VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI-590018



A MINI PROJECT REPORT

ON

ONLINE ELECTRONICS SHOP MANAGEMENT SYSTEM

 \mathbf{BY}

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In the partial fulfilment of the requirement for 5th semester

DBMS LABORATORY WITH MINI PROJECT

Under the Guidance of

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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CERTIFICATE

This is to certify that Ms.ANUSHA (4MT20CS025), Ms.AANCHAL NAGARAJ SHETTY (4MT20CS002) has satisfactorily completed the mini project entitled "ONLINE ELECTRONICS SHOP MANAGEMENT SYSTEM" for the DBMS Laboratory with mini Project(18CSL58) lab as prescribed by the VTU for 5th semester B.E. Computer Science and Engineering branch for the academic year 2022 – 2023.

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ABSTRACT

'Online Electronics Shop Management System' is a web based shopping system for an existing electronics shop. The objective is to provide easy access of electronics to the customers via internet. The customer being registered in the website has the facility to order electronic products. The purpose is to automate the existing manual system by the help of full-fledged computer software, fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same. Thus, it will help the administration in better utilization of resources. The electronics shop maintain computerized records without redundant entries. User will be motivated for making new order and they actually save their time by using this system.

TABLE OF CONTENTS

Acknowl	edgementi	
Abstract		
CHAPTER	CONTENT	PAGE NO
1	Introduction	1-3
2	Requirement Analysis and Specification	4-6
3	System Design	7-12
4	Implementation	13-19
5	Testing	20-22
6	Snapshots	23-27
7	Conclusion	28
	References	

LIST OF FIGURES

Sl No	TITLE	PAGE NO
Figure 3.1	ER Diagram for Online Electronics Shop management System	07
Figure 3.2	Schema diagram of Online Electronics Shop management system	09
Figure 4.1.1	Code snippet for connecting to the SQL server	13
Figure 4.1.2	Code snippet for user registration	14
Figure 4.1.3	Code snippet for user login	15-16
Figure 4.1.4	Code snippet for adding products to cart	16-17
Figure 4.1.5	Code snippet for feedback	18
Figure 4.1.6	Code snippet for admin login	18
Figure 4.1.7	Code snippet for inserting products	19
Figure 6.1	Screenshot of Homepage	23
Figure 6.2	Screenshot of About us page	23
Figure 6.3	Screenshot of Login page	24
Figure 6.4	Screenshot of Registration page	24
Figure 6.5	Screenshot of Products page	25
Figure 6.6	Screenshot of Contact us page	25
Figure 6.7	Screenshot of Edit account page	26
Figure 6.8	Screenshot of Admin Login page	26
Figure 6.9	Screenshot of Insert Products page	27
Figure 6.10	Screenshot of Admin Dashboard page	27

INTRODUCTION

A database management system (DBMS) refers to the technology for creating and managing databases. DBMS is a software tool to organize (create, retrieve, update and manage) data in a database. The main aim of a DBMS is to supply a way to store up and retrieve database information that is both convenient and efficient. By data, we mean known facts that can be recorded and that have embedded meaning. Normallpeople use software such as DBASE IV or V, Microsoft ACCESS, or EXCEL to store data in the form of a database. Database systems are meant to handle a large collection of information. Management of data involves both defining structures for the storage of information and providing mechanisms that can do the manipulation that storedinformation. Moreover, the database system must ensure the safety of the information stored, despite system crashes or attempts at unauthorized access.

1.1 Problem Statement

In Electronics Shop order detail, customer details and product details have to be maintained manually, this consumes lot of time and work. In real world, communication is quite difficult between service provider and clients. In our Online Electronics Shop management system it will be easy to maintain and store the data. Online ordering allows customers the ability to check prices and availability of products ahead of time. The individual who wants to order electronic products have to add the products to the cart and order after finalizing cart. He can also contact the shop for queries related to the products. This system increases customer satisfaction.

1.2 SQL (Structured Query Language)

SQL is used to communicate with databases and it is the standard language for relational database management systems. SQL statements are used to perform tasks such as creating, reading, updating, and deleting relational databases and tables. Most of the RDBMS like MySQL, Oracle, MS Access, Informix, and SQL Server use SQL as their standard database language

1.3 PHP (Hypertext Preprocessor)

PHP is a general-purpose scripting language that is especially suited to server-side web development, in which case PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP runtime, usually to create dynamic web page content or dynamic images used on websites or elsewhere. PHP originally stood for Personal Home Page, but it now stands for the recursive backronym PHP. Hypertext Pre-processor. PHP code may be embedded into HTML code, or it can be used in

1.4 HTML5(Hyper Text Markup Language)

HTML, which stands for Hyper Text Mark-Up Language, is the language for describing structureddocuments as well as the language used to create web pages in the Internet. The language is basedon an existing, international formatting standard SGML, Standard Generalized Mark-Up Language, which is used for text processing.HTML documents are nothing but web pages which contains HTML tags and plain text. The purpose of a web browser is to read HTML documents and display them as webpages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.

