CSE370 : Database Systems
Project Report
Project Title : Gadget Accessories (E-Commerce)

Group No : 03, CSE370 Lab Section : 04, Fall 2022		
ID	**Name**	**Contribution**
20301137	Farhan Faruk	Login-Signup (User Panel) Search Bar (User panel) Order List (User Panel) Payment-Success form (TRX-ID & Payment Status) Order List (Admin Panel)
20301370	Nafisa Ahmed Progga	Login-Signup (Admin Panel) Add or Remove Brand (Admin) Add or Remove Category (Admin) Add or Remove Product (Admin) Customer Info (Admin) Dashboard (Admin)
20301338	Utsha Sen Dhruba	Cart Checkout Update or Remove Product(Cart) Calculating Total Price(Cart) Payment Gateway Form Payment Success Dashboard (Frontend)
20301326	Sartaj Emon Prattoy	Index Page(Front Webpage) Brand and Category Creation & Product fetching Add Product to Cart Get item to Dropdown Cart

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Introduction

This is an e-commerce website which offers various types of digital gadgets. There's a login & registration option for both users and admin. Admins can add new products, brands & categories. On the other hand, Customers can view products, add products to cart and also can order gadgets from here through online payment. Moreover, Users can also search for products.

Why We Have Intended to Build This System

The main motivation behind building this system was starting our own business. We are highly motivated by the current e-commerce gadget selling websites (Swap Star Tech etc).

Project Description

This project has two sides, one is user side and another is admin side. First of all, at the user end a user can log in/sign up to his/her own account. Users can see products according to brand or category. Also users can search for specific items through the search option. Then he/she can add items to cart according to his/her choice. Therefore, the user end has a feature to update or remove items from the cart. Finally, users may place orders by making online payments. Besides, the project has a feature where users can see the orders they placed from their account. On the other hand, the admin side also has a feature of log in/sign up. Admins have the access to update products,brands,categories for the user end and also can track the customer details as well as the orders placed by the customers.

Project Features

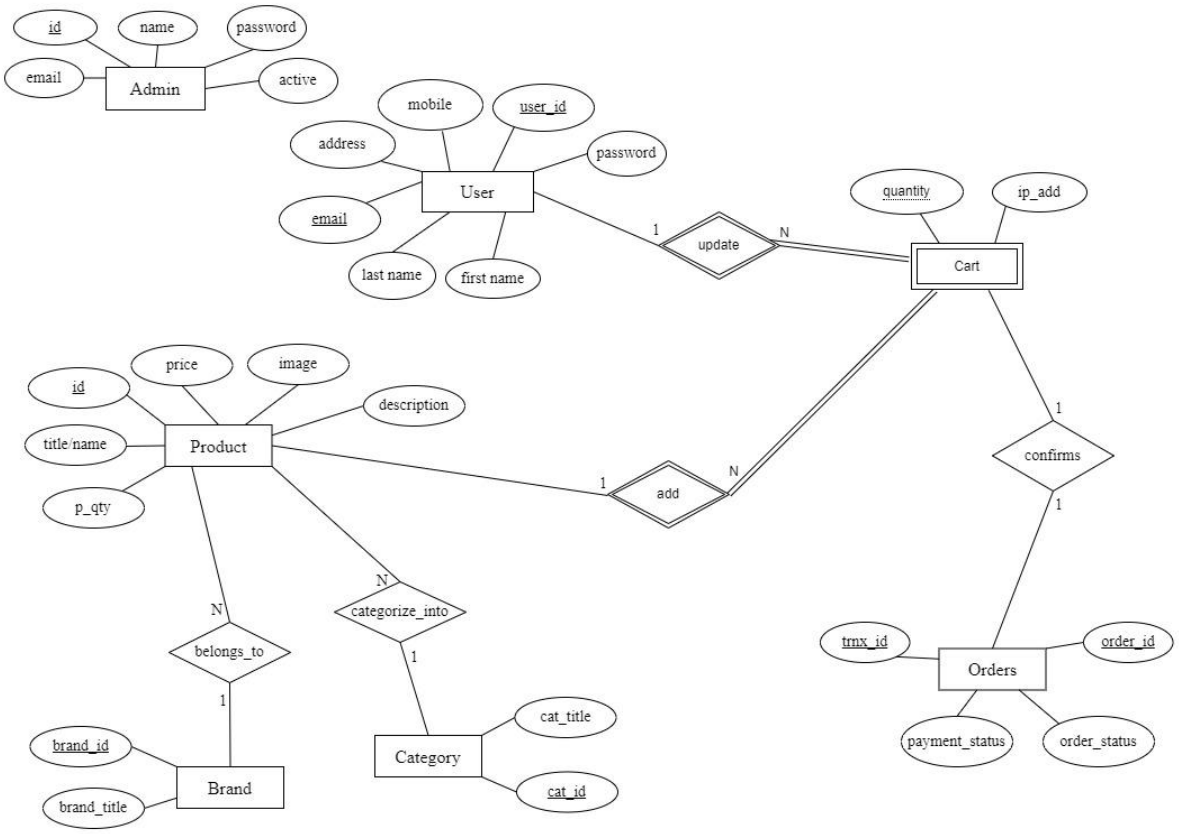
User Panel (Customer):

- Customer Registration
- Customer Login-Logout
- Index or Home page
- Dropdown login form
- Cart
- Dropdown Cart Edit
- Order List (Customer)
- Search Bar
- Payment form
- Payment Success (TRX-ID)
- Footer (Contact-Email)

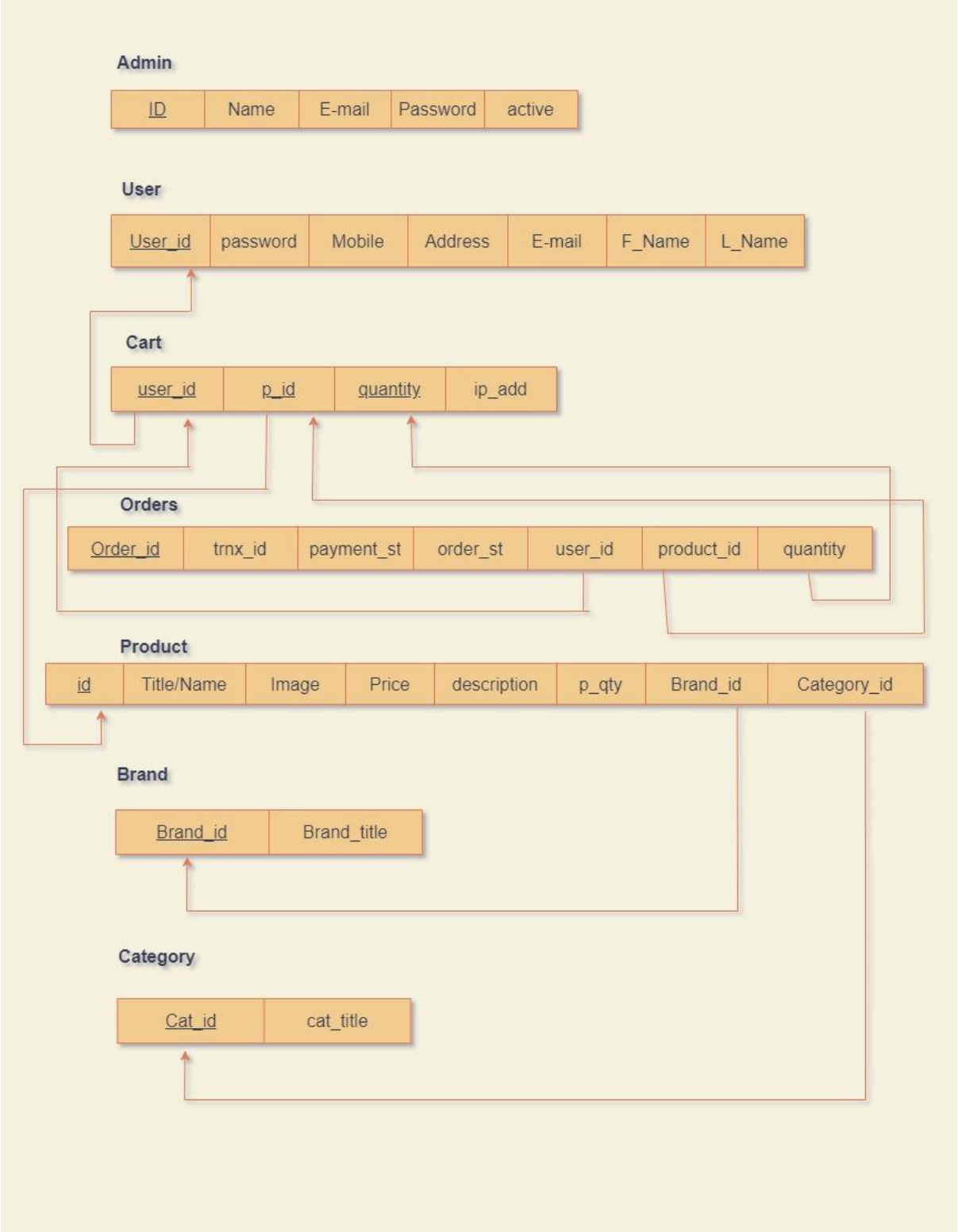
Admin Panel:

- Admin Register
- Admin Login-Logout
- Dashboard (Admin Details)
- Order List (Admin)
- Product list
- Add, Remove or update product List
- Brand List
- Add, Remove or update Brand List
- Category List
- Add, Remove or update Category List
- Customer’s Info

