

iSHOP: A VOICE ENABLED ERP SYSTEM FOR SEARCHING PRODUCTS



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

DECEMBER 2019

iSHOP: A VOICE ENABLED ERP SYSTEM FOR SEARCHING PRODUCTS

By

Md. Mehedi Hasan Anik

ID: 151-15-353

This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

Supervised By

Md. Nazmul Hoq

Lecturer&Associate Head

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

DECEMBER 2019

APPROVAL

This Project/internship titled “iSHOP: A voice enabled ERP system for searching products” submitted by Md. Mehedi Hasan Anik, ID No: 151-15-353 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on December 10, 2019.

BOARD OF EXAMINERS

Dr. Syed AkhterHossain
Professor and Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Chairman

Dr. S M Aminul Haque
AssociateProfessor& Associate Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Saif Mahmud Parvez
Lecturer

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Dr. Mohammad ShorifUddin
Professor

Department of Computer Science and Engineering
Jahangirnagar University

External Examiner

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md. Nazmul Hoq, Lecturer & Associate Head, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:



Handwritten signature of Md. Nazmul Hoq, dated 5/12/16.

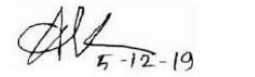
Md. Nazmul Hoq

Lecturer & Associate Head

Department of CSE

Daffodil International University

Submitted by:



Handwritten signature of Md. Mehedi Hasan Anik, dated 5-12-19.

Md. Mehedi Hasan Anik

ID: 151-15-351

Department of CSE

Daffodil International University

ACKNOWLEDGMENT

First, I express my heartiest thanks and gratefulness to Almighty God for His divine blessing makes me possible to complete the final year project/internship successfully.

I'm really grateful and wish my profound my indebtedness to **Md. Nazmul Hoq**, Lecturer & Associate Head, **Department of CSE, Daffodil International University**, Dhaka. Deep Knowledge & keen interest of my supervisor in the field of "Web Application Development" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to **Head, Department of CSE**, for his kind help to finish my project and also to other faculty member and the staff of CSE department of Daffodil International University.

I would like to thank my entire course mate in Daffodil International University, who took part in this discussion while completing the course work.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

ABSTRACT

The project “**iSHOP: A Voice Enabled ERP System for Searching Products**” is a voice search enabled online shopping platform for buying or selling product where anyone can sign up as a Customer and buy product from the webpage. iSHOP provides two different services for Customers and Sellers. The purpose of this project is to develop and implement an online shopping system for Business to Business and Business to Customer platform. Using this online shopping system searching products is easiest and fastest than before. Voice search feature included more comfortable shopping through this online shop. Customer could also comments on every available product on this shop. To place an order customer have to add to cart, proceed to checkout and place order or add to wish list for later order. There are different blog posts for Customer to view and comment, which is created by the admin. There are three types of user, Customer, Admin and Super admin. All admin are seller, they can add products, edit product’s details, delete products, and create blog post under any product. Super admin can control the entire system, can take any actions, anywhere in this system. Super admin normally add admin, delete admin and rest of the action is same as admin or seller

TABLE OF CONTENTS

CONTENTS	PAGE
Title page	i
Board of examiners	ii
Declaration	iii
Acknowledgement	iv
Abstract	v
Table of content	vi -viii
List of figures	viii
CHAPTER	
CHAPTER 1: INTRODUCTION	1-2
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	1
1.4 Expected Outcome	2
CHAPTER 2: BACKGROUND	3-4
2.1 Introduction	3
2.2 Related Works	4
2.3 Comparative Studies	4
2.4 Scope of the Problem	4
CHAPTER 3: REQUIREMENT SPECIFICATION	5-9
3.1 Requirement Collection and Analysis	5
3.2 Use Case Modeling and Description	8
3.3 Logical Data Model	9
3.4 Design Requirements	9
CHAPTER 4: DESIGN SPECIFICATION	10-16
4.1 Front-End Design	10
4.2 Back-End Design	13
4.3 Implementation Requirements	15

CHAPTER 5: IMPLEMENTATION AND TESTING	16-17
5.1 Implementation of Database	16
5.2 Implementation of Front-End Design	16
5.3 Implementation of Interactions	17
5.4 Testing Implementation	17
5.5 Test Results and Reports	17
CHAPTER 6: CONCLUSION AND FUTURE SCOPE	18-19
6.1 Introduction	18
6.2 System Development	18
6.3 Scope for further development	19
References	20
Appendix A	21-22
Appendix B	23-24

LIST OF FIGURES

FIGURES PAGE NO

3.3.1.1: Use Case Diagram	8
3.4.1.1: ER Diagram	9
4.1.1.1: Home Page	10
4.1.2.1: Featured Products	11
4.1.3.1: Clients Testimonial	11
4.1.4.1: Latest Product Blog Post	12
4.1.5.1: Footer	12
4.2.1.1: Customer Sign Up	13
4.2.2.1: Customer Login	13
4.2.3.1: Admin Login	14
4.2.4.1: Admin Profile	14
4.2.5.1: Add Admin	15
4.2.6.1: Add Category	15
4.2.7.1: Add Product	15
5.1.1.1: Tables for the total database design	16

Chapter 1

Introduction

1.1 Introduction

iSHOP: A voice enabled ERP system for searching products is an online shopping platform where people can search products by just saying their needs. Now customers have more efficiency on buying something from online using this online shopping platform. This platform comes with an innovative feature called **voice searching** capability. The system will listen you and show you the products you are looking for in a second. To buy product from this shop customer have to sign up first. **iSHOP** has three types of user, Customer, Admin and Super Admin. Admin can be created by the super admin where all admins are seller. All admin can add product on this shop and get order in admin's dashboard.

1.2 Motivation

The total idea of that project began through a long survey about e-commerce and online service selling concept. Between the title defense and pre phase I my supervisor inspired how to make a same thing differently and I took the chance of developing an online shop with the feature of voice searching.

1.3 Objective

With the objective of accomplishing this target, I will continue update this project under my maintenance and include these features bellow:

- **User friendly User Interface**

My main goal of development iSHOP is to improve the user's satisfaction on using experience an ERP system by providing a unique and some useful features, I hope the users will be satisfied with the system's services and products. Its easy interface will increase user's productivity.