1.5 CSS3(Cascading Style Sheet)

Cascading style sheets are used to format the layout of web pages. They can be used to define textstyles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. CSS helps Web developers create a uniform look across several pages of a Web site. Instead of defining the style of each table and each block of text within a page's HTML, commonly used styles need to be defined only once in a CSS document.

1.6 JAVASCRIPT

Javascript is the scripting language that enables you to create dynamically updating content, control multimedia, animate images, etc. Client-side Javascript is the most common form of the language. The script should be included in or referenced by an HTML document for the code to be interpreted by the browser. Javascript client-side mechanism provides many advantages. For example, we can use Javascript to check whether the user has entered a valid email address or not in the form field. Javascript can be used to trap user-initiated events such as button clicks, link navigation, and otheractions that the user initiates implicitly and explicitly

1.7 BOOTSTRAP 5

Bootstrap is the popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. Undoubtedly one of the biggest advantages of using Bootstrap is the speed of development. Bootstrap itself is being continuously updated and the creators have been really good about putting out timely updates

1.8 XAMPP

The acronym XAMP refers to a set of free (open source) applications, combined with Microsoft Windows, which are commonly used in Web server environments. The combined usage of these programs is called a server stack. In this stack, Microsoft Windows is the operating system (OS), Apache is the Webserver, MySQL handles the database components, while PHP, Python, represents the dynamic scripting languages.

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REQUIREMENT ANALYSIS AND SPECIFICATION

2.1 Functional Requirements

These are statements of services the system should provide, how the system should react to particular inputs and how the system should behave in particular situations. The functional requirements for a system describe what the system should do. These requirements depend on the type of software being developed, the expected users of the software and the general approach taken by the organization when writing requirements. When expressed as user requirements, the requirements are usually described abstractly. However, functional system requirements describe the system function in detail, its inputs and outputs, exceptions.

The functional requirements of Online Electronics Shop Management System are as follows:

2.1.1 Users

User can login and register to the page .User can also order products through add to cart module. User is also provided with the feature of updating their profile and give their feedback to the store and its products.

Register module

- The user needs to provide their email-id, new password and provide other details while registering.
- Once registered user detail will be stored in the database.

Login module

- The admin/user should provide their email id and password in order to login
- They use their respective accounts.

Add to cart module

- User can order for required products using add to card option.
- User can also update the quantity

Update profile

• User can change the profile picture and can also update their profile.

Feedback Module

• User can give their feedback to the store owner and also contact the store for enquiries.

2.1.2 Admin

Admin can login and update the page as per the requirements.

Login module

Admin can login to the admin page.

Update module

admin can update the page depending on the products and brands that are available in the store.

The functional requirements are broadly classified into 2 categories, they are:

Hardware requirements

• Processor: Intel i3/i5,1.8GHz machine or above

• Main memory: 4GB RAM or more.

• Hard disk drive: 1TB

Software requirements

• Operating System: Windows 7 and higher

• Front end: HTML5, CSS3, Javascript, Bootstrap 5

• Back end : PHP,SQL

• Software: Visual Studio Code, XAMPP

2.2 Non Functional Requirements

Non-functional requirements are requirements that are not directly concerned with the specific functions delivered by the system. They may relate to emergent system properties such as reliability, response time and store occupancy. Alternatively, they may define constraints on the system such as the capabilities of I/O devices and the data representations used in system interfaces. The plan for implementing functional requirements is detailed in the system design. The plan for implementing non-functional requirements is detailed in the system architecture. Non-functional requirements are often called qualities of a system. Other terms for non- functional requirements are "constraints", "quality attributes", "quality goals", "quality of service requirements" and "non-behavioral requirements". Qualities, that are non-functional requirements, can be divided into two main categories: Execution qualities, such as security and usability, which are observable at run time.

The non-functional requirements of Online Electronics Shop System Management are as follows:

Reliability:

- Online Electronics Shop Management System is a reliable interface as it provides data security and data safety.
- Data provided by the user is confidential and safe. User cannot use another user account without a password and user mail-id verification.

Consistency:

- Online Electronics Shop Management System provide consistency of data.
- The system can generate a list of products available in the store.
- There's no case of redundancy in the database so it will not take any extra memoryspace

Performance:

- Online Electronics Shop Management System interface performs smoothly for all user to have a good and easy experience.
- It is easy to understand and can access anywhere through the internet.
- Online Electronics Shop Management System maintains and retrieves all the data whenrequired.