ER/EER Diagram



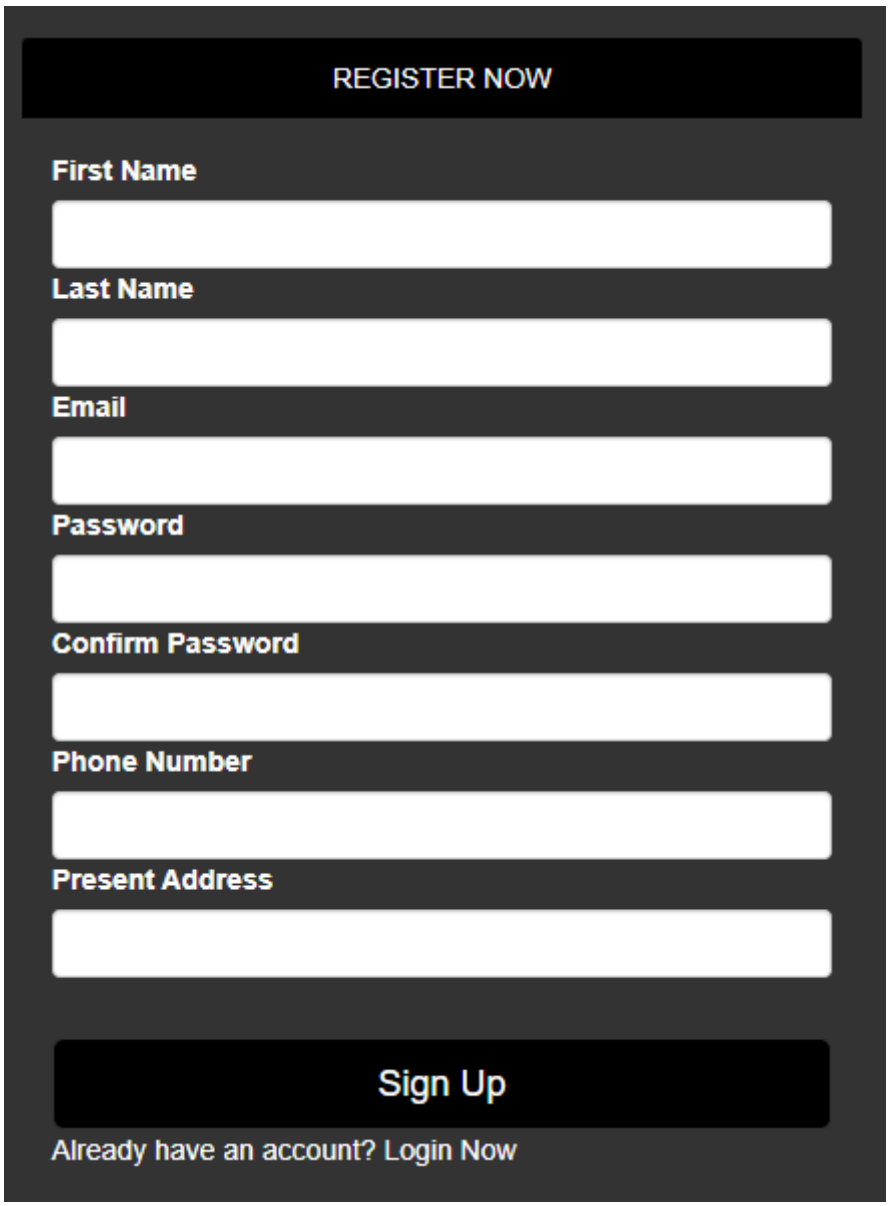
Schema Diagram



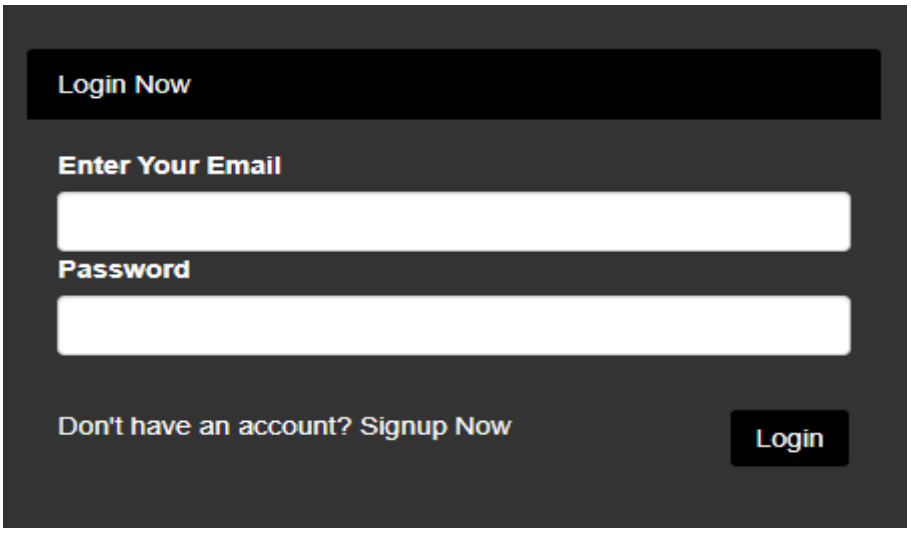
Frontend Development

Contribution of ID : 20301137, Name : Farhan Faruk

Signup

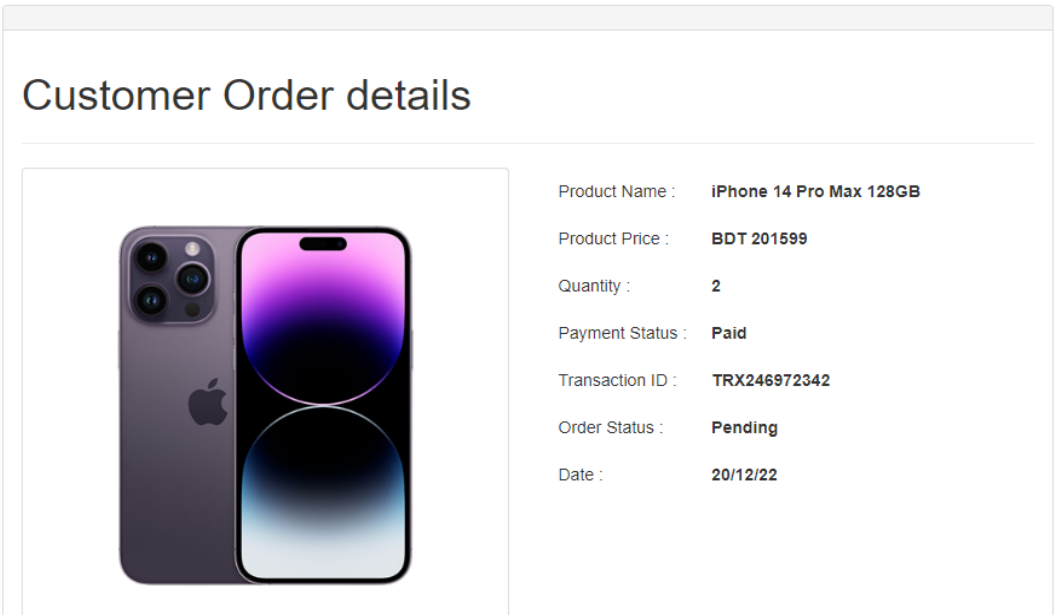


Login

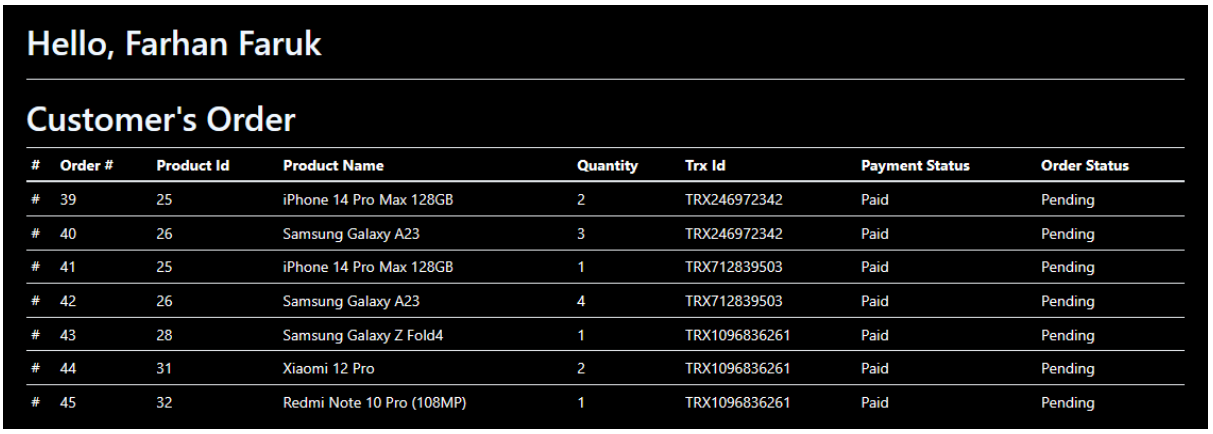


Search Bar

Order List (User Panel)



Order List (Admin Panel)

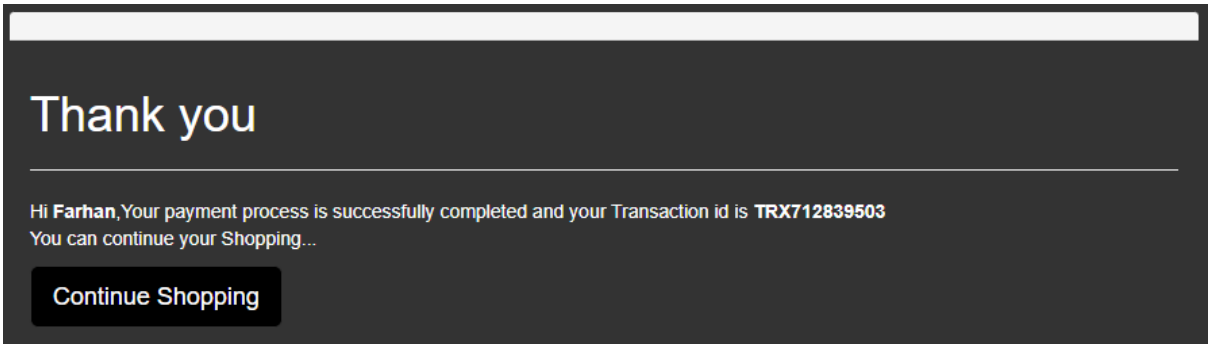


Hello, Farhan Faruk

Customer's Order

#	Order #	Product Id	Product Name	Quantity	Trx Id	Payment Status	Order Status
#	39	25	iPhone 14 Pro Max 128GB	2	TRX246972342	Paid	Pending
#	40	26	Samsung Galaxy A23	3	TRX246972342	Paid	Pending
#	41	25	iPhone 14 Pro Max 128GB	1	TRX712839503	Paid	Pending
#	42	26	Samsung Galaxy A23	4	TRX712839503	Paid	Pending
#	43	28	Samsung Galaxy Z Fold4	1	TRX1096836261	Paid	Pending
#	44	31	Xiaomi 12 Pro	2	TRX1096836261	Paid	Pending
#	45	32	Redmi Note 10 Pro (108MP)	1	TRX1096836261	Paid	Pending

Payment-Success (TRX-ID)



Thank you

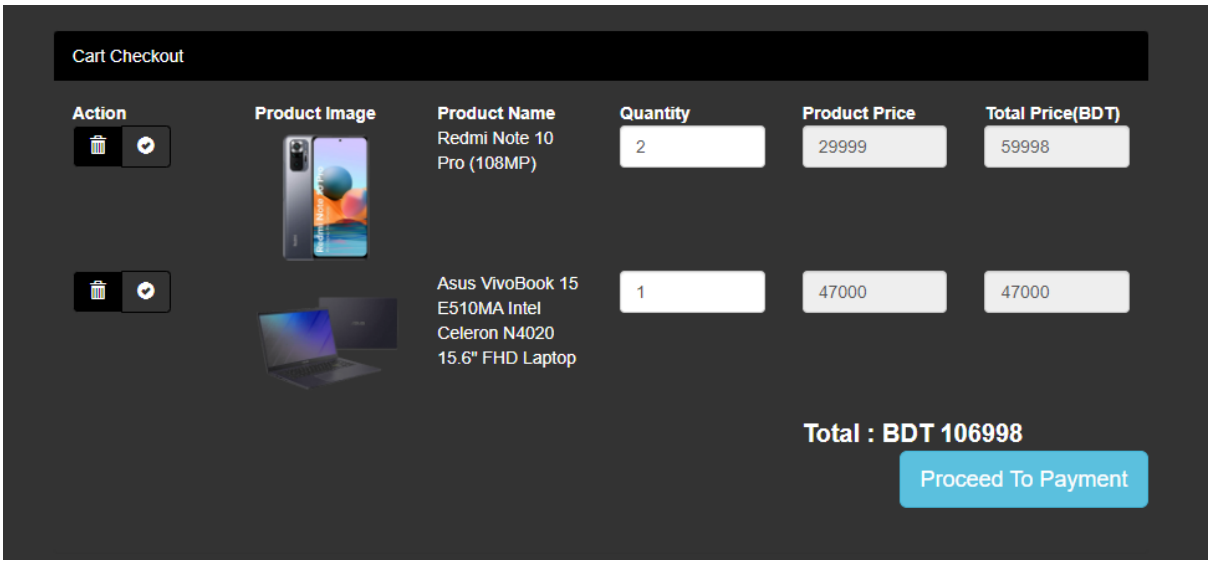
Hi **Farhan**,Your payment process is successfully completed and your Transaction id is **TRX712839503**
You can continue your Shopping...

Continue Shopping

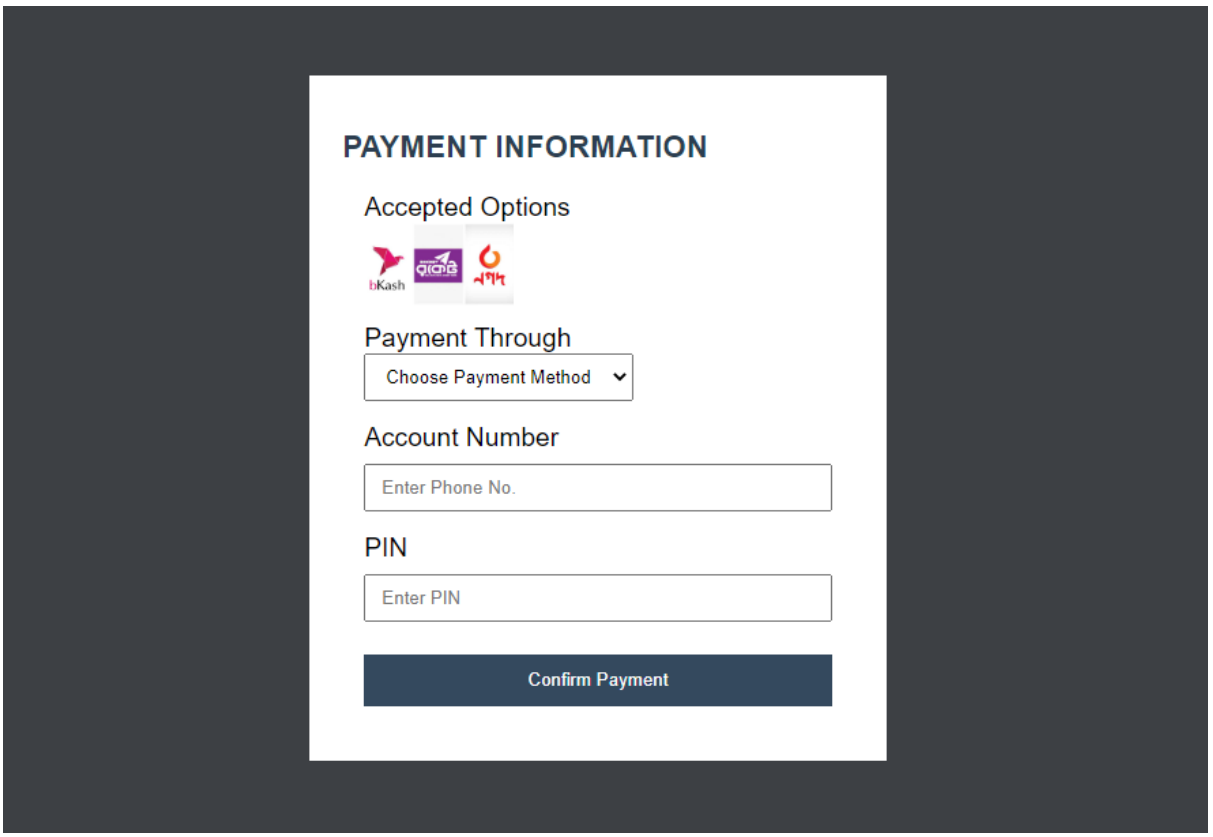
Here, I have given some frontend view of Login -Signup page for Customers, Search Bar which will helps the customer to find their desired product, Order list for user panel which will help them to track their orders, Order list for admin panel to track the orders and last but not the least payment success or generating Transaction ID.