- **Improved Product Searching**

Using this web application Customer can interact with their voice, speak to this virtual shop for searching products and easily can order in a while.

1.4 Expected Outcome

I could imagine after the feasibility case study of my proposed project that, iSHOP would be one of the unique and modern technology ERP system for searching products, order products and for admin it will be very easy and smart to use and start selling products.

1.4.1 Voce Search:

Using this web application customer can interact with their voice, speak to this virtual shop for searching products and easily can order in a while.

1.4.2 User SignUp:

It will be very easy for anyone to sign up here as a customer by their name, email address, phone number and address.

1.4.3 Admin:

For the admin sign up it is mandatory to sign up as a customer first and then contact from the contact page to create an admin account in this system.

1.4.4 Users:

There will be three types of user in this system, Admin, Super Admin and customers will use the features of this system. Main feature of this system is to develop for customer where customer could just speak out their product name or category of their needed product, the system will retrieve with the wanted product in a second.

CHAPTER 2

Background

2.1 Introduction

The web application “iSHOP: A voice enabled ERP system for searching products” which will make online shopping easier and faster by just speak out the product or the category name to find out the needed product. Customer can read blogs about products and order product or add to wish list for later order. Customer can rate and comment on each product and blog posts. Customers can interact with the super admin by contacting from contact page. Super admin can add admin where all admin can add product, add category, create blog post under each product and get order from the customers.

2.1.2 Application Features

There are three segments of features for customer, admin, and super admin.

Features for customer

- Voice search capability
- Add to cart
- Add to wish list for later order
- Comment on product
- Comment on blog post
- Proceed to checkout for order
- Interactive easy user interface

Features for admin

- Add/delete category
- Insert product under any category
- Edit/delete product
- Create blog post
- Receive order
- Receive messages from customers
- Easy Admin Panel

2.2 Related Works

There are many online shopping platforms all over the World. The biggest are:

- Amazon
- Alibaba
- Daraz

None of them are used voice search for their system. The search box is available on every page of this application in the front page but Customer couldn't able to speak with the system. Siri was the first voice assistant to reach a wide audience and others, like Google Now and Microsoft's Crotona soon followed.

2.3 Comparative Studies:

Just Say What Your Needs! The system will fetches with your needed products on shop page is the main specialty of this project that is **voice search**. Customer's rating under each product is another specialty of this project where customer can rate and comment on each product page and blog post also customer can be aware of new products by looking the rating and comments given by other customers. User friendly admin panel and front end provides better selling experience for admin and best buying experience for customers.

2.4 Scope of the Problem:

There are no major limitations in this project. I have finished the project as I supervised but if there will be other user necessities then this will be developed according to the requirements,

- Only Super admin will create categories and other admin
- Sellers are not able to create a seller account directly
- Product delivery segment is not located by the customers
- Payment get way is not implemented y

CHAPTER 3

Requirement Specification

3.1 Requirement Collection and Analysis

Firstly, I define the requirement specification by getting the voice input using **Web Audio API** (high level **JavaScript API** for processing and synthesizing audio in web application) and make the idea of voice search functional.

There are three type of users will use this web application, they are customer, admin and super admin. Their roles in this project are pre-defined what they can do in this application. Product category and product will be inserted by the admin and super admin from admin panel. Customers can rating product and comment under each product and buy products that are uploaded by the admin. Make two different login system for customers and admin where customer can sign up and login directly from the web page and admin has to go with this link (ishop.com/admin) to login into admin panel and controlling products, get orders and messages from customers. To make an interactive online shop where user can ask to the system by their voice.

3.2 Web Programming

3.2.1 HTML5

HTML is a hypertext markup language. [1] HTML5 is the latest version of this markup language. It is used to develop text and combination audio, video documents and to setup hypertext links among documents and buttons etc. HTML5 used broadly on the World Wide Web. HTML5 is the browser side language which is readable for all browsers. It can insert scripts for example JavaScript which distress the actions of HTML5 web pages and make interactive web features.

3.2.2 CSS3

CSS3 is the latest advancement of Cascading Style Sheets language and intentions at covering CSS2.1. It can include colors, layout, and fonts through the given class or id in

the html tag. CSS3 is liberated of HTML and can be used with any XML-based markup languages. The disappearance of HTML5 from CSS3 makes it stress-free to maintain web pages, change style sheets across pages, and modify pages into many different backgrounds like transparent, gradient etc.

3.2.3 Bootstrap Framework

Bootstrap[2] is one of the best front-end CSS framework for responsive, mobile first front-end web development. It is an open source framework for use in any web pages. Bootstrap combines HTML, CSS, and JavaScript code to support developers for build web application also it can be used to develop desktop and mobile application development. Bootstraps responsive adjust mobile, tablet and desktop is an additional reason to use it more helpful. Bootstrap is easier to use for comprehensive grid system with thousands of elements already built. It is comes with lot of CSS and JS.

3.2.4 PHP

PHP [3]viewpoints for Hypertext Preprocessor. It is a server-side programming language. PHP only can be interpreted on a server where PHP is installed. It is freely available for develop static, dynamic website or web application. PHP code in a requested file is implemented by the PHP runtime, to create usually lively web page or dynamic images used on websites.

3.2.5 Reasons behind using PHP

PHP makes fastest, secure as web development and make accessible for millions of people. It is freely available for develop static, dynamic website or web application. It has top-notch functionality which is being used to develop rich website and features for enhance user's interactivity and it's secure and efficient web pages provides multifarious benefits.

3.2.6 Introduction to MySQL Database Server

MySQL is SQL - structured query language based relational database management system. It is used for wide range data, including data warehouse, e-commerce, logging applications etc. Generally MySQL used for web database. MySQL database is capable of storing data and retrieve data very fast. Multiple website visitors can interact with MySQL at the same time. The terms that MySQL uses,

- Communicate with database
- Cross-platform support
- Stored actions
- Triggers and Cursors
- Strict mode and SSL support
- Embedded database library

3.2.7 MySQL VS Other Database

MySQL Advantage is consist of greater MySQL, Apache, PHP, and Perl, to createa joined Web development atmosphere. This tools set carries a complete, steady location for structure and deploying database-focused applications for theInternet. Available for Linux, UNIX, and Windows. Advantage permit users to develop and deploy on their choice of platforms. MySQL is an open-source database which provides effective management of database and it is fee to use. It is a powerful and reliable solution for enhance advanced features like the following:

- Data security and support is high for transactional processing.
- On Demand Scalability allows complete customization of e-Commerce
- Optimum speed ensuring high performance
- MySQL assurance of 24x7 high availability
- Instant deadlock identification enforced referential integrity.

