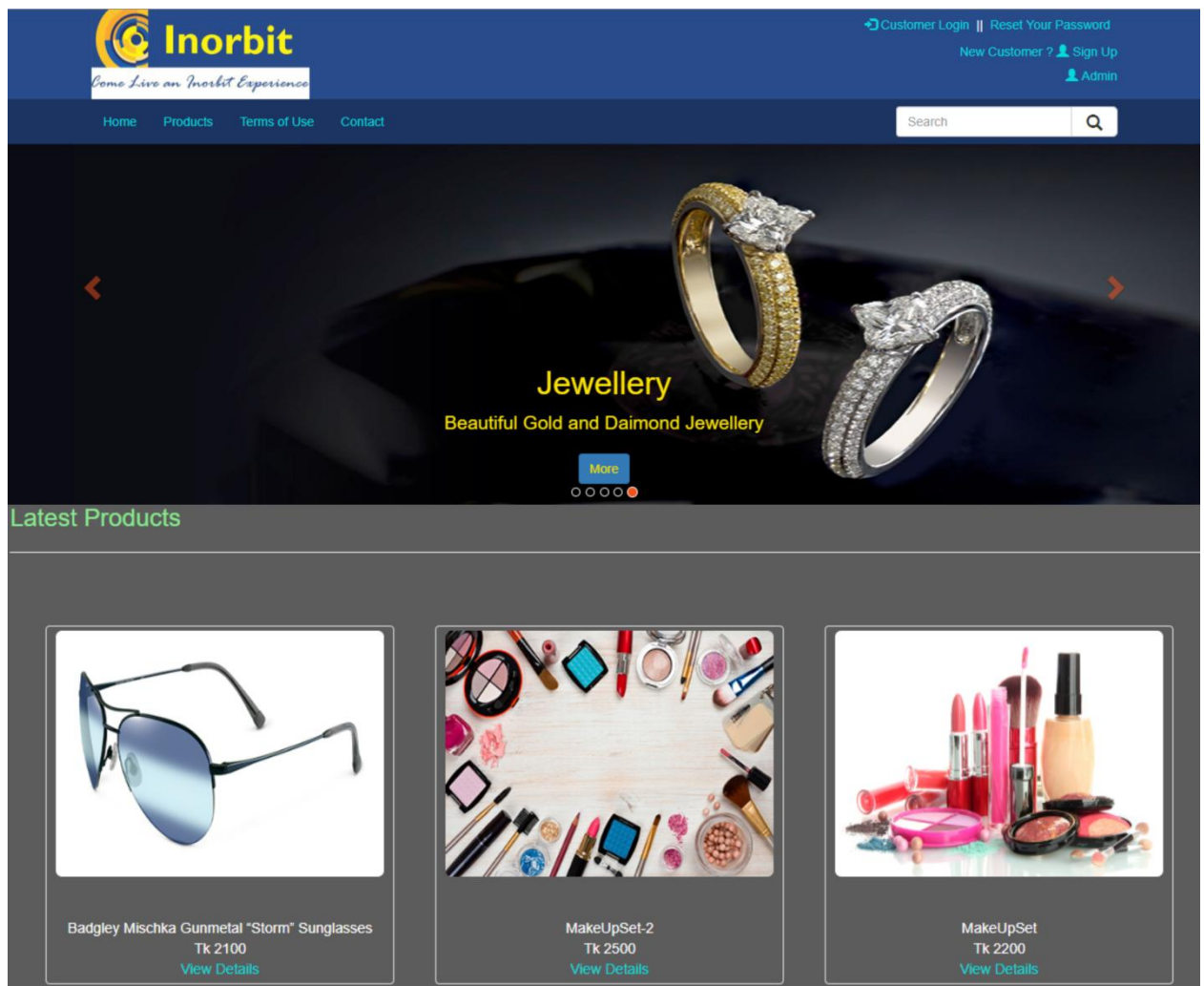
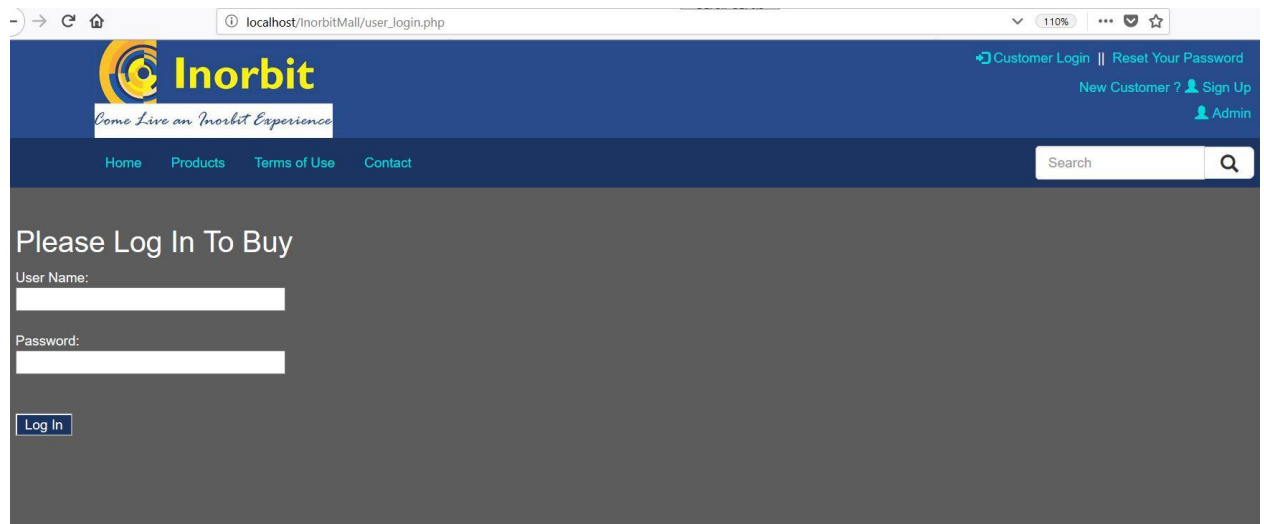