Security:

- Security is a very important aspect that Online Electronics Shop Management System provides, data of
 users are maintained with confidentiality.
- No data can be accessed by any third party and data is only for users to access.

Scalability:

• being able to handle an increase in the number of orders and demand for the products

SYSTEM DESIGN

System design process partitions the system into subsystems based on the requirements. It establishes overall system architecture and is concerned with identifying various components, specifying relationships among components, specifying software structures, maintaining the record of design decisions and providing a blueprint for the implementation phase. Design consists of architecture design and detailed design is concerned with the details of how to package processing modules and how to implement the processing algorithms, data structures and interconnections among modules and data structures.

3.1 ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other Words ,ER diagram help to explain the logical structure of database. ER diagram are created based on three basic concepts: entities, attributes and relationships.ER Diagram Contains different symbol that use rectangles to represent entities ,ovals to define attributes and diamond shapes to represent relationships.

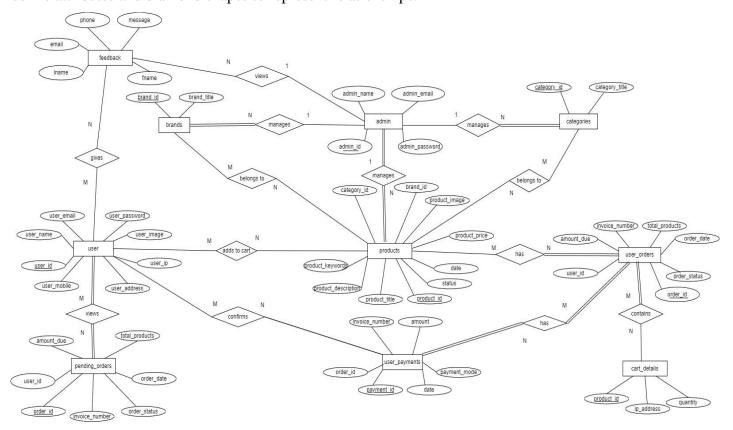


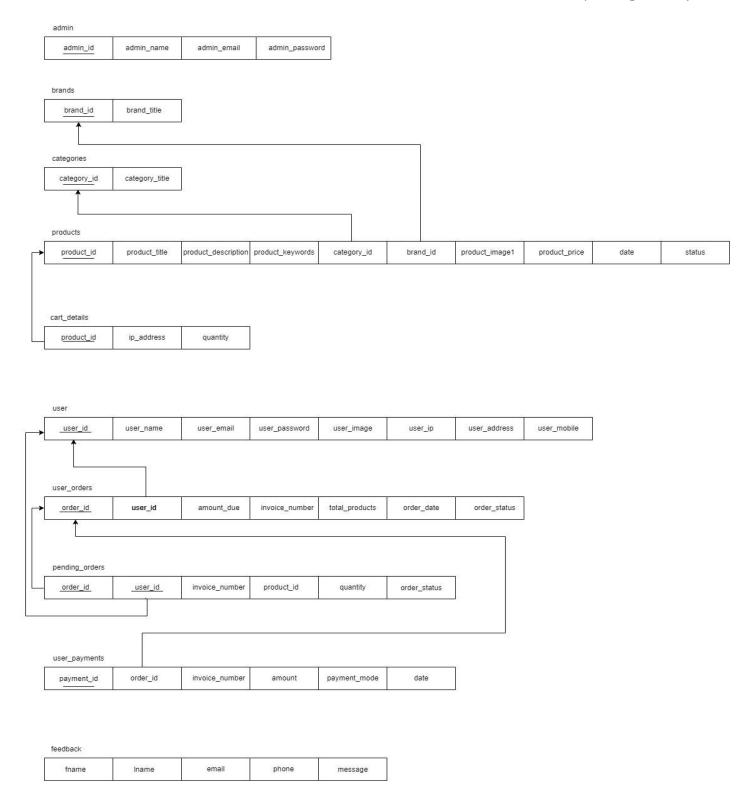
Figure 3.1 ER Diagram for Online Electronics Shop management System

In figure 3.1 there are total of 10 entities. They are user, products, admin,brands,categories,user_orders, cart_details, user_payments, pending.Consider the user entity which has 8 attributes user_id,user_name, user_email,user_password,user_image,user_ip, user_address and user_mobile. User_id is the primary key. It has M:N cardinality ratio and partial participation between products,feedback and user_payments. admin has 4 attributes where admin_id is the primary key. brands and categories entity has N:1 cardinality ratio with the partial participation of admin. brands entity has 2 attributes where brand_id is the primary key. It has N:1 cardinality ratio with the partial participation of admin and M:N cardinality ratio with the partial participation of products. categories entity has 2 attributes where category_id is the primary key. It has N:1 cardinality ratio with the partial participation of admin and M:N cardinality ratio with the partial participation of products. cart_details entity has 3 attributes where product_id is the primary key. It has M:N cardinality ratio with the total participation of user_orders. user_payments entity has 6 attributes where payment_id is the primary key. It has M:N cardinality ratio with the partial participation of user and M:N cardinality ratio with the total participation of user_orders entity has 7 attributes where order_id is the primary key. It has M:N cardinality ratio with the total participation of user. feedback entity has 5 attributes. It has M:N cardinality ratio with the total participation of user.