MySQL makes maintenance, debugging and upgrades fast and easy.

3.3 Use Case Modeling and Description

3.3.1 Description of use case modeling

A use case diagram models the functionality and represents the interactions between the system and users of the system. Use cases are prepared and actors are identified when a system is analyzed to gather its functionalities. Generally use case diagram is a graphic description of the interactions between the elements of a system. It is a methodology used in system analysis to identify and organized system requirements. Usually the actors involved individually with the system defined according to their roles. To represents the system use case diagram firstly have to identify the actors and then the actor's actions. In this system there are three types of user whom are actors. These are:

- Customer
- Admin
- Super Admin

Different actors has different role to take actions over the system. Admin, Super Admin and Customer's features has been different dataflow.

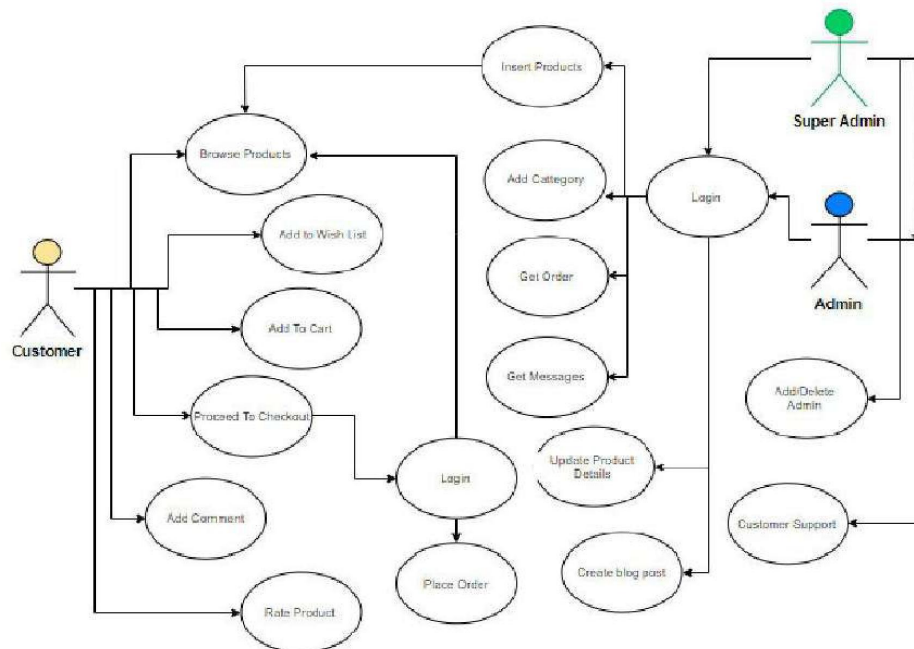


Figure 3.3.1.1: Use Case Diagram

3.4 Logical Data Model

3.4.1: ER Diagram

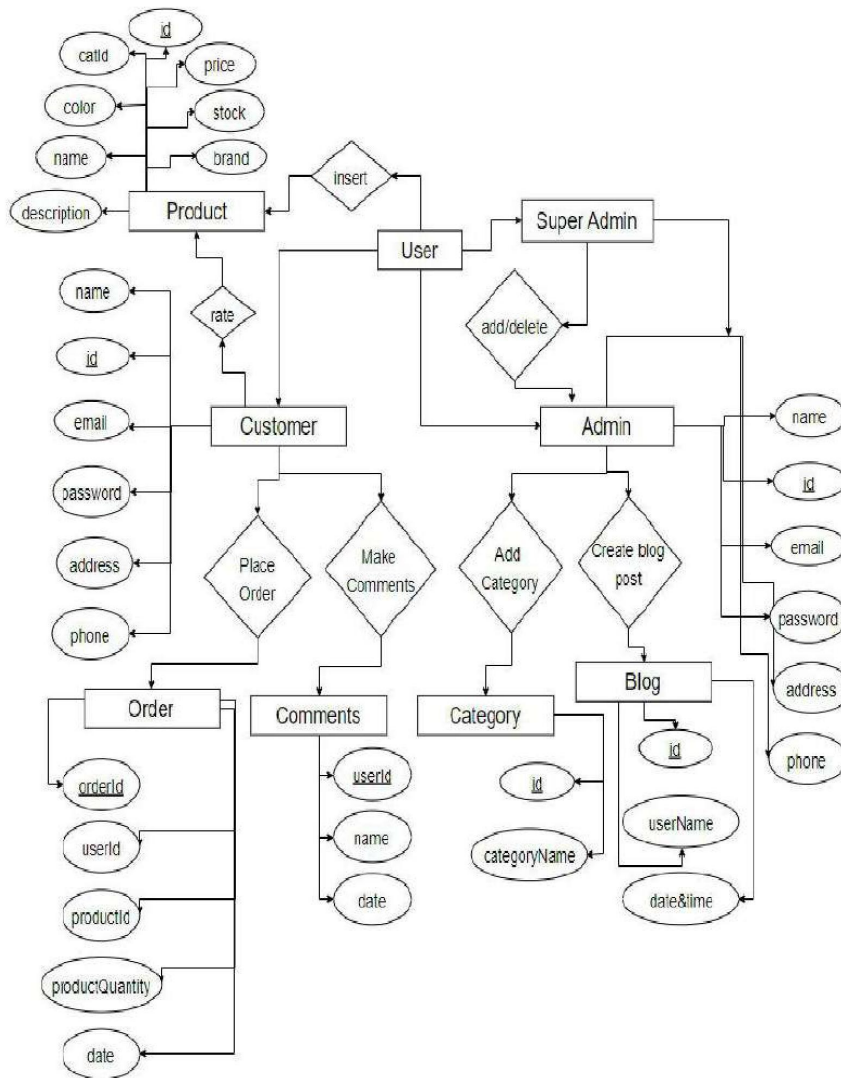


Figure 3.4.1.1: ER Diagram

CHAPTER 4

Design Specification

4.1 Front-End Design

System design is the process of defining the overall system architecture, modules, interfaces, and data types for a system to represent and specified requirements. It is also known as the application of systems theory to product development.