Contribution of ID : 20301338, Name : Utsha Sen Dhruba

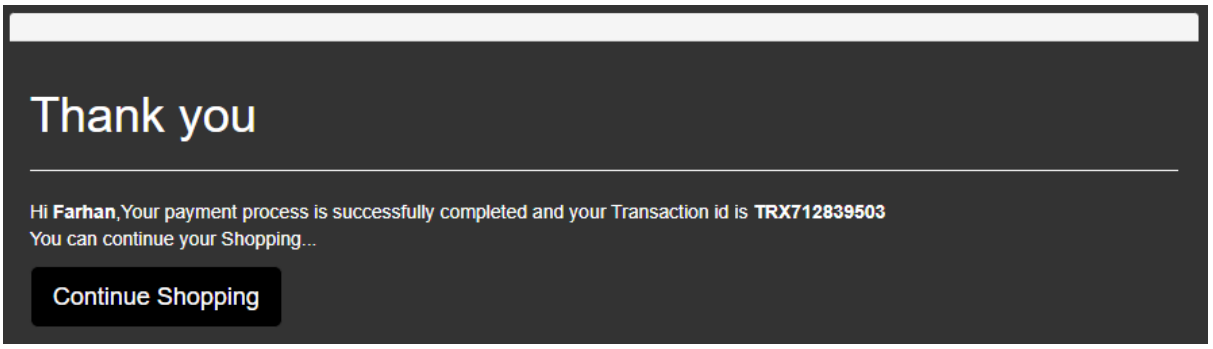
Cart Edit & Checkout



Payment Gateway Form



Payment Success

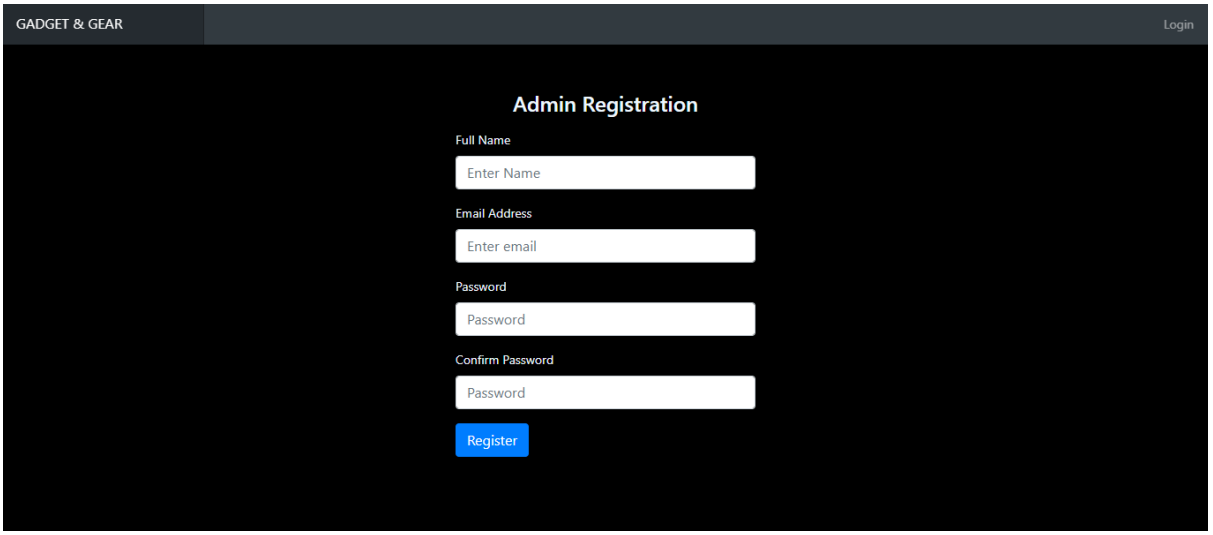


Admin Dashboard

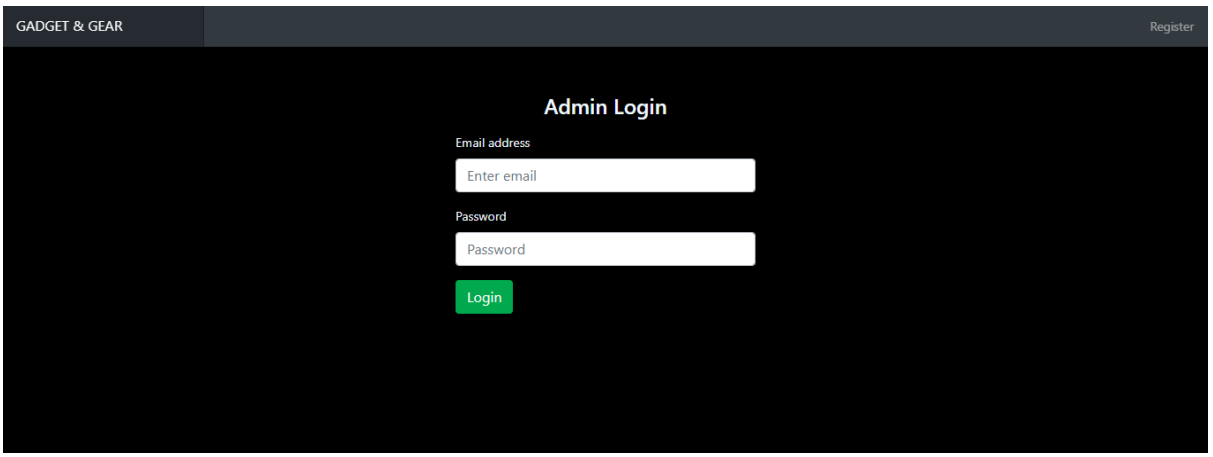
Here, I have added some frontend view of the cart checkout page where customers can update and remove the cart items. Then added the payment gateway and payment success page view where users can make payment and see a message for successful payment. The admin dashboard page shows the list of administrators.

Contribution of ID : 20301370, Name : Nafisa Ahmed Progga

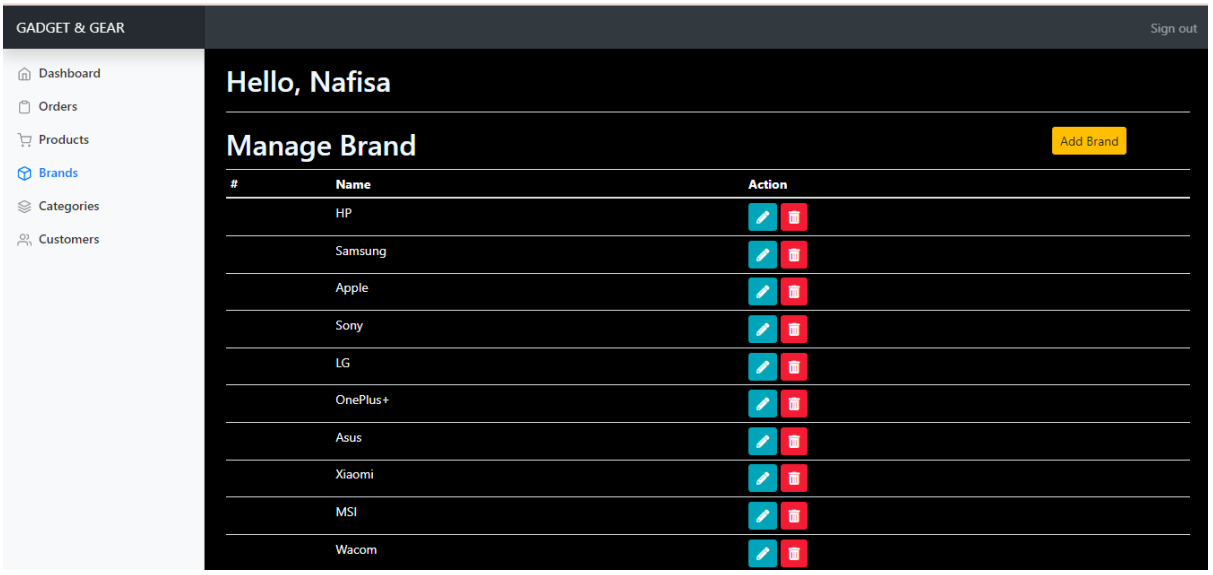
Signup (Admin Panel)

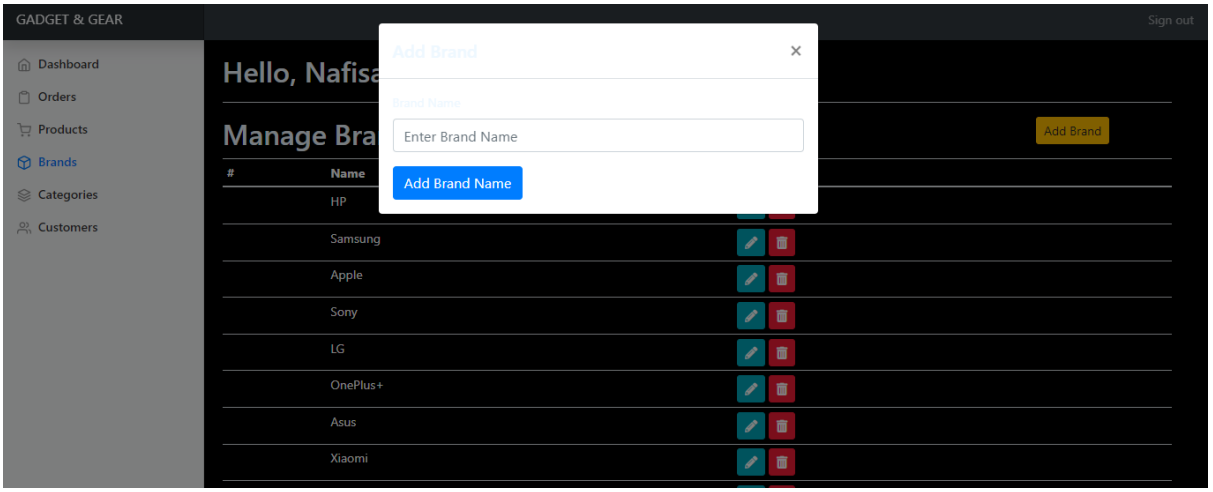


Login (Admin Panel)

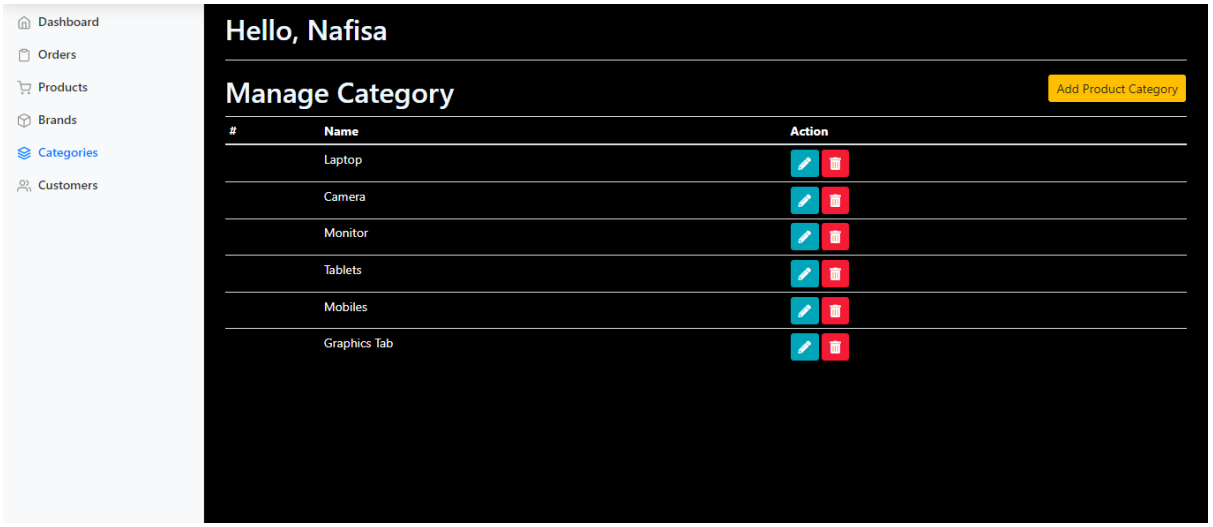


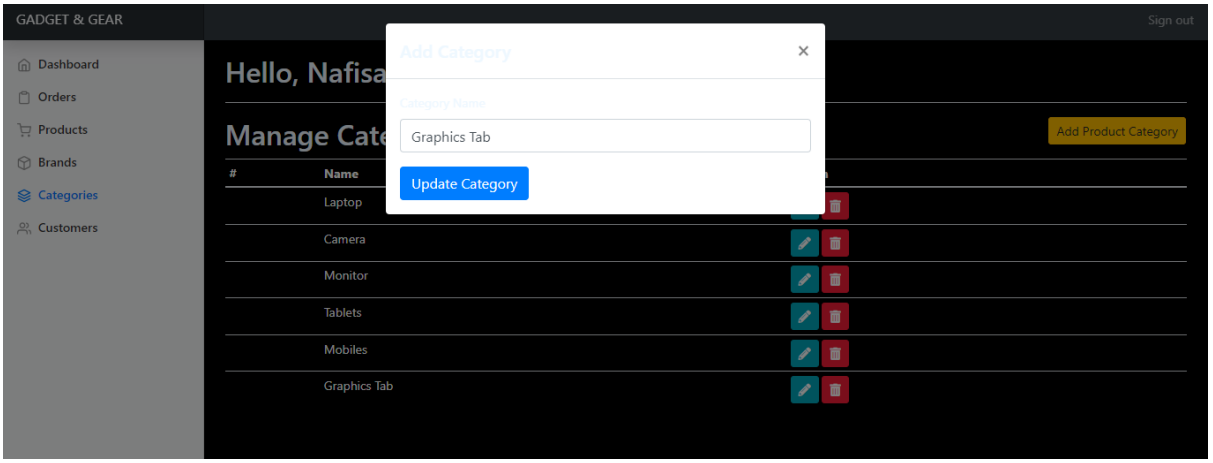
Add or Remove Brand (Admin)