3.2 Schema Diagram

A schema diagram is a diagram that contains entities and the attributes that will define that schema. A schema diagram only shows us the database design. It does not show the actual dataof the database. The schema represents the relationship between these tables.

In Figure 3.2 Schema diagram there are total of 10 entities which are admin, brands, categories, products, car_details,user,user_orders,pending_orders,user_payments,feedback.In admin entity we have 4 attributes, in brands and categories we have 2 attributes, in products we have 10 attributes, in cart_details we have 3 attributes, in user we have 8 attributes, in user_orders we have 7 attributes, in pending_orders and user payments we have 6 attributes and in feedback we have 5 attributes.



 $Figure \ 3.2 \ Schema \ diagram \ of \ online \ electronics \ shop \ management \ system$

3.3 Description of tables

1. Admin: Stores the details of the admin

admin_name :name of the admin

admin_email: email of admin

admin_id: unique ID for Admin

admin_password: password set by admin

2.User:Stores the details of the user

User_id:unique ID of the user

User name:name of the user

User_password:user entered password

User_email:email of the user

User_moblie:mobile number of the user

User_ip:IP address of the user

User_address: address of the user

User_image:image uploaded by the user

3. Products: Stores the details of the products

Product_id:unique id of the product

Product_title:title of the products

Product_description:description of the products

Product_price:price of the products

Product_image:image of the products

Category_id:category id of the products

Brand_id:brand id of the product

Status: status of the product

Date:date the product was updated

4. Categories: stores the category details of the products

Category_id:unique ID of the category

Category_title:name of the category Dept of CS&E MITE,Moodabidre

5.Brands:stores the brand details of the products

Brand_id:unique brand id of the products

Brand_title:name of the brand

6.User orders:stores the user order details

Order_id:unique order id of the orders

Order_status: status of the order

Amount_due:amount to be paid

Invoice_number:unique number generated for every order

Total_products:total number of products selected

Order_date:date of the order

User_id:id of the user who orders

7. Cart details: stores the details of the items added to the cart

Product_id:id of the product

Ip_address: ip address of the user device

Quantity:quantity of the products added

8.Pending Orders:Stores the pending order details of the the user

Order_id:unique order id of the orders

Order status: status of the order

Amount_due:amount to be paid

Invoice_number:unique number generated for every order

Total_products:total number of products selected

Order_date: date of the order

User_id: id of the user who orders

9.user payments

Order_id:unique order id of the orders

Invoice_number:unique number generated for every order

Amount:amount of the product

Payment_mode: mode of payment opted by the user Dept of CS&E MITE,Moodabidre Date:date of the payment

Payment_id:unique ID for payment

10.Feedback

Fname: first name of the customer

Lname:last name of the customer

Email:email of the customer

Phone:phone number of the customer

Message: message the customer wants to send

IMPLEMENTATION

PHP: Hypertext Pre-processor (or simply PHP) is a server-side scripting language. PHP code may Be embedded into HTML code, or it can be used in combination with various web templatesystems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executedPHP code, which may be any type of data, including images, with the generated web page. PHPcode may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

This project uses HTML as front-end tool. Hypertext Mark-up Language (HTML) is the standardmark-up language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the world wide web. Webbrowser receive HTML documents from a web server or from local storage and render the documents into multimedia web pages.HTML describes the structure of a web page semanticallyand originally included cues for the appearance of the document.HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page.HTML provides a means to create structured documents by structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.HTML elements are delineated by tags, written using angle brackets. Browsers do not display the HTML tags, but use them to interrupt the content of the page.

4.1Code Snippet:

Connection code:

```
<?php
    $con = mysqli_connect('localhost', 'root', '', 'mystore');
    if (!$con) {
        die(mysqli_connect_error());
        }
    ?>
```

Figure 4.1.1 Code snippet for connecting to the SQL server

The above code snippet is used for connecting purpose. This is used to connect back end and front end. This connection establishment is required for storing the details entered by the user in the HTML form to the database and also to retrieve the stored information from the database. Connection establishment is required for all database access operations.