4.1.1 Home Page

The picture illustrates the home page of this online shopping platform. Header section contains the logo on the left and menu (Home, Shop, Blogs, Contact, About) on the right side. Top header section contains wishlist and logout buttons.

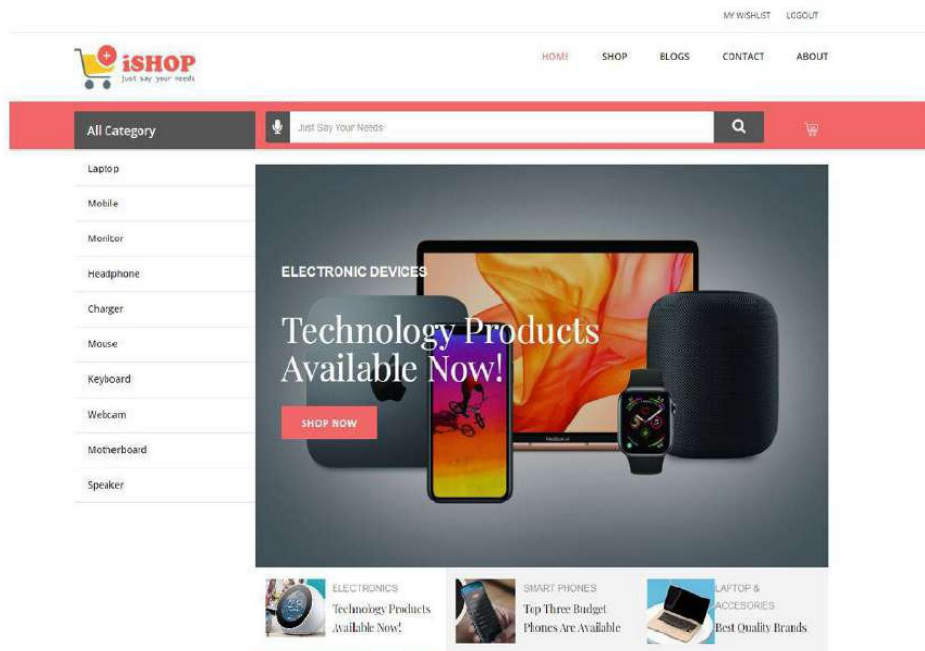


Figure 4.1.1.1: Home Page

Search box contains a microphone button for voice search and on the left section contains the All Category. Landing page contains a futuristic slider.

4.1.2 Featured Products

Featured Products are shown in the home page under the slider. The picture below illustrated the featured products of this online shopping platform.

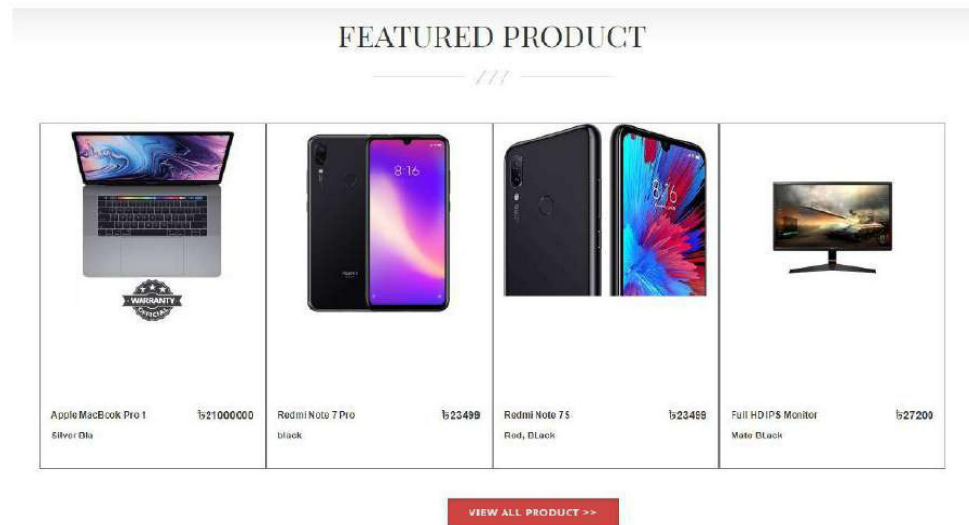


Figure 4.1.2.1: Featured Products

4.1.3 Client Testimonial

Client Testimonials has been displaying with an interactive slider. The picture illustrated the client testimonial.

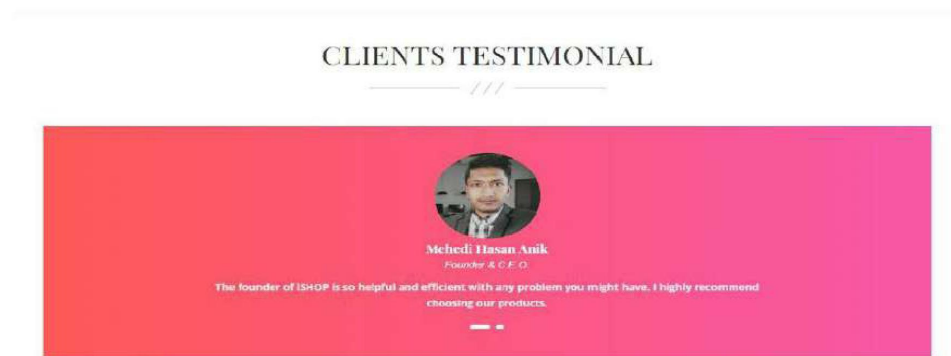


Figure 4.1.3.1: Clients Testimonial

4.1.4 Latest Product Blog Post

Latest Blog Posts are created by the admin. These blog posts has been shown in home page, by clicking “view all” button the system will jump into the blogs page.