Figure 2.7: User Interface: Home page.

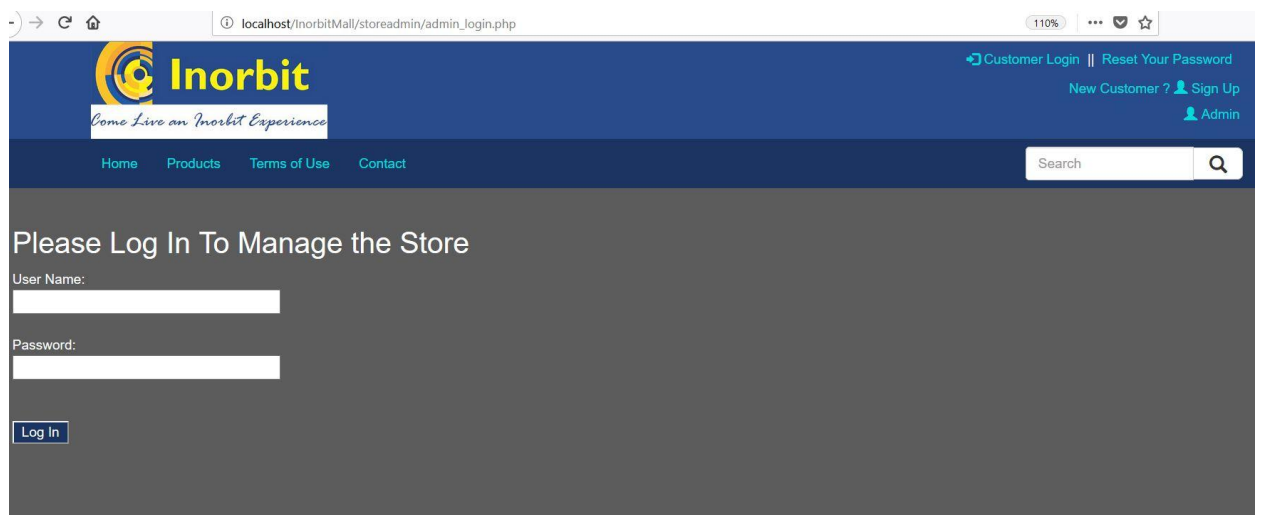
Login page:

The login page has two types – Admin and Customer .The Customer login page for registered user. And the Admin login page for those people who are in admin level of this organization.



The screenshot shows a web browser at the URL `localhost/inorbitMall/user_login.php`. The page features a dark blue header with the Inorbit logo and tagline "Come Live an Inorbit Experience". Navigation links include Home, Products, Terms of Use, and Contact. A search bar is located on the right. The main content area is titled "Please Log In To Buy" and contains a login form with fields for "User Name:" and "Password:", followed by a "Log In" button. In the top right corner, there are links for "Customer Login", "Reset Your Password", "New Customer ? Sign Up", and "Admin".

Figure 2.8: User Interface: Customer Login



The screenshot shows a web browser at the URL `localhost/inorbitMall/storeadmin/admin_login.php`. The page layout is identical to the customer login page, with the same header, navigation, and search bar. The main content area is titled "Please Log In To Manage the Store" and contains a login form with fields for "User Name:" and "Password:", followed by a "Log In" button. The top right corner links remain the same: "Customer Login", "Reset Your Password", "New Customer ? Sign Up", and "Admin".

Figure 2.9: User Interface: Admin Login

Shopping Cart:

Any user can choose his products from the products lists .After choosing the products one can add them to cart.