USER:

Registration Code:

```
<?php
if(isset($_POST['user_register'])){
  $maxsize=1048577;
  $user username=$ POST['user username'];
  $user_phone=$_POST['user_phone'];
  $user_email=$_POST['user_email'];
  $user_address=$_POST['user_address'];
  $user_password=$_POST['user_password'];
  $hash_password=password_hash($user_password,PASSWORD_DEFAULT);
  $user_confirmpassword=$_POST['user_confirmpassword'];
  $user image=$ FILES['image']['name'];
  $user_image_tmp=$_FILES['image']['tmp_name'];
  $user_ip=getIPAddress();
  if($_FILES['image']['size']>=$maxsize){
    echo "<script>alert('file size must be 1mb or less')</script>";}
 else{
 $select_query1="select*fromuserwhere user_name= '$user_username' or
user_email = ' $user_email'";
 $result=mysqli_query($con,$select_query1);
 $rows count=mysqli num rows($result);
 if($rows_count>0){
  echo "<script>alert('username and email aready exists!!')</script>";
 }else if($user_password!= $user_confirmpassword){
  echo "<script>alert('passwords do not match')</script>";
 }
 else{
  echo ''<script>alert('registration successfull')</script>'';
//folder for image
  move_uploaded_file($user_image_tmp,"user_images/ $user_image");
  //insert query
  $insert_query="insert into user (user_name, user_email,user_password, user_image,
    user_ip,user_address,user_mobile)
    values ('$user username', '$user email', '$hash password', '$user imag, $user ip', '$user address', '
$user_phone')";
  $sql execute=mysqli query($con,$insert query);
```

Figure 4.1.2 Code snippet for user registration

The above code is used for Registration purpose. This is used to store the values inserted by user into the Users table of database. If user already exists in table, it returns appropriate message saying user exists.

Login code:

```
<?php
   if(isset($_POST['user_login'])){
   $name=$_POST['name'];
   $password=$_POST['password'];
   $select_query="select * from user where
   user_name='$name' '';
   $result=mysqli_query($con,$select_query);
   $row_count=mysqli_num_rows($result);
   $row_data=mysqli_fetch_assoc($result);
   $user_ip=getIPAddress();
   //cartitem
   $select_query_cart="select * from cart_details where ip_address='$user_ip'" ;
  $select_cart=mysqli_query($con,$select_query_cart);
   $rows_count_cart=mysqli_num_rows($select_cart);
   if($row_count>0){
     $_SESSION['username']=$name;
     if(password_verify($password,$row_data['user_password'])){
     if($row_count_cart==0 and $row_count==1 ){
      $_SESSION['username']=$name;
     echo "<script>alert('You have logged in successfully')</script>";
     echo ''<script>window.open('profile.php','_self')</script>'';
      }else{
      $_SESSION['username']=$name;
      echo "<script>alert('You have logged in successfully')</script>";
```

```
}
} else{
    echo "<script>alert('invalid credentials')</script>";
} }else{
    echo "<script>alert('invalid credentials')</script>";
}}
?>
```

Figure 4.1.3 Code snippet for user login

The above code is used for Login purpose. This is used to check the username and password inserted by user with the Users table of database. If username and password inserted by user is in the table is valid then it opens the homepage else it returns appropriate message saying invalid credentials.

Add to cart code:

```
<?php
include ('./functions/common functions.php');
include('includes/connect.php');
if(isset($_GET['user_id'])){
 $user_id=$_GET['user_id'];
$get_ip_address=getIPAddress();
$total_price=0;
$cart_query_price="select * from cart_details where ip_address="$get_ip_address";
$result_cart_price=mysqli_query($con,$cart_query_price);
$invoice_number=mt_rand();
$status='pending';
$count_products=mysqli_num_rows($result_cart_price);
while($row_price=mysqli_fetch_array($result_cart_price)){
  $product_id=$row_price['product_id'];
  $select_product="select * from products
  where product_id=' $product_id''';
  $run_price=mysqli_query($con,$select_product);
  while($row_product_price=mysqli_fetch_array($run_price)){
     $product_price=array($row_product_price['product_price']);
```

```
$product_values=array_sum($product_price);
      $total_price+=$product_values;
}
// getting quantity from cart
$get_cart="select * from cart_details";
$run_cart=mysqli_query($con,$get_cart);//execute
$get_item_quantity=mysqli_fetch_array($run_cart);
$quantity=$get_item_quantity['quantity'];
if($quantity==0){
$quantity=1;
$subtotal= $total_price;
}
else{
    $quantity=$quantity;
    $subtotal= $total_price * $quantity;
}
\ insert_orders="insertintouser_orders(user_id,amount_due,invoice_number,total_products,order_dat)
e,order_status)values( $user_id, $subtotal,$invoice_number,$count_products,NOW(),'$status')'';
$result_query=mysqli_query($con,$insert_orders);
if($result_query){
  echo "<script>alert('orders are submitted successfully)</script>";
  echo "<script>window.open('profile.php','_self')</script>";
?>
```

Figure 4.1.4Code snippet for Adding products to cart

This code is used for the purpose of adding the products to the cart and calculating the total price of the selected products.