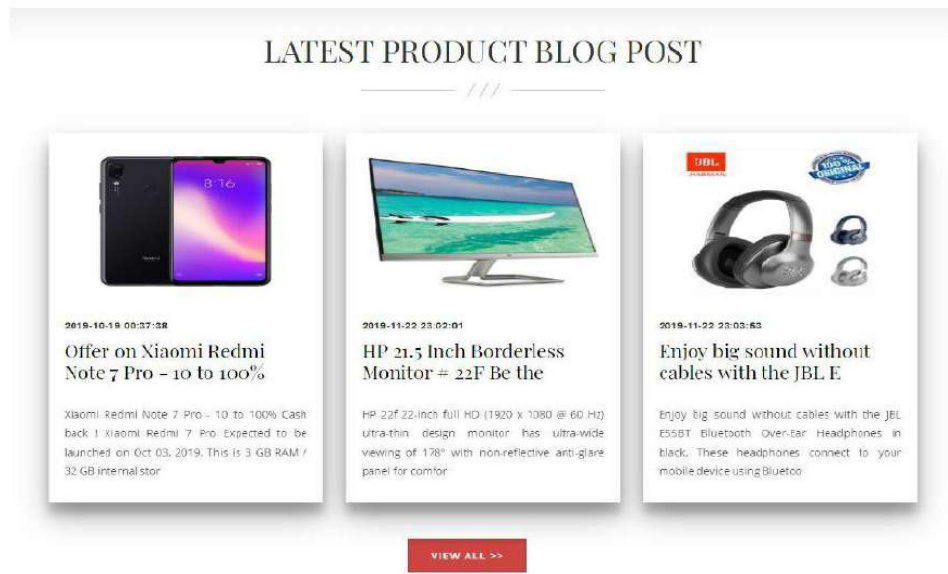


Figure 4.1.4.1: Latest Product Blog Post

4.1.5 Footer

The footer section contains all information about the system including My Account, Customer Service and Contact Information.

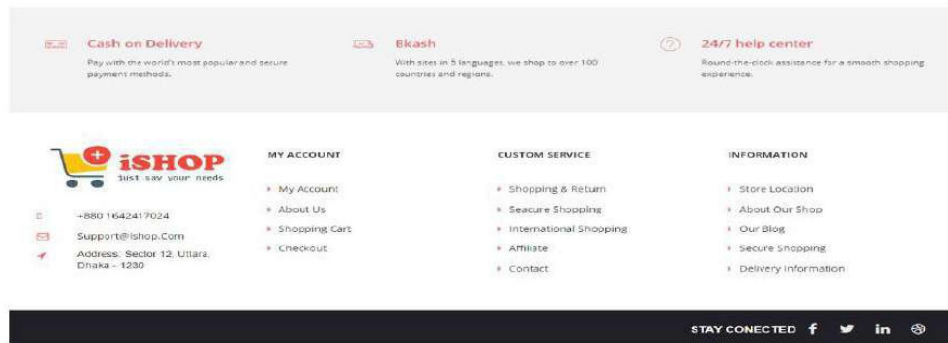


Figure 4.1.5.1: Footer

4.2 Back-End Design:

Logical Design of a system pertains to an abstract representation of the data flows, inputs and outputs of the system which involves a simplistic representation of an actual system.

4.2.1 Customer Sign Up:

Customers are able to Sign Up from the home page.

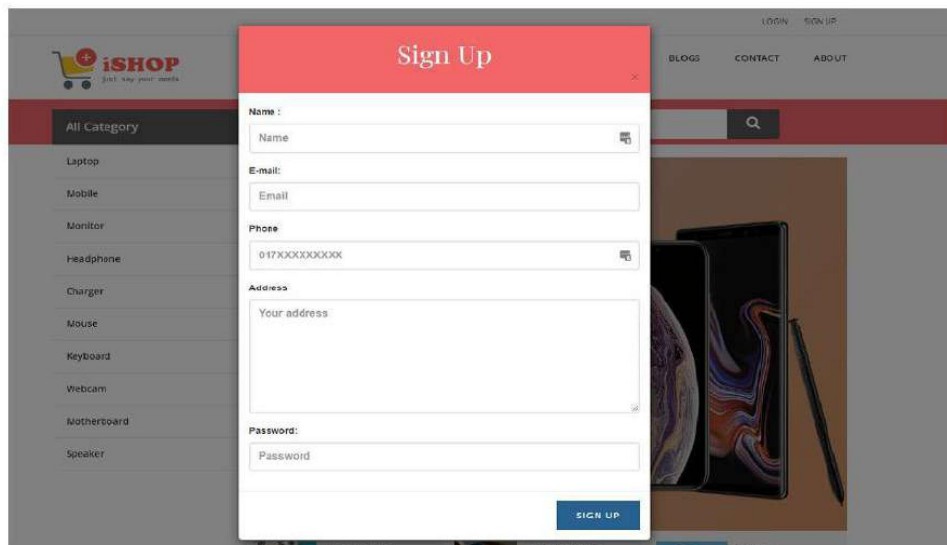
The image shows a web browser window displaying the iSHOP website. A modal window titled "Sign Up" is open in the center. The modal has a red header with the text "Sign Up" and a close button (X). Below the header, there are five input fields: "Name" with a label "Name:", "Email" with a label "E-mail:", "Phone" with a label "Phone" and a placeholder "017XXXXXXX", "Address" with a label "Address" and a placeholder "Your address:", and "Password" with a label "Password:". A blue button labeled "SIGN UP" is located at the bottom right of the modal. The background shows the iSHOP website with a navigation menu on the left and a search bar at the top.

Figure 4.2.1.1: Customer Sign Up

4.2.2 Customer Login:

The picture illustrate the Customer's Login.

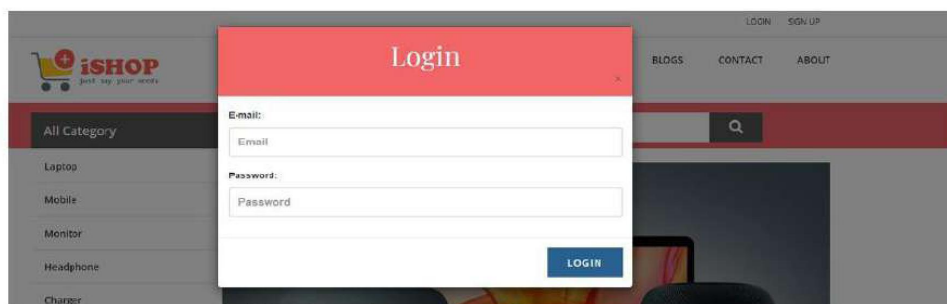
The image shows a web browser window displaying the iSHOP website. A modal window titled "Login" is open in the center. The modal has a red header with the text "Login" and a close button (X). Below the header, there are two input fields: "Email" with a label "E-mail:" and "Password" with a label "Password:". A blue button labeled "LOGIN" is located at the bottom right of the modal. The background shows the iSHOP website with a navigation menu on the left and a search bar at the top.