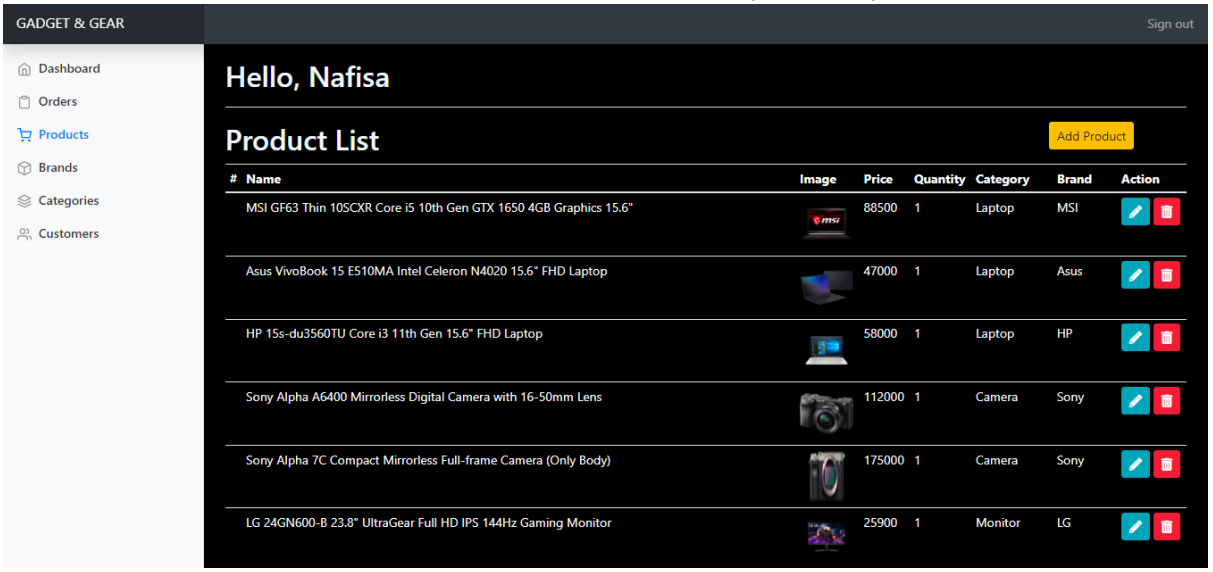


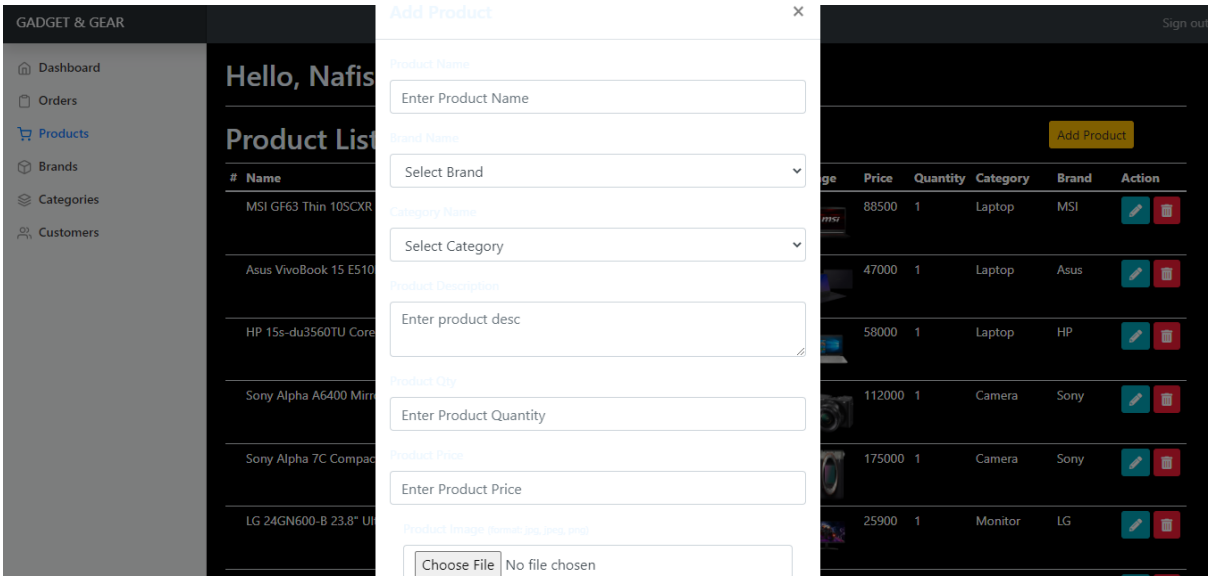
Add or Remove Category (Admin)

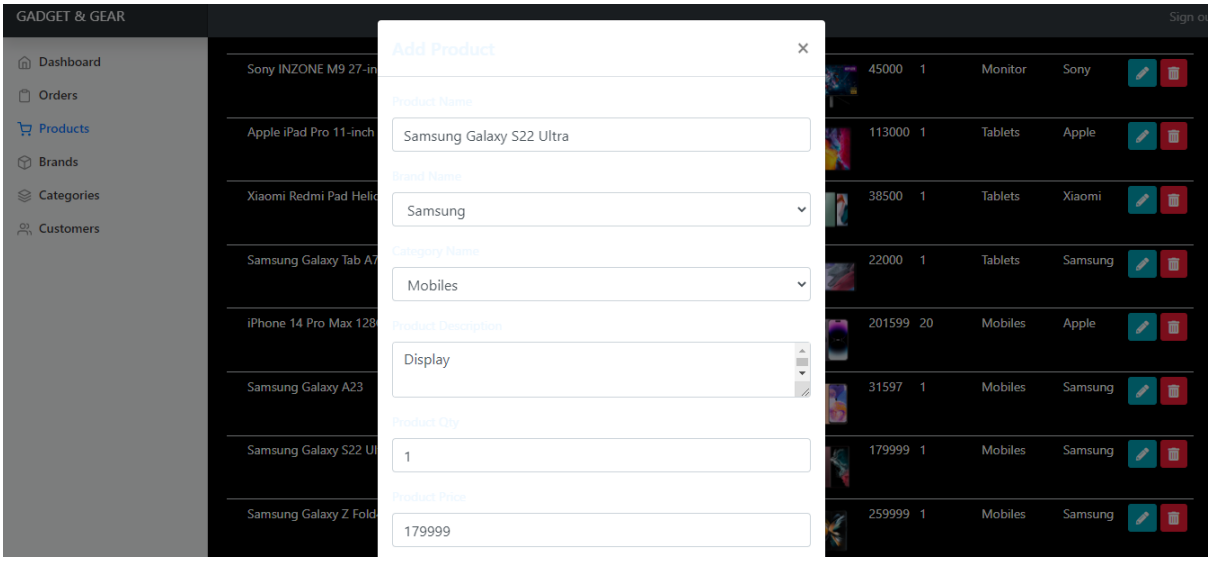




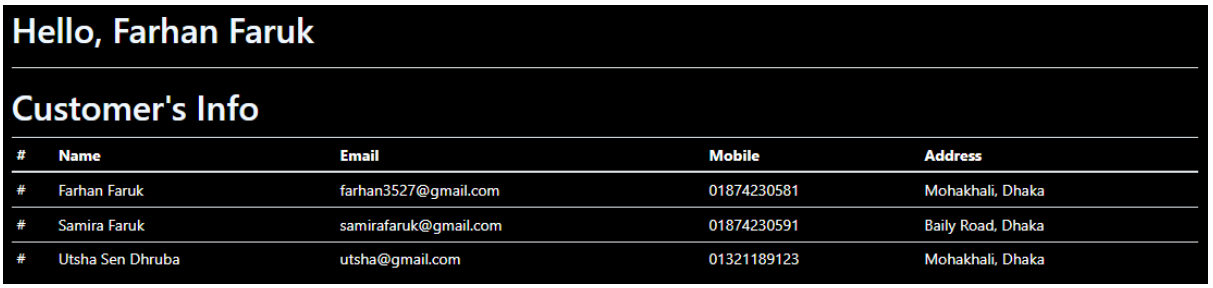
Add or Remove Product (Admin)







Customer Info



Hello, Farhan Faruk

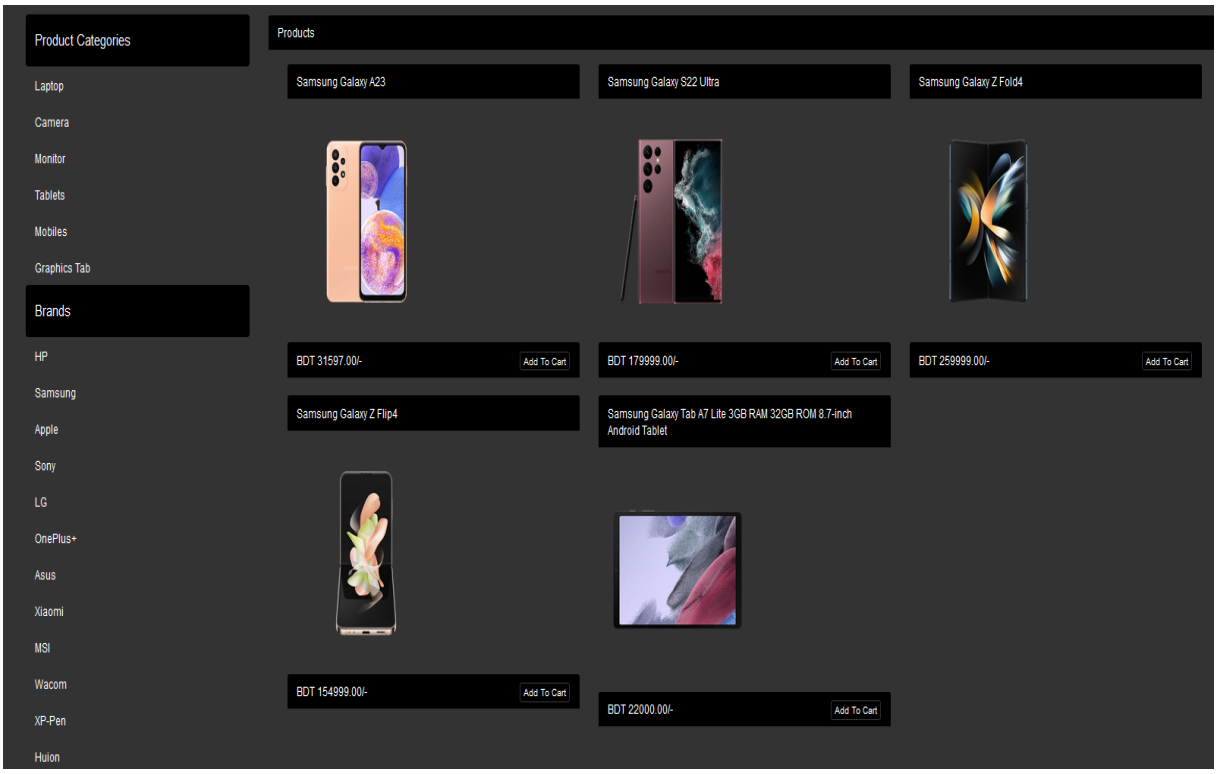
Customer's Info

#	Name	Email	Mobile	Address
#	Farhan Faruk	farhan3527@gmail.com	01874230581	Mohakhali, Dhaka
#	Samira Faruk	samirafaruk@gmail.com	01874230591	Baily Road, Dhaka
#	Utsha Sen Dhruba	utsha@gmail.com	01321189123	Mohakhali, Dhaka

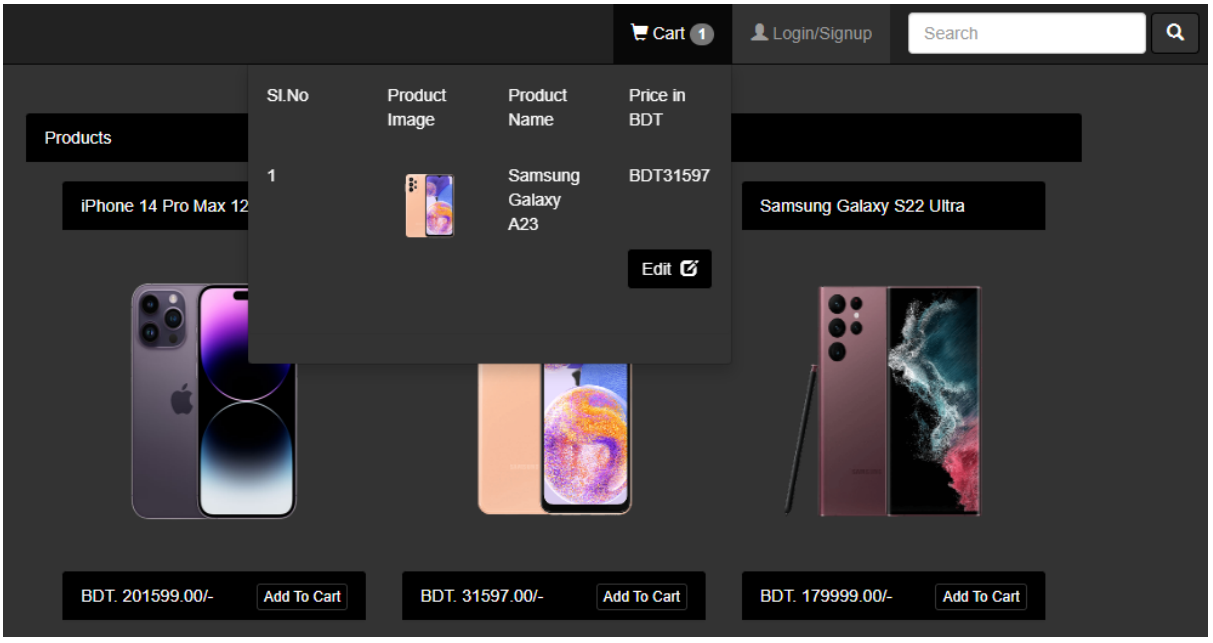
Here, I have added Admin Signup and Login pages, where admin can create their account and access the admin panel. I also added Brand, Category and Product Add, Edit and Delete functionalities, where admin can add or update Brands and Products in the database. And Lastly, I have added the Customer Information page, where admin can see Customers info in a glance.