Feedback code:

```
<?php
if(isset($_POST['contact']))
{
    $fname=$_POST['fname'];
    $lname=$_POST['lmame'];
    $email=$_POST['email'];
    $phone=$_POST['phone'];
    $message=$_POST['message'];
$insert_query="insert into feedback(fname,lname,email,phone,message) values
('$fname','$lname','$ email','$phone','$message')'';
$result=mysqli_query($con,$insert_query);
    if($result){
    echo "<script>alert('thanks for keeping in touch')</script>";
    echo "<script>window.open('contact_us.php','_self')</script>";
    }}
?>
```

Figure 4.1.5 Code snippet for feedback

This code is used by the customer for giving their feedback regarding the store and for doing enquiries.

ADMIN:

Admin Login Code:

```
<?php
if(isset($_POST['admin_login'])){
  $username = $_POST['username'];
  $password = $_POST['password'];
 //select query
  $select guery = "Select * from admin where admin name='$username'";
  $result = mysqli_query($con, $select_query);
  $row_count = mysqli_num_rows($result);
  $row_data = mysqli_fetch_assoc($result);
  if($row_count>0){
    if(password_verify($password,$row_data['admin_password'])){
       echo "<script>alert('Login Successful')</script>";
       echo '<script>window.location.href = "index.php";</script>';
    }else{
       echo "<script>alert('Invalid Credentials!!')</script>";
  }else{
    echo "<script>alert('Invalid Credentials!!')</script>";
}}?>
```

Figure 4.1.6 Code snippet for admin login

This code is used for the purpose of admin login here admin enters his username and passwords if the password matches with the table the login is successful else it displays invalid credentials.

Insert products code:

```
<?php
include('../includes/connect.php');
if(isset($_POST['insert_product'])){
 $maxsize=1048577;
  $product_title = $_POST['product_title'];
  $description = $_POST['description'];
  $product_keywords = $_POST['product_keywords'];
  $product_category = $_POST['product_category'];
  $product_brands = $_POST['product_brands'];
  $product_price = $_POST['product_price'];
  $product_status = 'true';
  $product_image1 = $_FILES['product_image1']['name'];
 $temp image1 = $ FILES['product image1']['tmp name'];
  if($_FILES['product_image1']['size']>=$maxsize){
    echo "<script>alert('file size must be 1mb or less')</script>";}
 else{
  if($product_title=='' or $description=='' or
                                                   $product_keywords=='' or
                                                                                  $product_category==''
$product brands=='' or $product price=='' or $product image1==''){
    echo ''<script>alert('Please fill all the available fields')</script>'';
    exit();
  }else{
    move uploaded file($temp image1, "./product images/$product image1");
$insert_products="insertproduct_title,product_description,product_keywords,category_id,brand_id,pr
oduct_image1 ,product_price ,date, status)values ('$product_title',' $description', '$product_keywords','
$product_category', '$product_brands', '$product_image1',' $product_price' ,NOW(),'$product_status')'';
    $result_query = mysqli_query($con, $insert_products);
    if($result_query){
      echo "<script>alert('Successfully inserted the products')</script>";
    }}}?>
```

Figure 4.1.7 Code snippet for inserting products

This code is used by the admin for the purpose of inserting new products.

TESTING

Software testing is the process of used to identify the correctness, security, completeness and quality of developed computer software. This includes the process of executing the program or applications with the intent of finding errors. An individual unit, functions or procedures of developed project is verified and validated and these units are fit for use.

5.1 Testing process

Best testing process is to test each subsystem separately, as we have done in project. Best done during implementation. Best done after small sub-steps of the implementation rather than large chunks. Once each lowest level unit has been tested, units are combined with related units and retested in combination. This proceeds hierarchically bottom-up until the entire system is tested as a whole. Typical levels of testing:

Module- package, abstract data type, class
Sub-system- collection of related modules, cluster of classes, method-message path
Acceptance testing- whole system with real data (involve customer, user, etc)

5.1.1 Unit testing

Unit testing is the process of testing individual software components unit or modules. Since it needs the detailed knowledge of the internal program design and code this task is done by the programmer and not by testers.

5.1.2 Integration Testing

Integration testing is another aspect of testing that is generally done in order to uncover errors associated with the flow of data across interfaces. The unit-tested modules are grouped together and tested in small segment, which makes it easier to isolate and correct errors. This approach is continued until we have integrated all modules to form the system as a whole. After the completion of each module, it has been combined with the remaining module to ensure that the project is working properly as expected.

5.1.3 System Testing

System testing tests a completely integrated system to verify that it meets its requirements. After the completion of the entire module, they are combined together to test whether the entire project is working properly.