Figure 4.2.2.1: Customer Login

4.2.3 Admin Login:

To Login into the Admin Panel, Admin have to go (ishop.com/seller) this url.

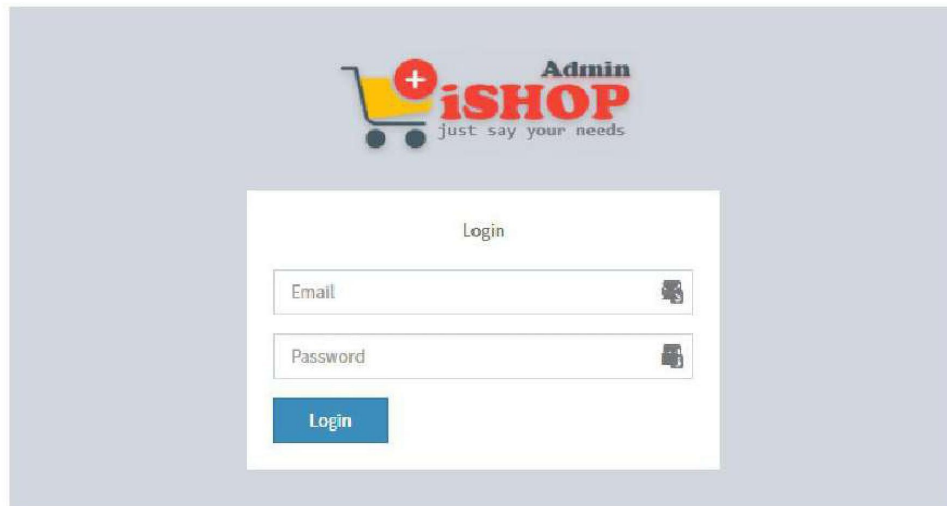


Figure 4.2.3.1: Admin Login

4.2.4 Admin Profile:

From the left menu section admin are able to jump into My Profile page.

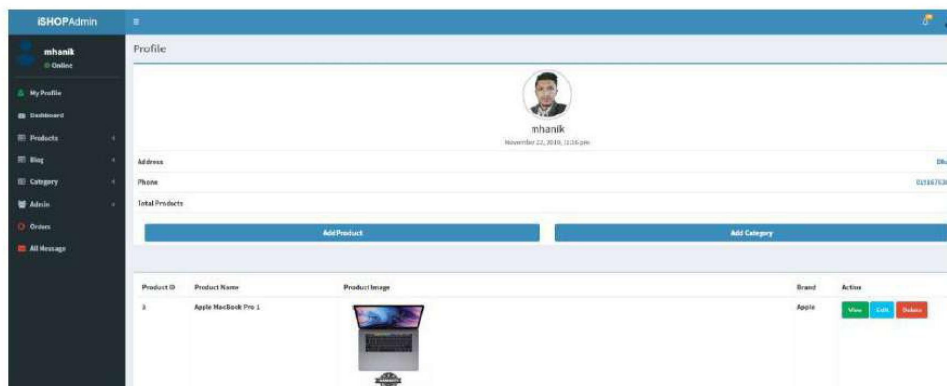


Figure 4.2.4.1: Admin Profile

4.2.5 Add Admin:

Only Super Admin can add Admin by selecting add Admin.

The screenshot shows the 'Add Admin' form in the iSHOPAdmin interface. On the left is a dark sidebar with a user profile for 'mhanik' and a navigation menu with items like 'My Profile', 'Dashboard', 'Products', 'Blog', 'Category', 'Admin', 'Orders', and 'All Message'. The main content area is titled 'Add Admin' and contains several input fields: 'Name', 'Product name', 'Email', 'Phone', 'Address' (with a 'Current Address' dropdown), and 'Password'. A blue 'Save' button is located at the bottom of the form.

Figure 4.2.5.1: Add Admin

4.2.6 Add Category:

Only Super Admin can add or delete Category from the admin panel.

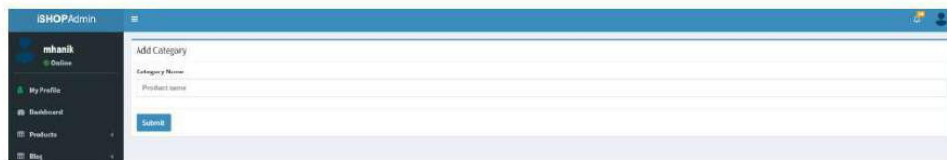
The screenshot shows the 'Add Category' form in the iSHOPAdmin interface. The sidebar is identical to the previous figure. The main content area is titled 'Add Category' and contains two input fields: 'Category Name' and 'Product name'. A blue 'Submit' button is positioned below the 'Category Name' field.

Figure 4.2.6.1: Add Category

4.2.7 Add Product:

All admin are able to add product from admin panel.

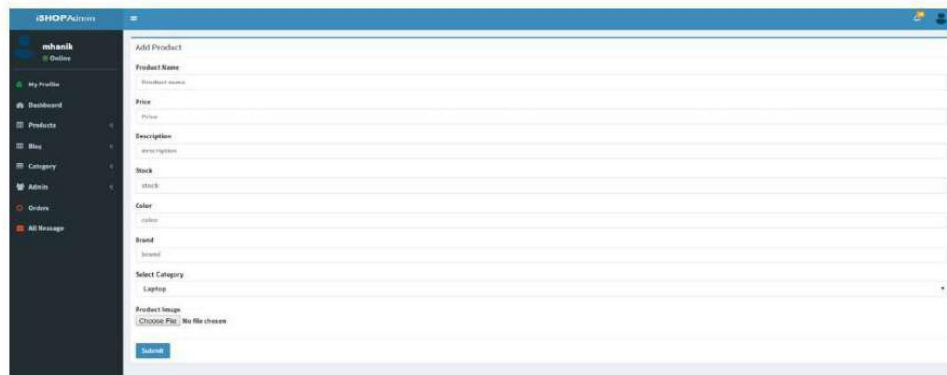
The screenshot shows the 'Add Product' form in the iSHOPAdmin interface. The sidebar is identical to the previous figures. The main content area is titled 'Add Product' and contains multiple input fields: 'Product Name', 'Price', 'Description', 'Stock', 'Color', 'Brand', and 'Select Category' (with a 'Laptop' dropdown). There is also a 'Product Image' section with a 'Choose File' button and the text 'No file chosen'. A blue 'Submit' button is at the bottom.