Contribution of ID : 20301326, Name : Sartaj Emon Prattoy

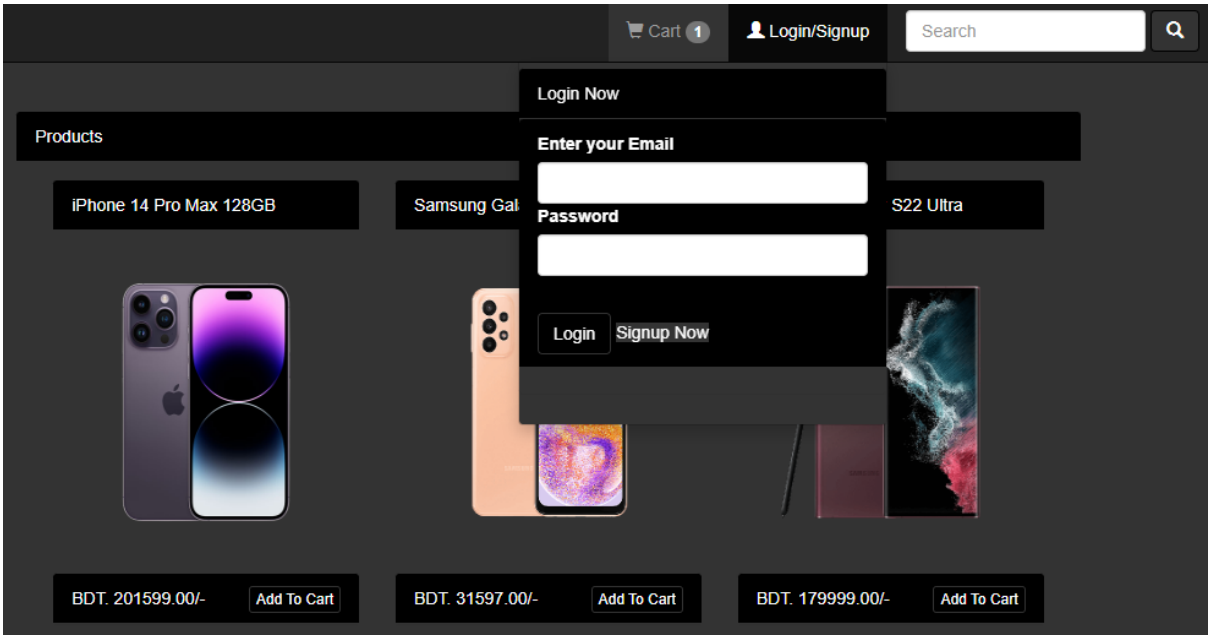
Brand and Category Fetching



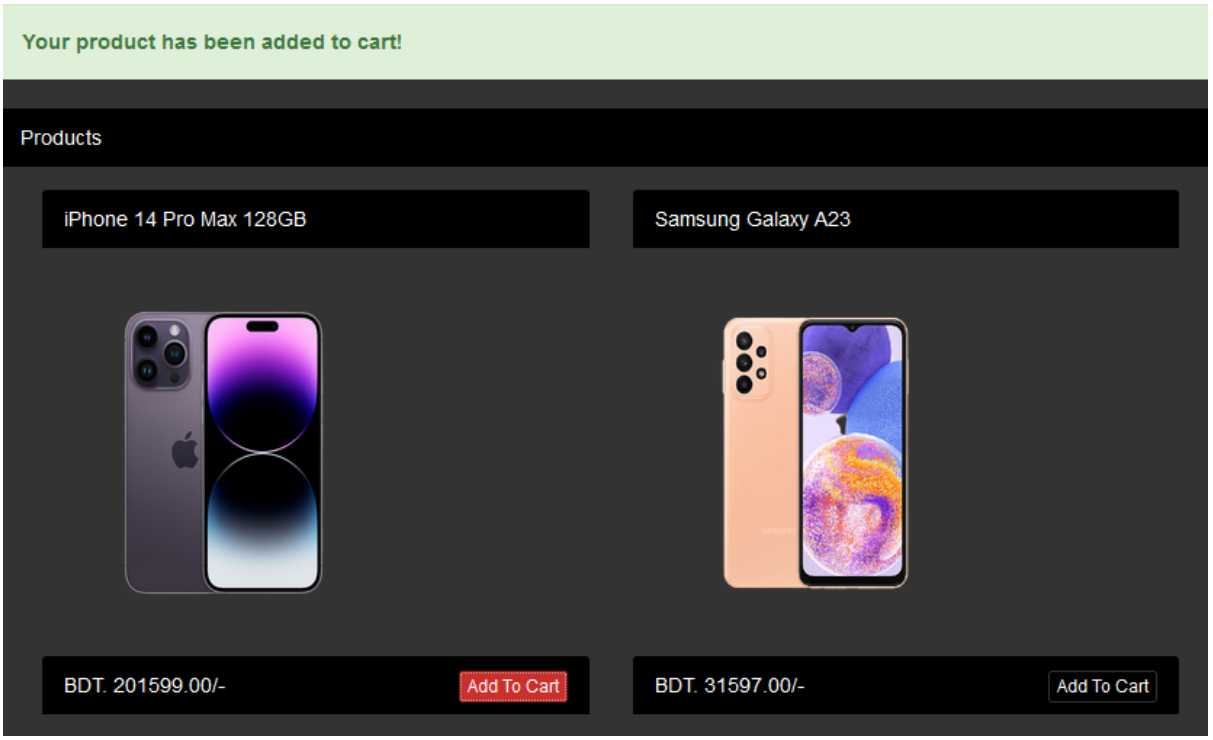
Cart (Dropdown)

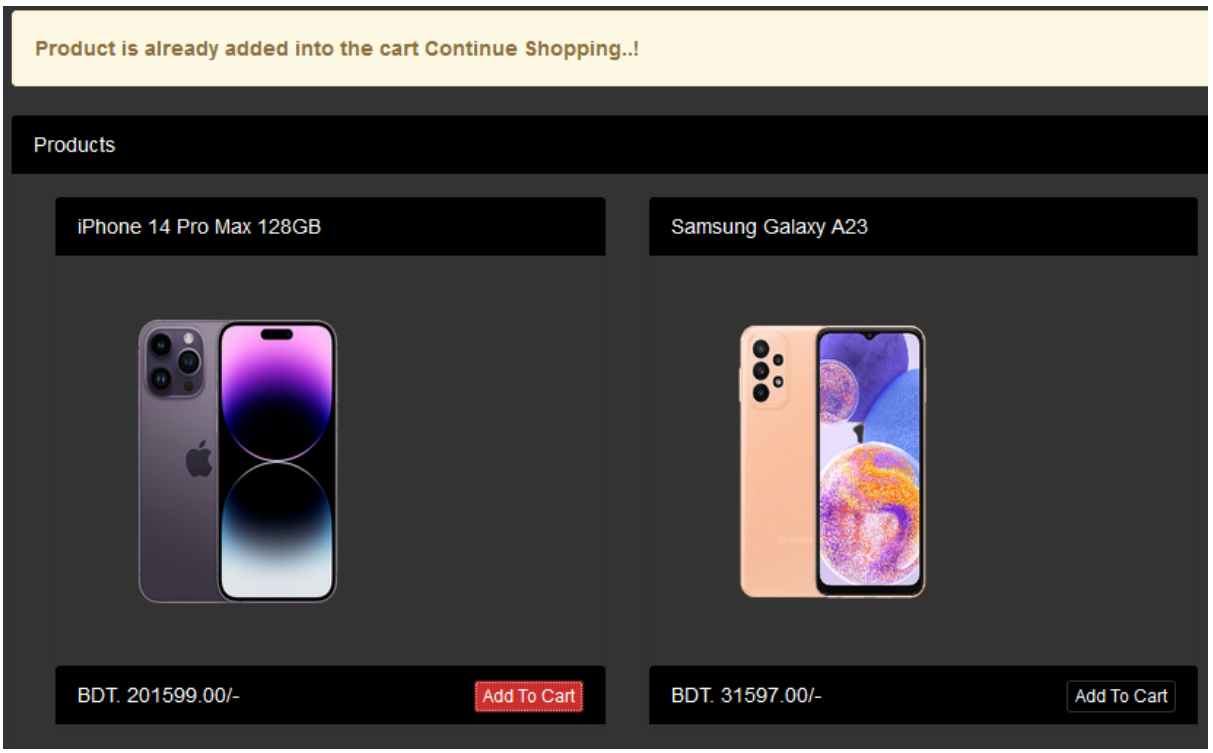


Login Popup

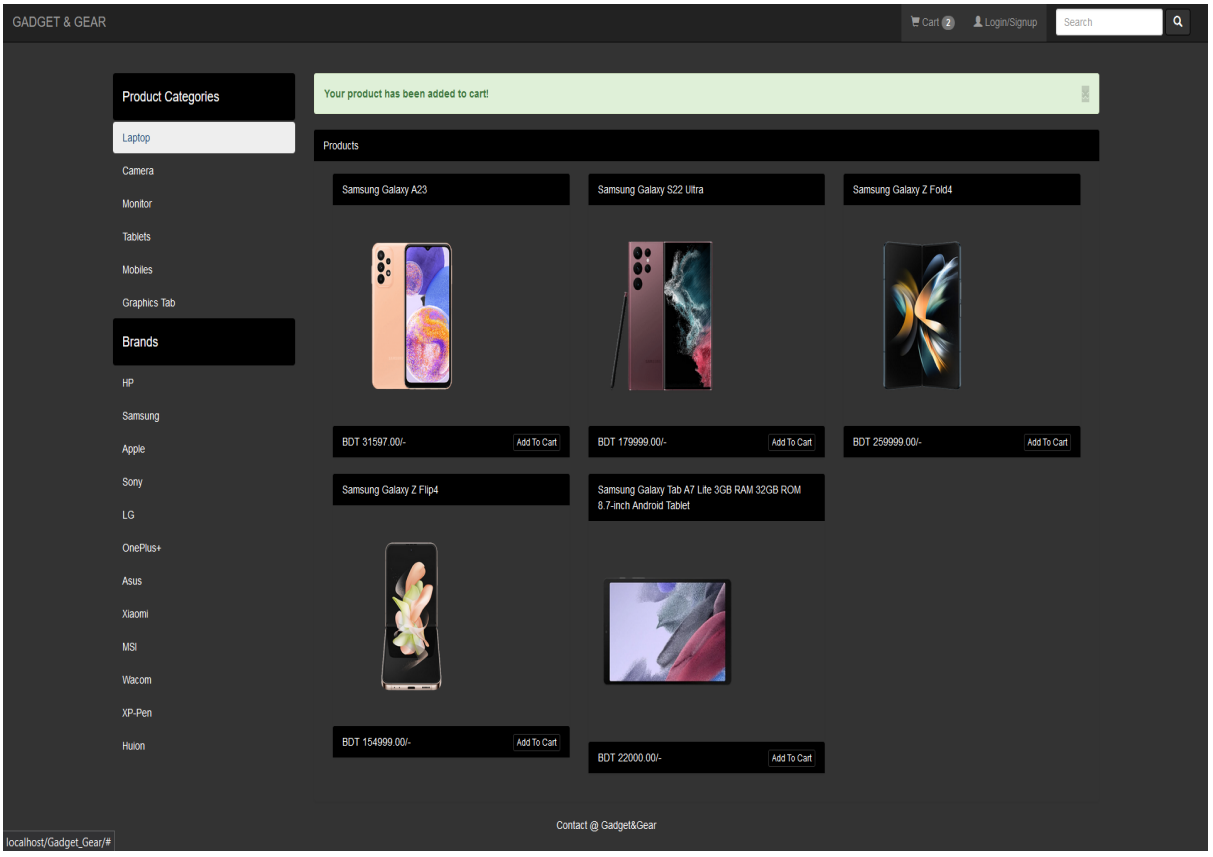


Successful Add to Cart operation





Index Page (Redirection)