5.2 Test Cases

A Test Case is a software testing document, which consists of events, action, input, output, expected result and actual result. Technically a test case includes test description, procedure, expected result and remarks. Test cases should be based primarily on the software requirements and developed to verify correct functionality and to establish conditions that reveal potential errors.

Test cases no	Test Case	Expected results	Status
1	Logging into website	Username and password provided correct	Successful
2	Logging into website	username incorrect	Unsuccessful
3	Logging into website	Password Incorrect	Unsuccessful
4	Logging into website	Any field left empty	Unsuccessful

5.1 Test Case for Login

Table 5.1 represents the test case for login module. It shows both successful result in case the user enters correct username and password and unsuccessful results for the test cases where the user enters incorrect password, incorrect username or leaves any field empty.

Test cases no	Test Case	Expected results	Status
1	Registration for new user	All details provided correctly	Successful
2	Registration for new user	Confirm password field and password field do not match	Unsuccessful
3	Registration for new user	Any field left empty	Unsuccessful

Table 5.2 Test Case for Register

Figure 5.2 represents the test case for register module. It shows both successful and unsuccessful results for the test cases.

SNAPSHOTS

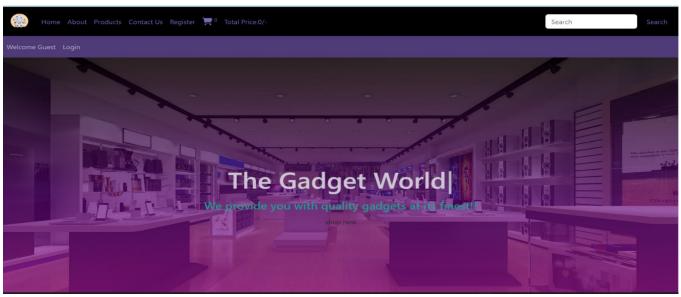


Figure 6.1 Screenshot of Homepage

Figure 6.1 indicates the home page. This contains navigation bar, through which you can navigate to other pages. It also contains some details about the website at the home page.

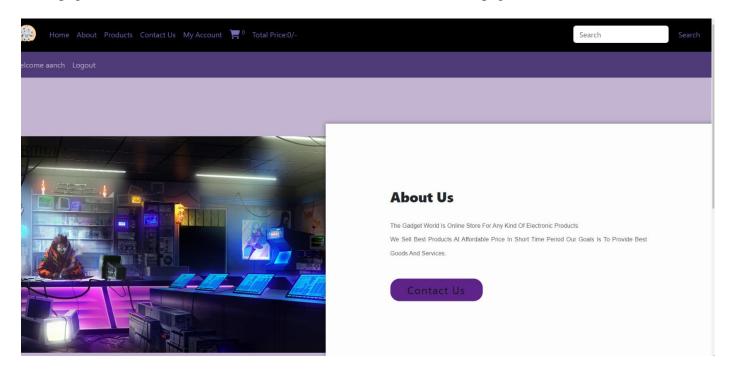


Figure 6.2 Screenshot of About us Page

Figure 6.2 indicates the about us page where the details about the shop is mentioned.



Figure 6.3 Screeshot of Login page

Figure 6.4 indicates the user login page. This contains login form, through which existing user is able to log in to the platform.



Figure 6.4 Screenshot of Registration Page

Figure 6.4 indicates the user register page. This contains registration form, through which new user is able to become a member of the platform.

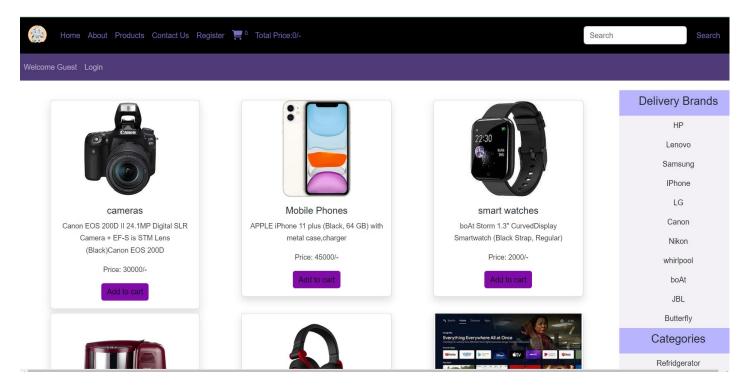


Figure 6.5 Screeshot of Products page

Figure 6.5 indicates the product page it has all the products available in the store so the user can choose the desired products and place order.