Figure 4.2.7.1: Add Product

Chapter 5

Implementation and Testing

5.1 Implementation of Database:

Database server consisting of a computer program and it delivers database services to other computers, mainly rest on the client-server model. Database server performs tasks as data analysis, storage, data-manipulation, archiving, backup and recovery also. In this chapter, I will discuss about the system database server that is used for the project. I used MYSQL server for my project.

5.1.1 Tables for the total database design:

In this picture bellow shows the total database design of this project. Users, category, chat, customers, ordertable, products, rating, users and wish list are the tables created under the database of the system named 'ishop'.



Table	Action	Rows	Type	Collation	Size	Overhead
blogs	☆ Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	26 Kib	-
category	☆ Browse Structure Search Insert Empty Drop	10	InnoDB	latin1_swedish_ci	26 Kib	-
chat	☆ Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	26 Kib	-
customers	☆ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	26 Kib	-
ordertable	☆ Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	26 Kib	-
productimages	☆ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	26 Kib	-
products	☆ Browse Structure Search Insert Empty Drop	19	InnoDB	latin1_swedish_ci	26 Kib	-
rating	☆ Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	26 Kib	-
review	☆ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	26 Kib	-
users	☆ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	32 Kib	-
wishlist	☆ Browse Structure Search Insert Empty Drop	26	InnoDB	latin1_swedish_ci	26 Kib	-
11 tables	Sum	74	InnoDB	latin1_swedish_ci	252 Kib	0.8

Figure 5.1.1.2: Tables for the total database design

5.2: Implementation of Front-End Design :

iSHOP is developed following responsive rules. In this web application, I've used different programming languages, these are HTML5, CSS3 and JavaScript plugins. To make the front-end interactive and futuristic I've used a framework named **Bootstrap**.

5.3: Implementation of Interactions:

In computer science, an implementation is an understanding of a technical specification or algorithm as a program, software component, or another computer system through programming and deployment. Many implementations may happen for a given specification or standard. For example, web browsers comprise implementations of World Wide Web association-recommended specifications, and development tools comprise implementations of programming languages

5.4: Testing Implementation:

The system testing is an investigation to delivers user with information about the product or service under test. System testing has been started from the users signup and login to the confirm order process. Each and every processes testing going under testing and fixing errors. In this phase brings all the operations together into a special testing situation, then checks for errors and interoperability.

Here I've completed system analysis by the input analysis and output analysis of the current system. At the initial stage of the analysis, I had followed the **SDLC** - System Development Life Cycle. I have tested the entire system by taking some suitable input data. The output, which derives according to the output, is correct. In the data analysis, the data has been designated from the input analysis according to their quirement of the system. In this system, data are taken from the different source. The requirements are collected from the user at the beginning of the development phase.

5.5: Test Results and Reports:

The system testing is an investigation to delivers user with information about the product or service under test. System testing has been started from,

- User login and sign up testing
- Order processing testing
- Performance tasting
- Voice search testing
- User session validation testing

Chapter 6

Conclusion and Future Scope

6.1 Introduction

Although my goal was to achieve a completed system that will have a high accuracy and at the same time can be able to execute user's voice commands for searching products and orders proficiently. I have managed to develop a system and an instruction on how an application can be developed for online shop based on the web. Now the system can execute voice search for product categories and I'll work for improving search by each product's name and brand name as well. The blog section is for reviewing product which could be helpful for customers. Customer can know what other customers think about the same product by looking the product and blog comments. I have seen many errors and fixed them and tried my best to move forward with progress and I hope to continue working with the project to improve its features and functionality.

6.2 System Development:

I've completed system development by following the **SDLC** - System Development Life Cycle. In the data analysis, the data has been designated from the input analysis according to the requirement of the system. In this system, data are taken from the different source. The requirements are collected from the user at the beginning of the development phase.

6.3 Scope for further development:

The system has been developed with future development possibilities in consideration. I wish, I could expand the system and reduce the limitation of the system in a short time after completing my graduation.

This project also has the scope of improvements like:

- Develop an android and IOS application for instant order which will work as an assistant shopkeeper.
- Add more features for customer and sellers
- The consistency of the web application can be increase

- Add more interactive user interface for searching section.
- Add more features for the blog section where bloggers could make money by creating blog under any product and share that for sell.
- Seller could directly sign up in the system and start selling
- Seller could stored their products on their shop name where every sellers have a shop and under that shop they will add product for sell.
- Develop an AI Chatbot for customer's inquiry

REFERENCES

Access Date: 13.01.2019

System Idea from https://en.wikipedia.org/wiki/Voice_search

Access Date: 11.12.2018

[1] HTML Tutorial from <https://www.w3schools.com/html>

Access Date: 15.01.2019

[2] CSS Tutorial from <https://www.w3schools.com/css>

Access Date: 15.01.2019

[3] Bootstrap Framework from <https://getbootstrap.com/docs/3.3/>

Access Date: 13.02.2019

[4] PHP resource from <https://www.w3schools.com/php>

Access Date: 1.11.2019

[5] Use Case Diagram making from <https://www.draw.io/>

Access Date: 27.03.2019

[6] Database Tutorial learned from <https://www.w3schools.com/sql/default.asp>

Access Date: 10.09.18

[7] Learned E-commerce from <https://www.trainingwithliveproject.com>

Appendix A: Project Reflection

Index.php

```
<?php include 'header.php';>
<?php
if( ( $SERVER['REQUEST_METHOD'] == "POST" ) && ( isset($_POST['place']) ) ){
    $customer->updateUserInfoById($_POST);
}

<!--
=====
SLIDER
=====
-->
<section class="xt-slider">
    <div class="container">
        <div class="row">
            <div class="col-md-3 category-hidden padding-right-0"></div>
            <div class="col-md-9 col-md-offset-3 padding-0 padding-sm">
                <div class="flexslider xt-slider-inner">
                    <ul class="slides">
                        <li>
                            
                            <div class="slide_text">
                                <span class="slide-category">Electronic Devices</span>
                                <h2 class="slide_title">Technology Products <br> Available Now!</h2>
                                <a href="shop-page.php" class="btn btn-fill ">Shop Now</a>
                            </div>
                        </li>
                        <li>
                            
                            <div class="slide_text">
                                <span class="slide-category">Smart Phones </span>
                                <h2 class="slide_title">Top Three Budget phones <br> Available Now!</h2>
                                <a href="shop-page.php?data-Mobile" class="btn btn-fill ">Shop Now</a>
                            </div>
                        </li>
                    </ul>
                </div>
            </div>
        </div>
    </div>
</section>
```