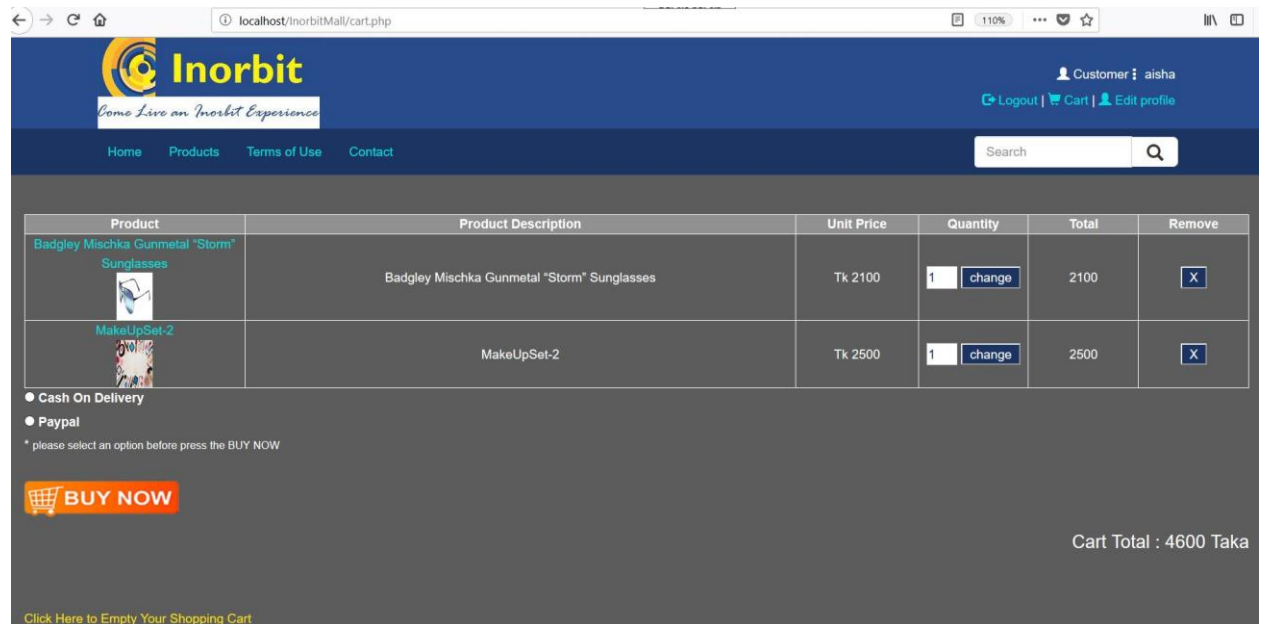


Figure 2.10: User Interface: Shopping Cart

Terms of Use and Service:

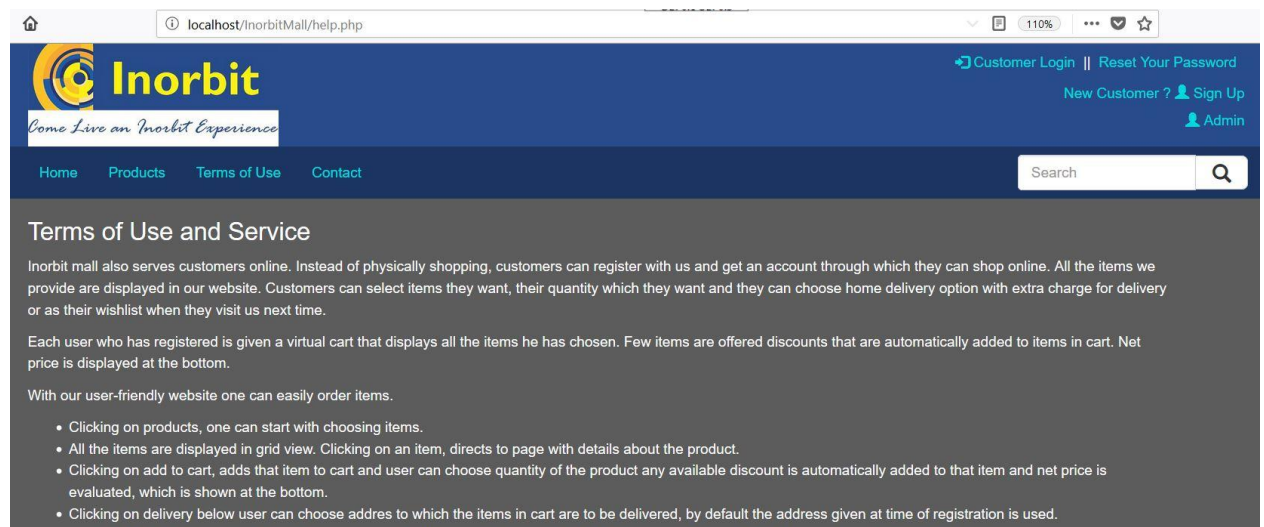


Figure 2.11: User Interface: Terms of Use and Service

Inventory Management:

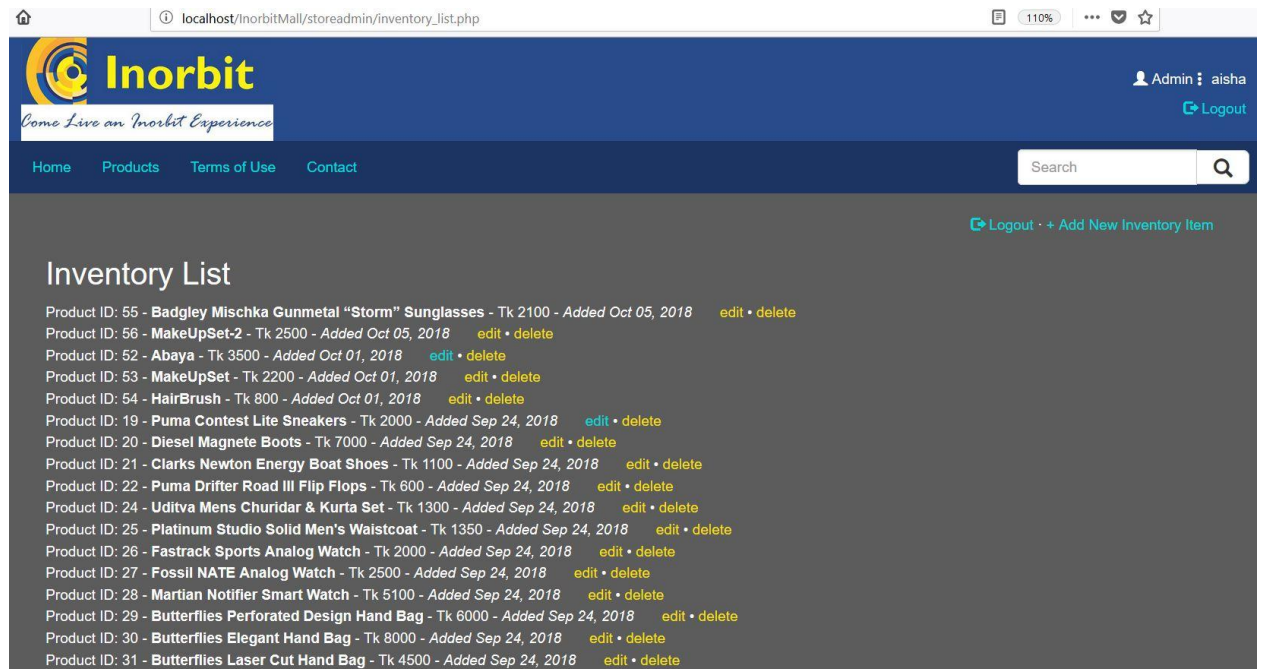


Figure 2.12: User Interface: Inventory List

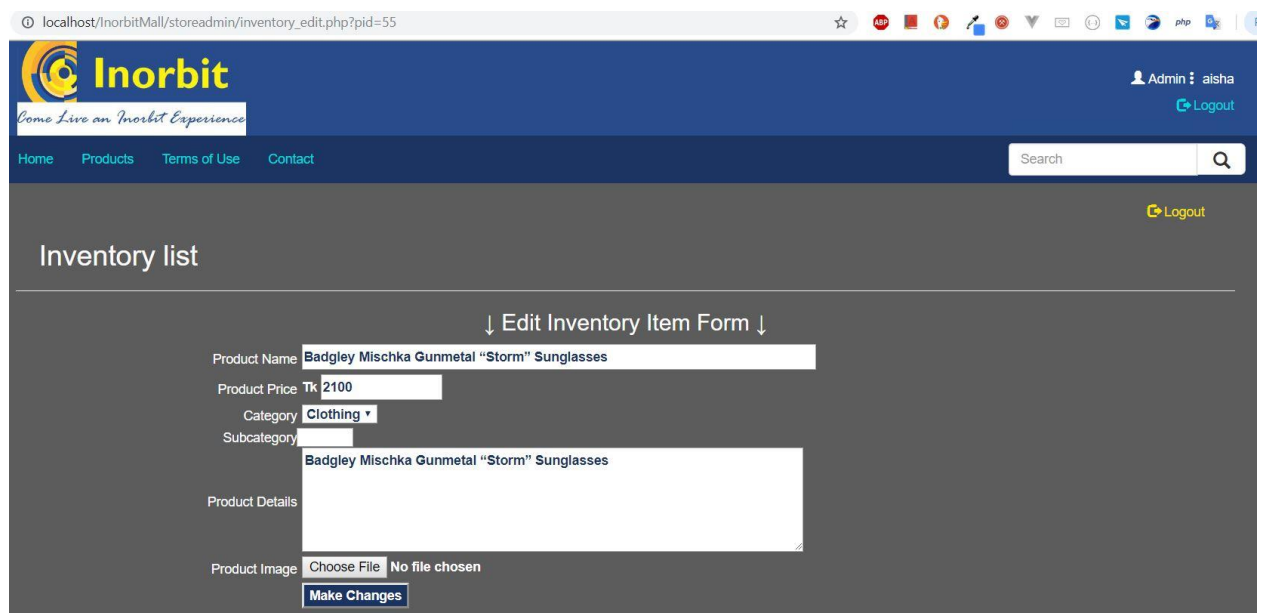


Figure 2.13: User Interface: Edit Inventory Item

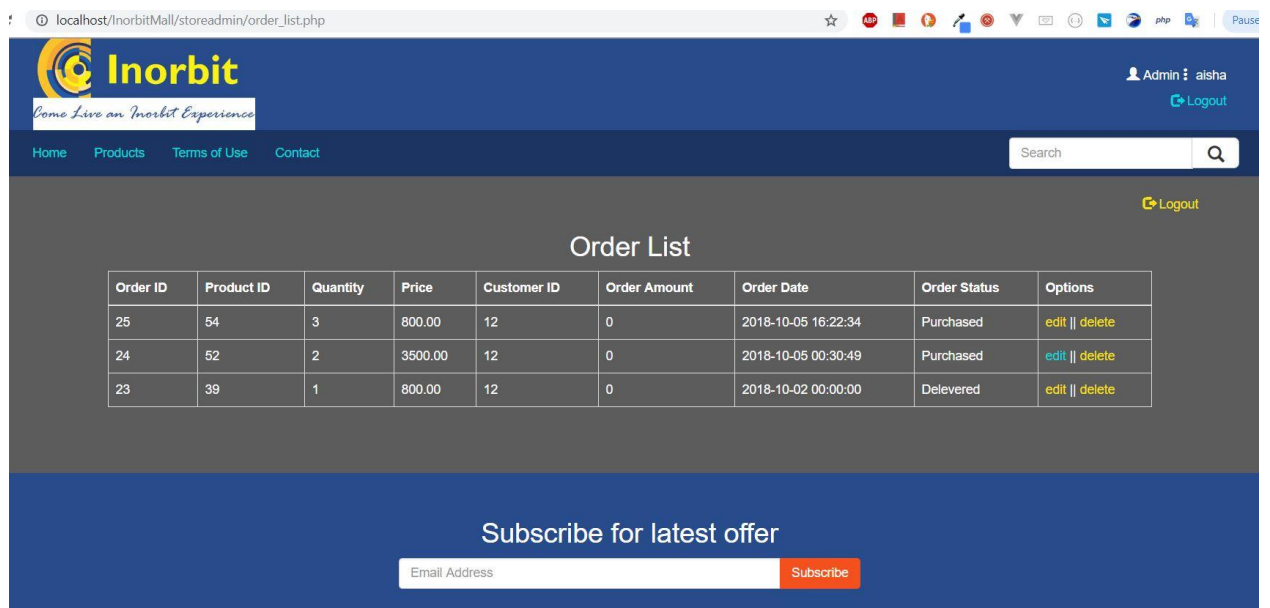


Figure 2.14: User Interface: Order List

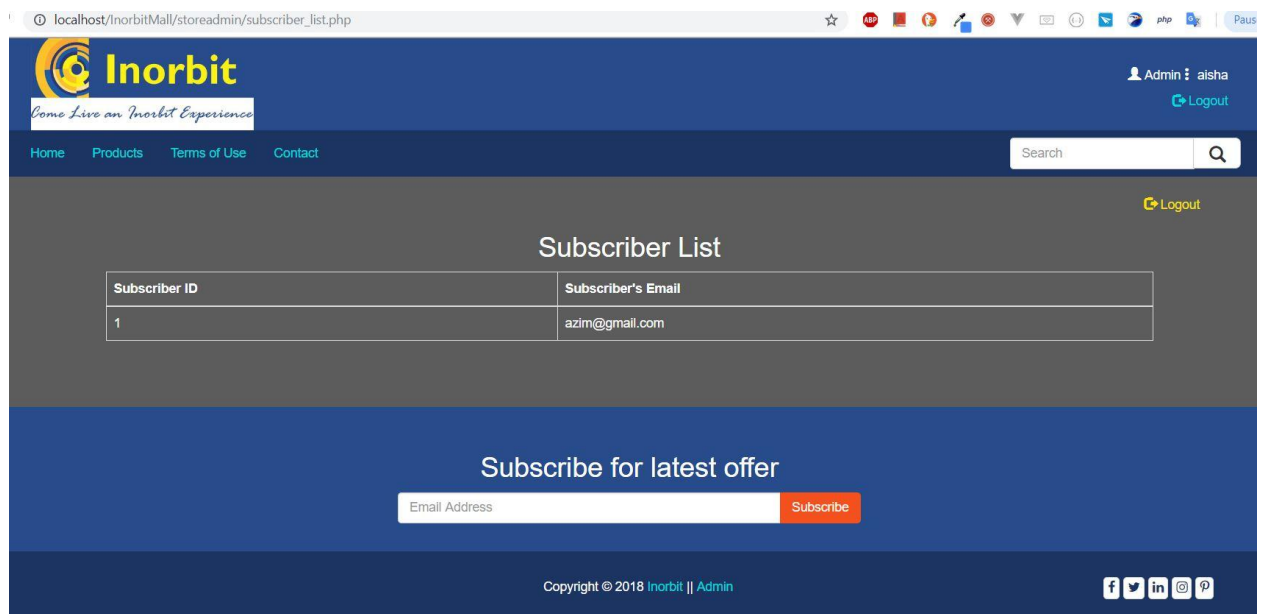


Figure 2.15: User Interface: Subscriber List

localhost/InorbitMall/storeadmin/user_list.php

Inorbit
Come Live an Inorbit Experience

Admin: aisha
Logout

Home Products Terms of Use Contact

Search

↓ New User Registration ↓