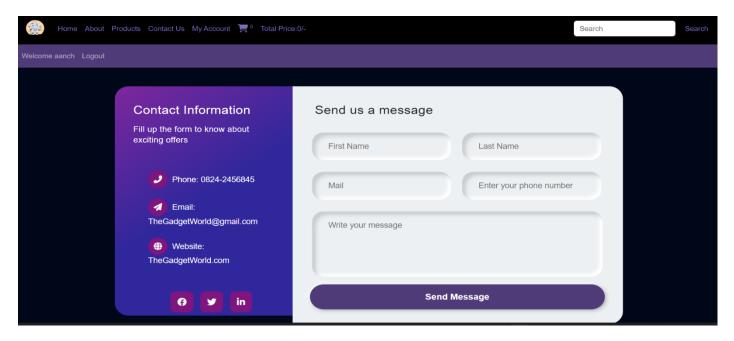


Figure 6.6 Screenshot of Contact Us Page

Figure 6.6 indicates the contact page where the user can contact the shop owner regarding queries or giving feeback about the product.

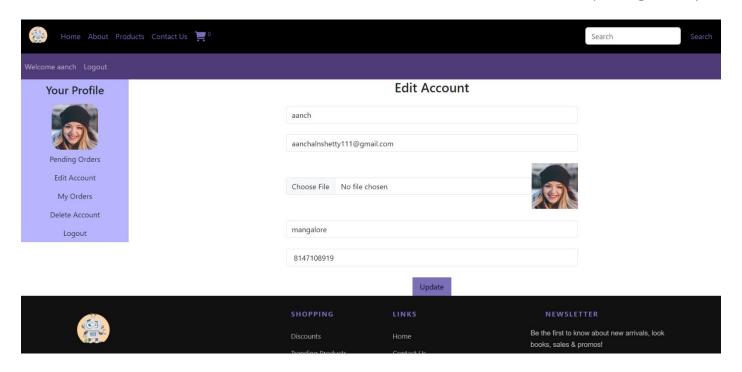


Figure 6.7 Screenshot of Edit Account Page

Figure 6.8 indicates the Edit account page here the user can edit their account and update their profile.

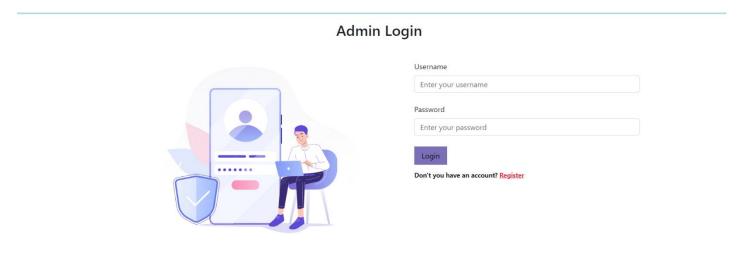


Figure 6.8 Screenshot of Admin Login Page

Figure 6.8 indicates the Admin Login Page where the admin can login to the admin dashboard.

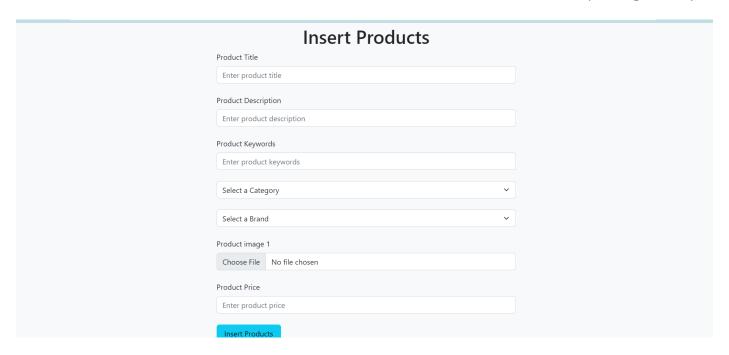


Figure 6.9 Screenshot of insert Products page

Figure 6.9 indicates the Insert products page where the admin can insert new products into the products page



Figure 6.10 Screenshot of Admin Dashboard

Figure 6.10 indicates the admin dashboard page here the admin can view products ,view categories ,view brands , view customer feedback and also edit the products page.

CONCLUSION

The Online Electronics Shop Management System reduces the manual work for the admin of the system. It saves time and resources and reduces redundancy of the data. It is very efficient when compared to the paper work that was used before the automation of the system. The order details and other details are stored in the database. The data stored in the database can easily be retrieved and updated or even deleted. Links are provided in each page so that the user can move from one page to anotherquickly. Proper error messages are displayed, so the user can easily identify the problem.

REFERENCES

- [1] Fundamentals of database system, Ramez-Elmasri -Shamkanth B 7th edition, 2017, Pearson.
- [2] https://www.w3schools.com/
- [3] https://stackoverflow.com/
- $[4] \underline{https://youtube.com/playlist?list=PL-h5aNeRKouEaGrQj6EXaqZsagEphQboI}\\$
- [5]https://youtu.be/v95sxoEUQpI