Backend Development

Contribution of ID : 20301137, Name : Farhan Faruk

Signup

```php
<?php
session_start();
include "db.php";
if (isset($_POST["f_name"])) {

    $f_name = $_POST["f_name"];
    $l_name = $_POST["l_name"];
    $email = $_POST['email'];
    $password = $_POST['password'];
    $repassword = $_POST['repassword'];
    $mobile = $_POST['mobile'];
    $address = $_POST['address'];
    $name = "/^[a-zA-Z ]+$/";
    $emailValidation = "/^[_a-z0-9-]+(\.[_a-z0-9-]+)*@[a-z0-9]+(\.[a-z]{2,4})$/";
    $number = "/^[0-9]+$/";
```

```php
if(empty($f_name) || empty($l_name) || empty($email) || empty($password) || empty($repassword) ||
    empty($mobile) || empty($address)){

        echo "
            <div class='alert alert-warning'>
                <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a><b>PLease Fill  fields..!</b>
            </div>
        ";
        exit();
    } else {
        if(!preg_match($name,$f_name)){
        echo "
            <div class='alert alert-warning'>
                <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                <b>this $f_name is not valid..!</b>
            </div>
        ";
        exit();
    }
    if(!preg_match($name,$l_name)){
        echo "
            <div class='alert alert-warning'>
                <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                <b>this $l_name is not valid..!</b>
            </div>
        ";
        exit();
    }
    if(!preg_match($emailValidation,$email)){
        echo "
            <div class='alert alert-warning'>
                <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                <b>this $email is not valid..!</b>
            </div>
        ";
        exit();
    }
```

```php
if(strlen($password) < 8 ){
    echo "
        <div class='alert alert-warning'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>Password is weak</b>
        </div>
    ";
    exit();
}
if(strlen($repassword) < 8 ){
    echo "
        <div class='alert alert-warning'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>Password is weak</b>
        </div>
    ";
    exit();
}
if($password != $repassword){
    echo "
        <div class='alert alert-warning'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>password is not same</b>
        </div>
    ";
}
if(!preg_match($number,$mobile)){
    echo "
        <div class='alert alert-warning'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>Mobile number $mobile is not valid</b>
        </div>
    ";
    exit();
}
```

```php
if(!(strlen($mobile) == 11)){
    echo "
        <div class='alert alert-warning'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>Mobile number must be 11 digit</b>
        </div>
    ";
    exit();
}
//for checking the existing email address in our database
$sql = "SELECT user_id FROM user_info WHERE email = '$email' LIMIT 1" ;
$check_query = mysqli_query($con,$sql);
$count_email = mysqli_num_rows($check_query);
if($count_email > 0){
    echo "
        <div class='alert alert-danger'>
            <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
            <b>Email Address is already available Try Another email address</b>
        </div>
    ";
    exit();
```

```
    } else {
        $sql = "INSERT INTO `user_info`
        (`user_id`, `first_name`, `last_name`, `email`,
        `password`, `mobile`, `address`)
        VALUES (NULL, '$f_name', '$l_name', '$email',
        '$password', '$mobile', '$address')";
        $run_query = mysqli_query($con,$sql);
        $_SESSION["uid"] = mysqli_insert_id($con);
        $_SESSION["name"] = $f_name;
        $ip_add = getenv("REMOTE_ADDR");
        $sql = "UPDATE cart SET user_id = '$_SESSION[uid]' WHERE ip_add='$ip_add' AND user_id = -1";
        if(mysqli_query($con,$sql)){
            echo "register_success";
            exit();
        }
    }
    }
}
?>
```

Here, I'm storing the new customer information from signup page to user info table of my database using mysql query.

Login

```
<?php
include "db.php";
session_start();

if(isset($_POST["email"]) && isset($_POST["password"])){
    $email = mysqli_real_escape_string($con,$_POST["email"]);
    $password = ($_POST["password"]);
    $sql = "SELECT * FROM user_info WHERE email = '$email' AND password = '$password'";
    $run_query = mysqli_query($con,$sql);
    $count = mysqli_num_rows($run_query);
    // checking if user is available or not
    if($count == 1){
        $row = mysqli_fetch_array($run_query);
        $_SESSION["uid"] = $row["user_id"];
        $_SESSION["name"] = $row["first_name"];
        $ip_add = getenv("REMOTE_ADDR");
        //if the cookie is available, user is not login
            if (isset($_COOKIE["product_list"])) {
                $p_list = stripcslashes($_COOKIE["product_list"]);
                $product_list = json_decode($p_list,true);
                for ($i=0; $i < count($product_list); $i++) {
                    //Checking user cart item if there is already product or not
                    $verify_cart = "SELECT user_id FROM cart
                    WHERE user_id = $_SESSION[uid] AND p_id = ".$product_list[$i];
                    $result  = mysqli_query($con,$verify_cart);
                    if(mysqli_num_rows($result) < 1){
                        $update_cart = "UPDATE cart SET user_id = '$_SESSION[uid]'
                        WHERE ip_add = '$ip_add' AND user_id = -1";
                        mysqli_query($con,$update_cart);
```

```
                }else{
                    //if already that product is available
                    $delete_existing_product = "DELETE FROM cart
                    WHERE user_id = -1 AND ip_add = '$ip_add' AND p_id = ".$product_list[$i];
                    mysqli_query($con,$delete_existing_product);
                }
            }
            setcookie("product_list","",strtotime("-1 day"),"/");
            echo "cart_login";
            exit();

        }
        echo "login_success";
        exit();
    }else{
        echo "<span style='color:red;'>Please register before login..!</span>";
        exit();
    }
}
?>
```

Search Bar

```
if(isset($_POST["get_seleted_Category"]) || isset($_POST["selectBrand"]) || isset($_POST["search"])){
    if(isset($_POST["get_seleted_Category"])){
        $id = $_POST["cat_id"];
        $sql = "SELECT * FROM products WHERE product_cat = '$id'";
    }else if (isset($_POST["selectBrand"])){
        $id = $_POST["brand_id"];
        $sql = "SELECT * FROM products WHERE product_brand = '$id'";
    }else {
        $Search = $_POST["keyword"];
        $sql = "SELECT * FROM products WHERE product_title LIKE  '%".$Search."%'";
    }
```

```
$run_query = mysqli_query($con,$sql);
while($row=mysqli_fetch_array($run_query)){

    $pro_id    = $row['product_id'];
    $pro_cat   = $row['product_cat'];
    $pro_brand = $row['product_brand'];
    $pro_title = $row['product_title'];
    $pro_price = $row['product_price'];
    $pro_image = $row['product_image'];
    echo "
        <div class='col-md-4'>
            <div class='panel panel-info'>
                <div class='panel-heading'>$pro_title</div>
                <div class='panel-body'>
                    <img src='product_images/$pro_image' style='width:220px; height:250px;'/>
                </div>
                <div class='panel-heading'>BDT $pro_price.00/-
                    <button pid='$pro_id' style='float:right;' id='product' class='btn btn-danger btn-xs'>Add To Cart</button>
                </div>
            </div>
        </div>
    ";
    }
}
```

```
$("#search_btn").click(function(event){
    event.preventDefault();
    $("#get_product").html(product());
    var keyword = $("#search").val();
    if(keyword != ""){
        $.ajax({
        url      :   "action.php",
        method   :   "POST",
        data     :   {search:1,keyword:keyword},
        success  :   function(data){
            $("#get_product").html(data);
            if($("body").width() < 480){
                $("body").scrollTop(683);
            }
        }
    })
    }
})
```

Order List (User Panel)

```
<h1>Customer Order details</h1>
<hr/>
<?php
    include_once("db.php");
    $user_id = $_SESSION["uid"];
    $orders_list = "SELECT o.order_id,o.user_id,o.product_id,o.qty,o.trx_id,o.p_status,o.o_status,p.product_title,p.product_price,p.product_image
    FROM orders o,products p WHERE o.user_id='$user_id' AND o.product_id=p.product_id";
    $query = mysqli_query($con,$orders_list);
    if (mysqli_num_rows($query) > 0) {
        while ($row=mysqli_fetch_array($query)) {
            ?>
                <div class="row">
                    <div class="col-md-6">
                        <img style="float:right;" src="product_images/<?php echo $row['product_image']; ?>" class="img-responsive img-thumbnail"/>
                    </div>
                    <div class="col-md-6">
                        <table>
                            <tr><td>Product Name :</td><td><b><?php echo $row["product_title"]; ?></b> </td></tr>
                            <tr><td>Product Price :</td><td><b><?php echo  CURRENCY." ".$row["product_price"]; ?></b></td></tr>
                            <tr><td>Quantity :</td><td><b><?php echo $row["qty"]; ?></b></td></tr>
                            <tr><td>Payment Status :</td><td><b><?php echo $row["p_status"]; ?></b></td></tr>
                            <tr><td>Transaction ID :</td><td><b><?php echo $row["trx_id"]; ?></b></td></tr>
                            <tr><td>Order Status :</td><td><b><?php echo $row["o_status"]; ?></b></td></tr>
                            <tr><td>Date :</td><td><b><?php echo date("d/m/y"); ?></b></td></tr>
                        </table>
                    </div>
                </div>
            <?php
```

Here, I'm order list information for the database table using mysql query.

Payment-Success (TRX-ID)

```php
<?php
require "db.php";
session_start();
if(!isset($_SESSION["uid"])){
    header("location:index.php");
}?>
<?php

$trx_id=rand();
$str_trx = "TRX".$trx_id;
$cm_user_id = $_SESSION["uid"];
$p_st="Paid";
$sql = "SELECT p_id,qty FROM cart WHERE user_id = '$cm_user_id'";
$query = mysqli_query($con,$sql);

while ($row=mysqli_fetch_array($query)) {

    $product_id[] = $row["p_id"];
    $qty[] = $row["qty"];
}
for ($i=0; $i < count($product_id); $i++) {
    $sql = "INSERT INTO orders (user_id,product_id,qty,trx_id,p_status)
    VALUES ('$cm_user_id','".$product_id[$i]."','".$qty[$i]."','$str_trx','$p_st')";
    mysqli_query($con,$sql);
}
$sql = "DELETE FROM cart WHERE user_id = '$cm_user_id'";
if (mysqli_query($con,$sql)){ ?>
```

Here, I'm generating a random id using the rand() function as well as concating it with string- "TRX". This is how I'm generating the transaction id.

Order List (Admin Panel)

```php
public function getCustomersOrder(){
    $query = $this->con->query("SELECT o.order_id, o.product_id, o.qty, o.trx_id, o.p_status, o.o_status, p.product_title, p.product_image
    FROM orders o JOIN products p ON o.product_id = p.product_id");
    $ar = [];
    if (@$query->num_rows > 0) {
        while ($row = $query->fetch_assoc()) {
            $ar[] = $row;
        }
        return ['status'=> 202, 'message'=> $ar];
    }
    return ['status'=> 303, 'message'=> 'no orders yet'];
}
```

```html
<div class="row">
  <div class="col-10">
    <h2>Customer's Order</h2>
  </div>
</div>

<div class="table-responsive">
  <table class="table table-striped table-sm">
    <thead>
      <tr>
        <th>#</th>
        <th>Order #</th>
        <th>Product Id</th>
        <th>Product Name</th>
        <th>Quantity</th>
        <th>Trx Id</th>
        <th>Payment Status</th>
        <th>Order Status</th>
      </tr>
    </thead>
    <tbody id="customer_order_list">
```