Full Name

Login

Password

Confirm Password

Security Question

Answer

Mobile

Email Id

Address

City

State

PinCode

Register Now

Figure 2.16: User Interface: New User Registration

localhost/InorbitMall/storeadmin/user_edit.php?pid=3

Inorbit
Come Live an Inorbit Experience

Admin: aisha
Logout

Home Products Terms of Use Contact

Search

Logout

↓ Edit User ↓

Full Name

Login

Security Question

Answer

Mobile

Email Id

Address

City

State

PinCode

Change Now

Figure 2.17: User Interface: Edit User

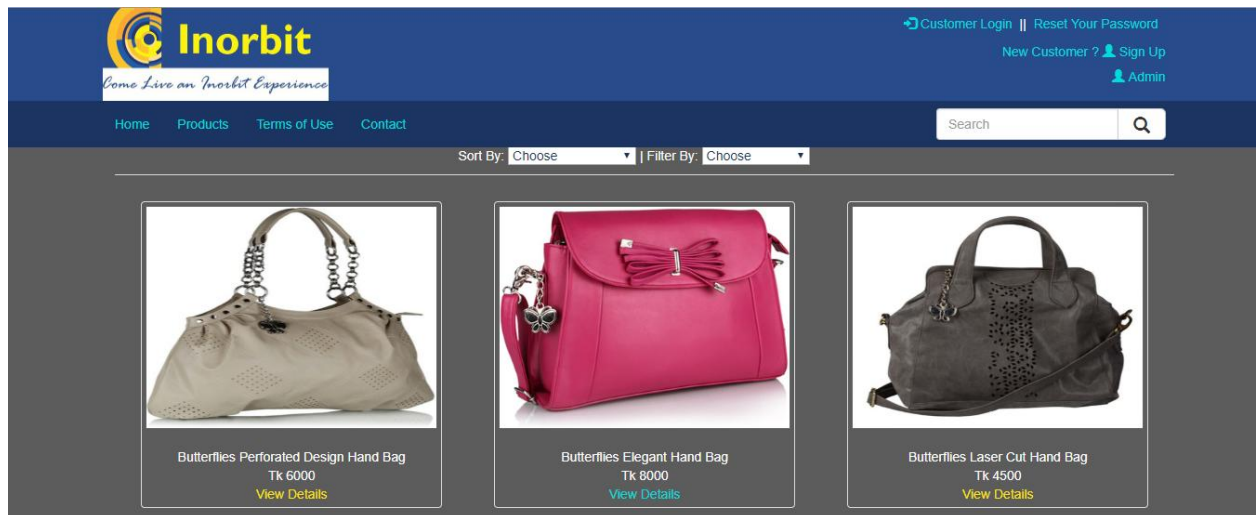


Figure 2.18: User Interface: Product

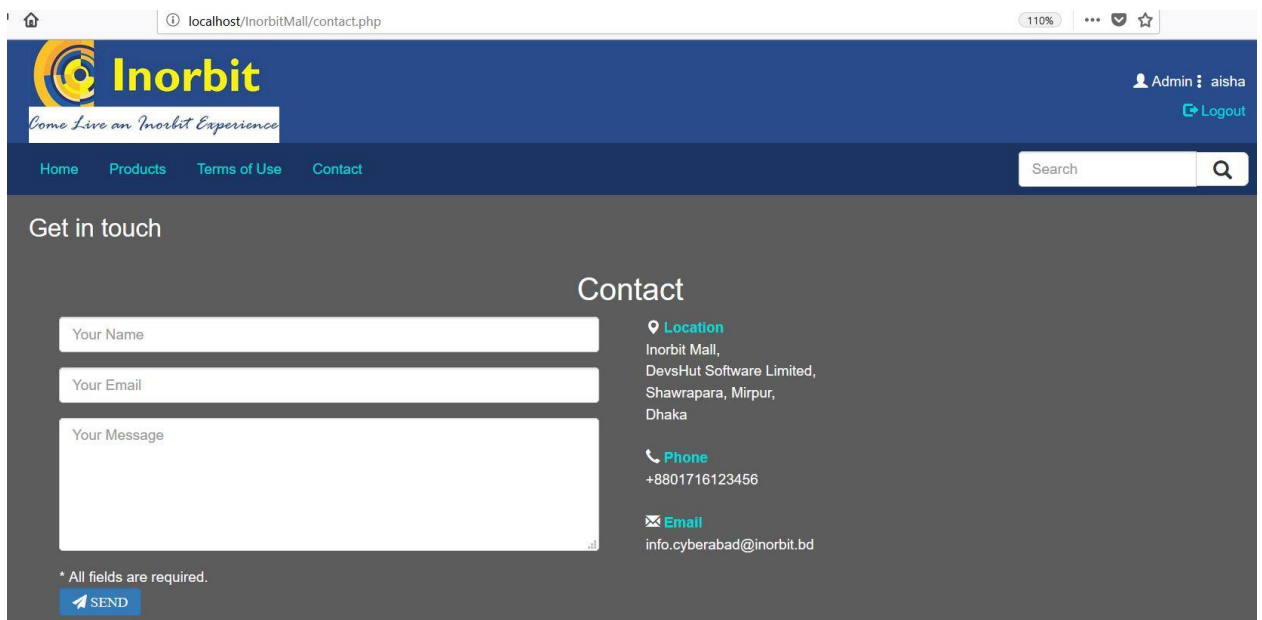


Figure 2.19: User Interface: Contact

2.3 Actors of this Project:

Admin:

- Only admin can access and manage inventory items.
- When the store of products is finished then admin sets the product as inactive before restoring items.

Users:

- All users can view the site and products.
- Users are allowed to know the company information.
- Users may view the privacy policy and user agreement.