Header.php

```
</head>
<body>
<?php
if( (isset($_POST['login'])) && ($SERVER['REQUEST_METHOD'] == "POST")) {
    $customer->loginUser($_POST['email'], $_POST['pass']);
}

if( (isset($_POST['signup'])) && ($SERVER['REQUEST_METHOD'] == "POST")) {
    $customer->registerUser($_POST['email'], $_POST['pass'], $_POST['phone'], $_POST['address'], $_POST['name']);
}

if( (isset($_GET['action'])) && ($_GET['action'] == 'logout')) {
    Session::destroy();
}

if( (isset($_GET['action'])) ) {
    $wishlist->insertWishlist($_GET['action']);
    // echo "example window closed" . "<br>";
}

if( ($SERVER['REQUEST_METHOD'] == "POST" ) && (isset($_POST['post-comment'])) ){
    $comment->insertComment($_POST['user'], $_POST['reviewId'], $_POST['comment']);
}

<!-- Modal -->
<div class="modal fade" id="exampleModal" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
    <div class="modal-dialog" role="document">
        <div class="modal-content">
            <div class="modal-header" style="background-color: #f2f6ff;">
                <h3 class="modal-title center font-weight-bold" style="color: #007bff; font-size: 1.2em;" id="exampleModalLabel">Login</h3>
                <button type="button" class="close" data-dismiss="modal" aria-label="Close">
                    <span aria-hidden="true">&times;</span></button>
            </div>
            <div class="modal-body">
                <div class="form-group">
                    <input type="text" class="form-control" id="usr" name="email" placeholder="Email">
                </div>
                <div class="form-group">
                    <input type="password" class="form-control" id="pwd" name="pass" placeholder="Password">
                </div>
                <div class="modal-footer">
                    <button type="submit" name="login" class="btn btn-primary">Login</button>
                </div>
            </div>
        </div>
    </div>
</div>
```

Footer.php

```
FOOTER
-----
<footer class="xt-footer">
  <div class="footer-middle bg-2">
    <div class="container">
      <div class="row section-separator">
        <div class="col-md-4 col-sm-4">
          <div class="footer-widget-2">
            <div class="row">
              <div class="col-md-2 f-icon">
                <i class="fa fa-credit-card"></i>
              </div>
              <div class="col-md-10">
                <h3>Cash on Delivery</h3>
                <p>Pay with the world's most popular and secure payment methods.</p>
              </div>
            </div>
          </div>
        </div>
        <div class="col-md-4 col-sm-4">
          <div class="footer-widget-2">
            <div class="row">
              <div class="col-md-2 f-icon">
                <i class="fa fa-truck"></i>
              </div>
              <div class="col-md-10">
                <h3>24/7 help centers</h3>
                <p>With sites in 5 languages, we ship to over 100 countries and regions.</p>
              </div>
            </div>
          </div>
        </div>
        <div class="col-md-4 col-sm-4">
          <div class="footer-widget-2">
            <div class="row">
              <div class="col-md-2 f-icon">
                <i class="fa fa-question"></i>
              </div>
              <div class="col-md-10">
                <h3>24/7 help centers</h3>
                <p>Round-the-clock assistance for a smooth shopping experience.</p>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>
```

```
function rat(params) {
  let remove = document.getElementsByClassName('rating-clear');
  for (let index = 0; index < remove.length; index++) {
    remove[index].style.display = "none";
  }

  //product_id
  let rating = params.parentNode.parentNode.className;
  // console.log(`${"." + rating}.selector`);
  let produc = `${"." + rating}.selector`;
  let first = produc.substring(produc.split('').indexOf('.')+1, produc.split('').length)
  console.log(produc);
  let proId = first.substring(first.split('').indexOf('.')+1, first.split('').length);
  let val = document.getElementsByClassName('pro-rating-' + proId);
  console.log(val);

  let data = {
    proId: proId,
    val: val[1].defaultValue
  }

  $.post('lib/rating.php', data).done(function(response){
    console.log(response);
  });
}
</script>

<script>
  let commentButton = document.getElementById('comment-button');
  commentButton.addEventListener('click', (e) => {
    console.log(e);
    let comment = document.getElementById('comment').value;
    let userId = document.getElementById('user').value;
    let proId = document.getElementById('proId').value;

    let data = {
      ucorId: ucorId,
      proId: proId,
      comment: comment
    }

    console.log(data);

    $.post('lib/setComment.php', data).done(function(response){
      console.log(response);
    });
    location.reload();
  });
</script>
</body>
</html>
```

APPENDIX B

As per the requirement of the project report I have checked full report document and then checked plagiarism of the report. The report has come after checking as attached herewith.

151-15-353

ORIGINALITY REPORT

12%

SIMILARITY INDEX

6%

INTERNET SOURCES

0%

PUBLICATIONS

12%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Daffodil International University Student Paper	5%
2	Submitted to Middlesex University Student Paper	2%
3	media.neliti.com Internet Source	1%
4	Submitted to Myanmar Computer Company (MCC) - MANDALAY Student Paper	1%
5	justjapanjunkie.blogspot.com Internet Source	1%
6	dspace.daffodilvarsity.edu.bd:8080 Internet Source	1%
7	Submitted to KMD Computer Center Student Paper	<1%
8	blog.chromium.org Internet Source	<1%
9	Submitted to Universiti Tenaga Nasional	