Contribution of ID : 20301370, Name : Nafisa Ahmed Progga

Signup & Login (Admin Panel)

```php
public function createAdminAccount($name, $email, $password){
    $q = $this->con->query("SELECT email FROM admin WHERE email = '$email'");
    if ($q->num_rows > 0) {
        return ['status'=> 303, 'message'=> 'Email already exists'];
    }else{
        $password = password_hash($password, PASSWORD_BCRYPT, ["COST"=> 8]);
        $q = $this->con->query("INSERT INTO `admin`(`name`, `email`, `password`, `is_active`) VALUES ('$name','$emai
        if ($q) {
            return ['status'=> 202, 'message'=> 'Admin Created Successfully'];
        }

    }
}

public function loginAdmin($email, $password){
    $q = $this->con->query("SELECT * FROM admin WHERE email = '$email' LIMIT 1");
    if ($q->num_rows > 0) {
        $row = $q->fetch_assoc();
        if (password_verify($password, $row['password'])) {
            $_SESSION['admin_name'] = $row['name'];
            $_SESSION['admin_id'] = $row['id'];
            return ['status'=> 202, 'message'=> 'Login Successful'];
        }else{
            return ['status'=> 303, 'message'=> 'Login Fail'];
        }
    }else{
        return ['status'=> 303, 'message'=> 'Account not created yet with this email'];
    }
}
```

```php
if (isset($_POST['admin_register'])) {
    extract($_POST);
    if (!empty($name) && !empty($email) && !empty($password) && !empty($cpassword)) {
        if ($password == $cpassword) {
            $c = new Credentials();
            $result = $c->createAdminAccount($name, $email, $password);
            echo json_encode($result);
            exit();
        }else{
            echo json_encode(['status'=> 303, 'message'=> 'Password mismatch']);
            exit();
        }
    }else{
        echo json_encode(['status'=> 303, 'message'=> 'Empty fields']);
        exit();
    }
}

if (isset($_POST['admin_login'])) {
    extract($_POST);
    if (!empty($email) && !empty($password)) {
        $c = new Credentials();
        $result = $c->loginAdmin($email, $password);
        echo json_encode($result);
        exit();
    }else{
        echo json_encode(['status'=> 303, 'message'=> 'Empty fields']);
        exit();
    }
}
```

```php
<?php include "./templates/top.php"; ?>

<?php include "./templates/navbar.php"; ?>

<div class="container">
    <div class="row justify-content-center" style="margin:100px 0;">
        <div class="col-md-4">
            <h4 class="text-center">Admin Registration</h4>
            <p class="message"></p>
            <form id="admin-register-form">
              <div class="form-group">
                <label for="name">Full Name</label>
                <input type="text" class="form-control" name="name" id="name" placeholder="Enter Name">
              </div>
              <div class="form-group">
                <label for="email">Email Address</label>
                <input type="email" class="form-control" name="email" id="email" placeholder="Enter email">

              </div>
              <div class="form-group">
                <label for="password">Password</label>
                <input type="password" class="form-control" name="password" id="password" placeholder="Password">
              </div>
              <div class="form-group">
                <label for="cpassword">Confirm Password</label>
                <input type="password" class="form-control" name="cpassword" id="cpassword" placeholder="Password">
              </div>
              <input type="hidden" name="admin_register" value="1">
              <button type="button" class="btn btn-primary register-btn">Register</button>
            </form>
        </div>
```

```php
<?php include "./templates/navbar.php"; ?>

<div class="container">
    <div class="row justify-content-center" style="margin:100px 0;">
        <div class="col-md-4">
            <h4 class="text-center">Admin Login</h4>
            <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/scss/_reboot.scss" crossorigin="a
            <link rel="stylesheet" href="admin2.css">
            <link rel="icon" type="image/x-icon" href="icon.png">
            <p class="message"></p>
            <form id="admin-login-form">
              <div class="form-group">
                <label for="email">Email address</label>
                <input type="email" class="form-control" name="email" id="email"  placeholder="Enter email">

              </div>
              <div class="form-group">
                <label for="password">Password</label>
                <input type="password" class="form-control" name="password" id="password" placeholder="Password">
              </div>
              <input type="hidden" name="admin_login" value="1">
              <button type="button" class="btn btn-success login-btn">Login</button>
            </form>
        </div>
    </div>
</div>


<?php include "./templates/footer.php"; ?>
<script type="text/javascript" src="./js/main.js"></script>
```

Here, I am collecting the admin and user account details and checking the correct email and password while they are signing up or logging - in.

DashBoard (backend)

```php
<?php


class Admin
{

    private $con;

    function __construct()
    {
        include_once("Database.php");
        $db = new Database();
        $this->con = $db->connect();
    }

    public function getAdminList(){
        $query = $this->con->query("SELECT `id`, `name`, `email`, `is_active` FROM `admin` ");
        $ar = [];
        if ($query->num_rows > 0) {
            while ($row = $query->fetch_assoc()) {
                $ar[] = $row;
            }
            return ['status'=> 202, 'message'=> $ar];
        }
        return ['status'=> 303, 'message'=> 'No Admin'];
    }


}


if (isset($_POST['GET_ADMIN'])) {
    $a = new Admin();
    echo json_encode($a->getAdminList());
    exit();

}
```

Here, I am collecting and retrieving admin information.

Add or Remove Brand (Admin)

```php
public function addBrand($name){
    $q = $this->con->query("SELECT * FROM brands WHERE brand_title = '$name' LIMIT 1");
    if ($q->num_rows > 0) {
        return ['status'=> 303, 'message'=> 'Brand already exists'];
    }else{
        $q = $this->con->query("INSERT INTO brands (brand_title) VALUES ('$name')");
        if ($q) {
            return ['status'=> 202, 'message'=> 'New Brand added Successfully'];
        }else{
            return ['status'=> 303, 'message'=> 'Failed to run query'];
        }
    }
}

public function deleteBrand($bid = null){
    if ($bid != null) {
        $q = $this->con->query("DELETE FROM brands WHERE brand_id = '$bid'");
        if ($q) {
            return ['status'=> 202, 'message'=> 'Brand removed'];
        }else{
            return ['status'=> 202, 'message'=> 'Failed to run query'];
        }

    }else{
        return ['status'=> 303, 'message'=>'Invalid brand id'];
    }

}
```

```php
public function updateBrand($post = null){
    extract($post);
    if (!empty($brand_id) && !empty($e_brand_title)) {
        $q = $this->con->query("UPDATE brands SET brand_title = '$e_brand_title' WHERE brand_id = '$brand_id'");
        if ($q) {
            return ['status'=> 202, 'message'=> 'Brand updated'];
        }else{
            return ['status'=> 202, 'message'=> 'Failed to run query'];
        }

    }else{
        return ['status'=> 303, 'message'=>'Invalid brand id'];
    }

}
```

```php
public function getBrands(){
    $q = $this->con->query("SELECT * FROM brands");
    $ar = [];
    if ($q->num_rows > 0) {
        while ($row = $q->fetch_assoc()) {
            $ar[] = $row;
        }
    }
    return ['status'=> 202, 'message'=> $ar];
}
```

Here, I am updating, deleting and adding brands.

Add or Remove Category (Admin)

```php
public function addCategory($name){
    $q = $this->con->query("SELECT * FROM categories WHERE cat_title = '$name' LIMIT 1");
    if ($q->num_rows > 0) {
        return ['status'=> 303, 'message'=> 'Category already exists'];
    }else{
        $q = $this->con->query("INSERT INTO categories (cat_title) VALUES ('$name')");
        if ($q) {
            return ['status'=> 202, 'message'=> 'New Category added Successfully'];
        }else{
            return ['status'=> 303, 'message'=> 'Failed to run query'];
        }
    }
}

public function getCategories(){
    $q = $this->con->query("SELECT * FROM categories");
    $ar = [];
    if ($q->num_rows > 0) {
        while ($row = $q->fetch_assoc()) {
            $ar[] = $row;
        }
```

```php
  public function deleteCategory($cid = null){
      if ($cid != null) {
          $q = $this->con->query("DELETE FROM categories WHERE cat_id = '$cid'");
          if ($q) {
              return ['status'=> 202, 'message'=> 'Category removed'];
          }else{
              return ['status'=> 202, 'message'=> 'Failed to run query'];
          }

      }else{
          return ['status'=> 303, 'message'=>'Invalid cattegory id'];
      }

  }



  public function updateCategory($post = null){
      extract($post);
      if (!empty($cat_id) && !empty($e_cat_title)) {
          $q = $this->con->query("UPDATE categories SET cat_title = '$e_cat_title' WHERE cat_id = '$cat_id'");
          if ($q) {
              return ['status'=> 202, 'message'=> 'Category updated'];
          }else{
              return ['status'=> 202, 'message'=> 'Failed to run query'];
          }

      }else{
          return ['status'=> 303, 'message'=>'Invalid category id'];
      }

  }
```

Here, I am updating, deleting and adding categories.

Add or Remove Product (Admin)

```php
public function getProducts(){
    $q = $this->con->query("SELECT p.product_id, p.product_title, p.product_price,p.product_qty, p.product_desc, p.product_image, c.cat_title,
    c.cat_id, b.brand_id, b.brand_title FROM products p JOIN categories c ON c.cat_id = p.product_cat JOIN brands b ON
    b.brand_id = p.product_brand");

    $products = [];
    if ($q->num_rows > 0) {
        while($row = $q->fetch_assoc()){
            $products[] = $row;
        }

        $_DATA['products'] = $products;
    }

    $categories = [];
    $q = $this->con->query("SELECT * FROM categories");
    if ($q->num_rows > 0) {
        while($row = $q->fetch_assoc()){
            $categories[] = $row;
        }

        $_DATA['categories'] = $categories;
    }

    $brands = [];
    $q = $this->con->query("SELECT * FROM brands");
    if ($q->num_rows > 0) {
        while($row = $q->fetch_assoc()){
            $brands[] = $row;
        }

        $_DATA['brands'] = $brands;
    }
```

```php
  public function addProduct($product_name,
                             $brand_id,
                             $category_id,
                             $product_desc,
                             $product_qty,
                             $product_price,
                             $file){


      $fileName = $file['name'];
      $fileNameAr= explode(".", $fileName);
      $extension = end($fileNameAr);
      $ext = strtolower($extension);

      if ($ext == "jpg" || $ext == "jpeg" || $ext == "png") {



          if ($file['size'] > (1024 * 2)) {

              $uniqueImageName = time()."_".$file['name'];
              if (move_uploaded_file($file['tmp_name'], $_SERVER['DOCUMENT_ROOT']."/Gadget&Gear/product_images/".$uniqueImageName)) {

                  $q = $this->con->query("INSERT INTO `products`(`product_cat`, `product_brand`, `product_title`, `product_qty`,
                  `product_price`, `product_desc`, `product_image`) VALUES
                  ('$category_id', '$brand_id', '$product_name', '$product_qty', '$product_price', '$product_desc', '$uniqueImageName')");

                  if ($q) {
                      return ['status'=> 202, 'message'=> 'Product Added Successfully..!'];

                  }else{
                      return ['status'=> 303, 'message'=> 'Failed to run query'];
                  }

              }else{
                  return ['status'=> 303, 'message'=> 'Failed to upload image'];
              }
```

```php
public function deleteProduct($pid = null){
    if ($pid != null) {
        $q = $this->con->query("DELETE FROM products WHERE product_id = '$pid'");
        if ($q) {
            return ['status'=> 202, 'message'=> 'Product removed from stocks'];
        }else{
            return ['status'=> 202, 'message'=> 'Failed to run query'];
        }

    }else{
        return ['status'=> 303, 'message'=>'Invalid product id'];
    }

}
```

Here, I am updating, deleting and adding Products.

Customer Info

```php
<?php
session_start();


class Customers
{

    private $con;

    function __construct()
    {
        include_once("Database.php");
        $db = new Database();
        $this->con = $db->connect();
    }

    public function getCustomers(){
        $query = $this->con->query("SELECT `user_id`, `first_name`, `last_name`, `email`, `mobile`, `address` FROM `user_info`");
        $ar = [];
        if (@$query->num_rows > 0) {
            while ($row = $query->fetch_assoc()) {
                $ar[] = $row;
            }
            return ['status'=> 202, 'message'=> $ar];
        }
        return ['status'=> 303, 'message'=> 'no customer data'];
    }
```

Here, I am collecting and retrieving user information.

Contribution of ID : 20301338, Name : Utsha Sen Dhruba

Cart Checkout

```php
if (isset($_POST["checkOutDetails"])) {
    if (mysqli_num_rows($query) > 0) {
            $n=0;
            while ($row=mysqli_fetch_array($query)) {
                $n++;
                $product_id = $row["product_id"];
                $product_title = $row["product_title"];
                $product_price = $row["product_price"];
                $product_image = $row["product_image"];
                $qty = $row["qty"];
```

```javascript
function checkOutDetails(){
 $('.overlay').show();
    $.ajax({
        url : "action.php",
        method : "POST",
        data : {Common:1,checkOutDetails:1},
        success : function(data){
            $('.overlay').hide();
            $("#cart_checkout").html(data);
                net_total();
        }
    })
}
```

Here, I am showing the cart items to the cart page.

Update & Remove Item From Cart

```php
//Remove Item From cart
if (isset($_POST["removeItemFromCart"])) {
    $remove_id = $_POST["rid"];
    if (isset($_SESSION["uid"])) {
        $sql = "DELETE FROM cart WHERE p_id = '$remove_id' AND user_id = '$_SESSION[uid]'";
    }else{
        $sql = "DELETE FROM cart WHERE p_id = '$remove_id' AND ip_add = '$ip_add'";
    }
    if(mysqli_query($con,$sql)){
        echo "<div class='alert alert-danger'>
                    <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                    <b>Product is removed from cart</b>
                </div>";
        exit();
    }
}


//Update Item From cart
if (isset($_POST["updateCartItem"])) {
    $update_id = $_POST["update_id"];
    $qty = $_POST["qty"];
    if (isset($_SESSION["uid"])) {
        $sql = "UPDATE cart SET qty='$qty' WHERE p_id = '$update_id' AND user_id = '$_SESSION[uid]'";
    }else{
        $sql = "UPDATE cart SET qty='$qty' WHERE p_id = '$update_id' AND ip_add = '$ip_add'";
    }
    if(mysqli_query($con,$sql)){
        echo "<div class='alert alert-info'>
                    <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                    <b>Product is updated</b>
                </div>";
        exit();
    }
}

?>
```

Total Price Calculation

```javascript
$("body").delegate(".qty","keyup",function(event){
    event.preventDefault();
    var row = $(this).parent().parent();
    var price = row.find('.price').val();
    var qty = row.find('.qty').val();
    if (isNaN(qty)) {
        qty = 1;
    };
    if (qty < 1) {
        qty = 1;
    };
    var total = price * qty;
    row.find('.total').val(total);
    var net_total=0;
    $('.total').each(function(){
        net_total += ($(this).val()-0);
    })
    $('.net_total').html("Total : "+ CURRENCY+ " " +net_total);

})
```