Customers:

- When a user wants to buy a product; then she/he has to fill up the user registration form to be an authorized customer.
- Only authorized customers are allowed to buy products for safe transactions.

Chapter 3

Tools and Technologies

This project has been used the following tools and technologies:

3.1 HTML:

A language for describing web pages is HTML.

- Hyper Text Markup Language (HTML)
- It is not a programming language, it is a markup language
- A set of markup tags combines to a markup language

3.2 CSS:

A styling element which stands for **Cascading Style Sheets** is **CSS**

- ☐ It defines the display style of HTML elements.
- ☐ These Style Sheets can save a lot of work space and time.
- ☐ CSS files makes ease of maintenance in styling.

3.3 JavaScript:

A server side scripting language, it works in all browsers, such as Internet Explorer, Firefox, Chrome, Opera, and Safari. JavaScript adds interactivity to HTML pages. This is integrated directly into HTML pages. This is an interpreted language i.e. the scripts execute without primary compilation. This is used mostly for adding validation. Also it can add many magical effects to the selected objects in a website. This is license free.

3.4 PHP:

Hypertext Preprocessor (PHP) technology; which is used for dynamic web development. PHP technology initiates the random development in platform independent web applications. This technology restricts content management for the naive users. And also it enables the designers to make changes in page layout in the dynamic content of the pages of a website.

This kind of scripts is executed on the server.

- Supports databases like (MySQL, Informix, Oracle, Sybase, PostgreSQL, Generic ODBC, etc.)
- This is an open source software

3.5 Database: In this project MySQL is used as backend database. Because, MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. As a Relational Database Management System (RDBMS) MySQL runs as a server; providing multi-user access to a number of databases.

MySQL is a name in the open source database software, which has Billions of copies of its software distributed throughout its history. For its superb performance in speed, reliability, and ease of maintenance and use, MySQL has gains popularity in choice for Web, Web 2.0, SaaS, ISV, Telecom companies and forward-thinking corporate IT Managers. It eliminates the major problems associated with downtime, maintenance and administration for modern, online applications.

As MySQL saves time and money most of the famous organizations are using this tool as their backend database; Facebook, Twitter, Wikipedia are some of the names in them.

3.6 Server:

In this project we used Apache as a web server, which is cross platform open source web server which is developed by the Apache Software Foundation (ASF). It provides a smooth web server environment for PHP code to run.

Chapter 4

Results

4.1 Required software for Installation: To work within this project we used Dreamweaver IDE to write & edit code and apache server as web server.

4.2 Running the Software: The main advantage of working in web is that simply a web browser is needed to run the software. Followings are some screenshots which represents the navigation of this project.

At first a registered customer will login to the site from the customer login page.

The screenshot shows the Inorbit website's customer login interface. The header is dark blue with the Inorbit logo on the left, which includes a stylized 'C' and the tagline 'Come Live an Inorbit Experience'. On the right side of the header, there are links for 'Customer Login', 'Reset Your Password', 'New Customer ? Sign Up', and 'Admin'. Below the header is a navigation bar with links for 'Home', 'Products', 'Terms of Use', and 'Contact', along with a search bar. The main content area has a dark grey background and features the text 'Please Log In To Buy'. Below this text are two input fields: 'User Name:' with the value 'ibnmahmud' and 'Password:' with masked characters '****'. A 'Log In' button is positioned at the bottom left of the login form.

Figure 4.1: Running the Software: Customer Login

Then the customer will select any kind of product(s) from the product section.

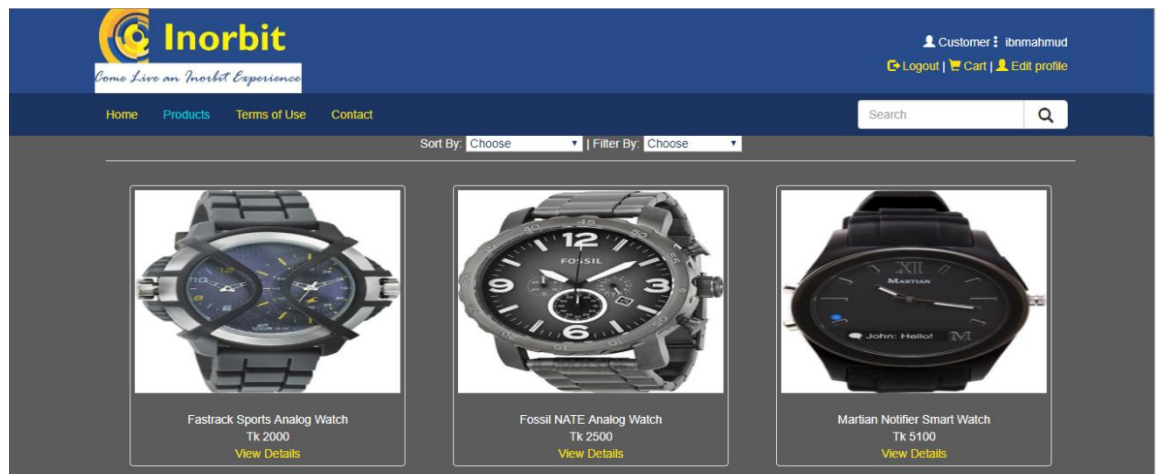


Figure 4.2: Running the Software: Product category (Watch)

By adding the product(s) in shopping cart customer can order any kind and amount of product(s) from store.

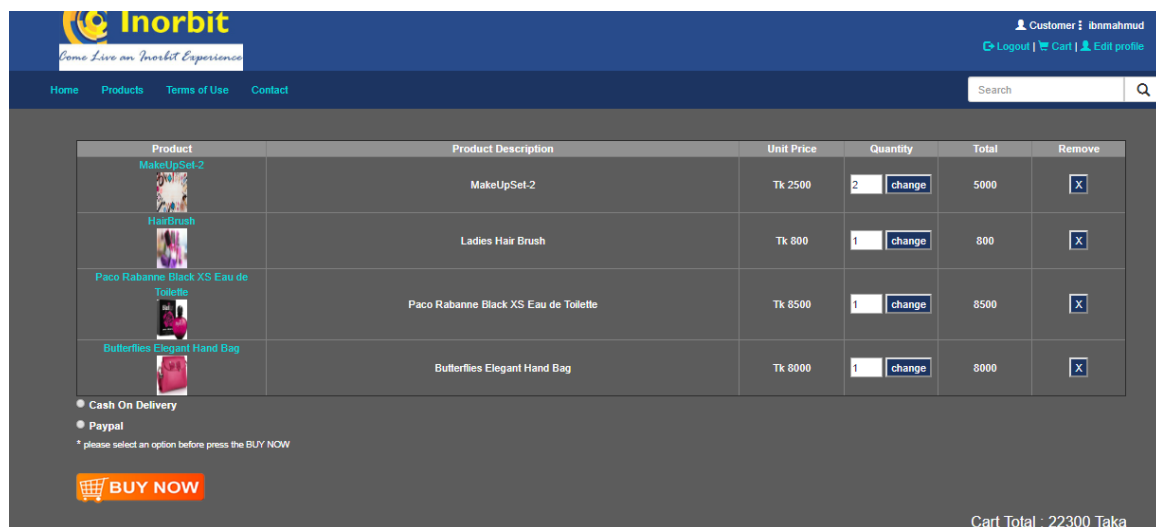
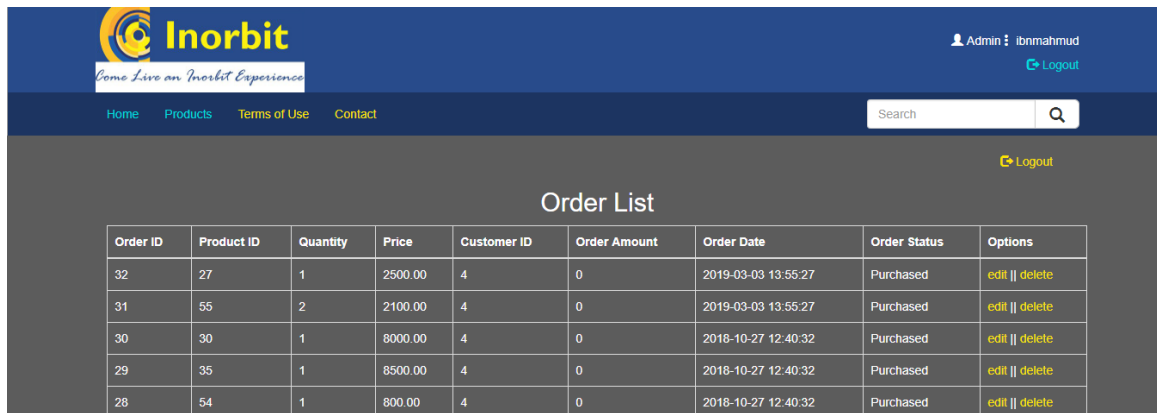


Figure 4.3: Running the Software: Shopping Cart

An admin can view the orders from order list in admin access. And provide products as per customer order.



Order ID	Product ID	Quantity	Price	Customer ID	Order Amount	Order Date	Order Status	Options
32	27	1	2500.00	4	0	2019-03-03 13:55:27	Purchased	edit delete
31	55	2	2100.00	4	0	2019-03-03 13:55:27	Purchased	edit delete
30	30	1	8000.00	4	0	2018-10-27 12:40:32	Purchased	edit delete
29	35	1	8500.00	4	0	2018-10-27 12:40:32	Purchased	edit delete
28	54	1	800.00	4	0	2018-10-27 12:40:32	Purchased	edit delete

Figure 4.4: Running the Software: Order List

From this Online Shopping Store shopping is done in this process.

Chapter 5

Conclusion and Future Works

5.1 Conclusion

This project tried to put in all the information that is needed in this project, which will help the customers and admin to operate their financial transaction. It follows the complete Software Development Life Cycle (SDLC). To calculate the Work Breakdown Structure (WBS) it follows the COCOMO Model. Finally, this project is a complete one that will provide the opportunity for the customers to buy products conveniently and the employee to manage the items and execute transaction.

5.2 Future Works

For the moment this project has been used by computer network and Internet but in future this application can be used via Mobile Phone, Tab and I-Phone devices.

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