Payment Gateway Form

```php
<?php

require "config/constants.php";

?>

<?php
    if(isset($_POST["submit"])){
        if(strlen($_POST['account_number']) != 11){
            $account_error = '*Phone number must be 11 digit';
        }
        if(strlen($_POST['pin_number']) != 5){
            $pin_error = '*Pin number must be 5 digit';
        }
        if(($_POST['option']) == 'Choose Payment Method'){
            $opt_error = '*You must select a payment method';
        }
        if((strlen($_POST['account_number']) == 11) && (strlen($_POST['pin_number']) == 5) && (($_POST['option']) != 'Choose Payment Method')){
            header('Location: payment2.php');
        }

    }
?>
<?php
    if(!(isset($_POST['account_number']))){
        $_POST['account_number']="";
    }
    if(!(isset($_POST['pin_number']))){
        $_POST['pin_number']="";
    }
    if(!(isset($_POST['option']))){
        $_POST['option'] = '';
    }
?>
```

```html
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Payment</title>
    <link rel="icon" type="image/x-icon" href="icon.png">
    <link rel="stylesheet" type="text/css" href="payment.css">
</head>
<body>
<header>
    <div class="container">
        <div class="center">
            <h3>PAYMENT INFORMATION</h3>
            <form action="payment.php" method="post">
                Accepted Options <br>
                <img src="image/picture.jpeg" width="110">
                </br>
                <div id="method">
                    <label>
                        Payment Through</br>
                        <select name='option'>
                            <option>Choose Payment Method</option>
                            <option
                            <?php
                                if (($_POST['option'])=='bKash'){
                                    echo "selected";
                                }
                            ?>
                            >bKash</option>
                            <option
                            <?php
                                if (($_POST['option'])=='ROCKET'){
                                    echo "selected";
                                }
                            ?>
```

```
                        >ROCKET</option>
                        <option
                        <?php
                            if (($_POST['option'])=='NAGAD'){
                                echo "selected";
                            }
                        ?>
                        >NAGAD</option>
                    </select>
                    <div class="red-text"> <?php if(isset($opt_error)){echo $opt_error;} ?> </div>
                </label>
            </div>
            Account Number
            <input type="number" name="account_number" value="<?php echo $_POST['account_number']?>" placeholder="Enter Phone No." required>
            <div class="red-text"> <?php if(isset($account_error)){echo $account_error;} ?> </div>
            PIN
            <input type="number" name="pin_number" value="<?php echo $_POST['pin_number']?>" placeholder="Enter PIN" required>
            <div class="red-text"> <?php if(isset($pin_error)) {echo $pin_error;} ?> </div>
            <div class="center">
                <input type="submit" name="submit" value="Confirm Payment">
            </div>
        </form>
    </div>
</div>

</header>
</body>
</html>
```

Here, I have created a dummy payment gateway form with multiple payment options. The form also has some conditions without which successful payment will not occur.

Payment Success

```
<!DOCTYPE html>
<html>
    <head>
        <meta charset="UTF-8">
        <title>Gadget&Gear</title>
        <link rel="icon" type="image/x-icon" href="icon.png">
        <link rel="stylesheet" href="css/bootstrap.min.css"/>
        <link rel="stylesheet" href="css/bootstrap.css">
        <script src="js/jquery2.js"></script>
        <script src="js/bootstrap.min.js"></script>
        <script src="main.js"></script>
        <style>
            table tr td {padding:10px;}
        </style>
    </head>
```

```
<body>
    <div class="navbar navbar-inverse navbar-fixed-top">
        <div class="container-fluid">
            <div class="navbar-header">
            <a href="index.php"><span class="navbar-brand">GADGET & GEAR</a>
            </div>
            <ul class="nav navbar-nav">
        </div>
    </div>
    <p><br/></p>
    <p><br/></p>
    <p><br/></p>
    <div class="container-fluid">

        <div class="row">
            <div class="col-md-2"></div>
            <div class="col-md-8">
                <div class="panel panel-default">
                    <div class="panel-heading"></div>
                    <div class="panel-body">
                        <h1>Thank you</h1>
                        <hr/>
                        <p>Hi <?php echo "<b>".$_SESSION["name"]."</b>"; ?>,Your payment process is
                        successfully completed and your Transaction id is <b><?php echo $str_trx; ?></b><br/>
                        you can continue your Shopping <br/></p>
                        <a href="index.php" class="btn btn-success btn-lg">Continue Shopping</a>
                    </div>
                    <div class="panel-footer"></div>
                </div>
            </div>
            <div class="col-md-2"></div>
        </div>
    </div>
</body>
</html>
<?php
}
else{
    header("location:index.php");
}?>
```

Here, users get a successful payment message when users confirm his/her payment by filling up the payment gateway form.

Admin Dashboard

```php
<?php
session_start();
if (!isset($_SESSION['admin_id'])) {
  header("location:login.php");
}

include "./templates/top.php";

?>

<?php include "./templates/navbar.php"; ?>

<div class="container-fluid">
  <div class="row">

    <?php include "./templates/sidebar.php"; ?>

      <h2><center>Admin Details</center></h2>
      <div class="table-responsive">
        <table class="table table-striped table-sm">
          <thead>
            <tr>
              <th>#</th>
              <th>Name</th>
              <th>Email</th>
              <th>Status</th>
              <th>Action</th>
            </tr>
          </thead>
```

Contribution of ID : 20301326, Name : Sartaj Emon Prattoy

Brand and Category implementation

Category

```php
if(isset($_POST["category"])){
    $category_query = "SELECT * FROM categories";
    $run_query = mysqli_query($con,$category_query) or die(mysqli_error($con));
    echo "
        <div class='nav nav-pills nav-stacked'>
            <li class='active'><a href='#'><h4>Product Categories</h4></a></li>
    ";
    if(mysqli_num_rows($run_query) > 0){
        while($row = mysqli_fetch_array($run_query)){
            $cid = $row["cat_id"];
            $cat_name = $row["cat_title"];
            echo "
                <li><a href='#' class='category' cid='$cid'>$cat_name</a></li>
            ";
        }
        echo "</div>";
    }
}
```

Brand

```php
if(isset($_POST["brand"])){
    $brand_query = "SELECT * FROM brands";
    $run_query = mysqli_query($con,$brand_query);
    echo "
        <div class='nav nav-pills nav-stacked'>
            <li class='active'><a href='#'><h4>Brands</h4></a></li>
    ";
    if(mysqli_num_rows($run_query) > 0){
        while($row = mysqli_fetch_array($run_query)){
            $bid = $row["brand_id"];
            $brand_name = $row["brand_title"];
            echo "
                <li><a href='#' class='selectBrand' bid='$bid'>$brand_name</a></li>
            ";
        }
        echo "</div>";
    }
```

Fetching Product for Brand and Category

```
}
if(isset($_POST["get_seleted_Category"]) || isset($_POST["selectBrand"]) || isset($_POST["search"])){
    if(isset($_POST["get_seleted_Category"])){
        $id = $_POST["cat_id"];
        $sql = "SELECT * FROM products WHERE product_cat = '$id'";
    }else if (isset($_POST["selectBrand"])){
        $id = $_POST["brand_id"];
        $sql = "SELECT * FROM products WHERE product_brand = '$id'";
    }else {
        $Search = $_POST["keyword"];
        $sql = "SELECT * FROM products WHERE product_title LIKE  '%".$Search."%'";
    }

    $run_query = mysqli_query($con,$sql);
    while($row=mysqli_fetch_array($run_query)){

            $pro_id    = $row['product_id'];
            $pro_cat   = $row['product_cat'];
            $pro_brand = $row['product_brand'];
            $pro_title = $row['product_title'];
            $pro_price = $row['product_price'];
            $pro_image = $row['product_image'];
            echo "
                <div class='col-md-4'>
                            <div class='panel panel-info'>
                                <div class='panel-heading'>$pro_title</div>
                                <div class='panel-body'>
                                    <img src='product_images/$pro_image' style='width:220px; height:250px;'/>
                                </div>
                                <div class='panel-heading'>BDT $pro_price.00/-
                                    <button pid='$pro_id' style='float:right;' id='product' class='btn btn-danger btn-xs'>Add To Cart</bu
                                </div>
                            </div>
                        </div>
            ";
        }
    }
```

Getting Products

```
}
if(isset($_POST["getProduct"])){
    $limit = 9;
    if(isset($_POST["setPage"])){
        $pageno = $_POST["pageNumber"];
        $start = ($pageno * $limit) - $limit;
    }else{
        $start = 0;
    }
    $product_query = "SELECT * FROM products LIMIT $start,$limit";
    $run_query = mysqli_query($con,$product_query);
    if(mysqli_num_rows($run_query) > 0){
        while($row = mysqli_fetch_array($run_query)){
            $pro_id    = $row['product_id'];
            $pro_cat   = $row['product_cat'];
            $pro_brand = $row['product_brand'];
            $pro_title = $row['product_title'];
            $pro_price = $row['product_price'];
            $pro_image = $row['product_image'];
            echo "
                <div class='col-md-4'>
                            <div class='panel panel-info'>
                                <div class='panel-heading'>$pro_title</div>
                                <div class='panel-body'>
                                    <img src='product_images/$pro_image' style='width:220px; height:250px;'/>
                                </div>
                                <div class='panel-heading'>".CURRENCY.". $pro_price.00/-
                                    <button pid='$pro_id' style='float:right;' id='product' class='btn btn-danger btn-xs'>Add To Cart</bu
                                </div>
                            </div>
                        </div>
            ";
        }
    }
}
```

Adding Products to Cart

```php
if(isset($_POST["addToCart"])){


    $p_id = $_POST["proId"];


    if(isset($_SESSION["uid"])){

    $user_id = $_SESSION["uid"];

    $sql = "SELECT * FROM cart WHERE p_id = '$p_id' AND user_id = '$user_id'";
    $run_query = mysqli_query($con,$sql);
    $count = mysqli_num_rows($run_query);
    if($count > 0){
        echo "
            <div class='alert alert-warning'>
                    <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                    <b>Product is already added into the cart Continue Shopping..!</b>
            </div>
        ";
    } else {
        $sql = "INSERT INTO `cart`
        (`p_id`, `ip_add`, `user_id`, `qty`)
        VALUES ('$p_id','$ip_add','$user_id','1')";
        if(mysqli_query($con,$sql)){
            echo "
                <div class='alert alert-success'>
                    <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                    <b>Product is Added..!</b>
                </div>
            ";
        }
    }
```

```php
}else{
    $sql = "SELECT user_id,p_id FROM cart WHERE ip_add = '$ip_add' AND p_id = '$p_id' AND user_id = -1";
    $query = mysqli_query($con,$sql);
    if (mysqli_num_rows($query) > 0) {
        echo "
            <div class='alert alert-warning'>
                    <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                    <b>Product is already added into the cart Continue Shopping..!</b>
            </div>";
            exit();
    }
    $sql = "INSERT INTO `cart`
    (`p_id`, `ip_add`, `user_id`, `qty`)
    VALUES ('$p_id','$ip_add','-1','1')";
    if (mysqli_query($con,$sql)) {
        echo "
            <div class='alert alert-success'>
                <a href='#' class='close' data-dismiss='alert' aria-label='close'>&times;</a>
                <b>Your product has been added to cart!</b>
            </div>
        ";
        exit();
    }
```

Getting Cart Item to Dropdown menu

```php
//Get Cart Item From Database to Dropdown menu
if (isset($_POST["Common"])) {

    if (isset($_SESSION["uid"])) {
        //When user is logged in this query will execute
        $sql = "SELECT a.product_id,a.product_title,a.product_price,a.product_image,b.qty FROM products a,cart b WHERE a.product_id=b.p_id AND b.user_id='$_SESSION[uid]'";
    }else{
        //When user is not logged in this query will execute
        $sql = "SELECT a.product_id,a.product_title,a.product_price,a.product_image,b.qty FROM products a,cart b WHERE a.product_id=b.p_id AND b.ip_add='$ip_add' AND b.user_id < 0";
    }
    $query = mysqli_query($con,$sql);
    if (isset($_POST["getCartItem"])) {
        //display cart item in dropdown menu
        if (mysqli_num_rows($query) > 0) {
            $n=0;
            while ($row=mysqli_fetch_array($query)) {
                $n++;
                $product_id = $row["product_id"];
                $product_title = $row["product_title"];
                $product_price = $row["product_price"];
                $product_image = $row["product_image"];
                // $cart_item_id = $row["id"];
                $qty = $row["qty"];
                echo '
                    <div class="row">
                        <div class="col-md-3">'.$n.'</div>
                        <div class="col-md-3"><img class="img-responsive" src="product_images/'.$product_image.'" /></div>
                        <div class="col-md-3">'.$product_title.'</div>
                        <div class="col-md-3">'.CURRENCY.''.$product_price.'</div>
                    </div>';

            }
            ?>
                <a style="float:right;" href="cart.php" class="btn btn-warning">Edit  <span class="glyphicon glyphicon-edit"></span></a>
            <?php
            exit();
        }
```

Index

```php
<?php
require "config/constants.php";
session_start();
if(isset($_SESSION["uid"])){
    header("location:profile.php");
}
?>
```

Future Plan

We intend to build a more powerful system in the future which can compete with the existing websites. By nurturing our knowledge of Database Management System, we want to turn this project into a more secure, user friendly and an efficient website that can handle all the necessary demand which is expected from a high end e-commerce website. Moreover, in future we also intend to add features such as user review, live interaction, product comparison, promotion & discount code tools, reporting tools & custom report features, Blog and articles section and so on. Despite our combined effort, there were some flaws in our system. Thus, along with the future development which we mentioned, we would like to work on building a system that will be flawless and will have an effective contribution to E-commerce.

Conclusion

In this project, we tried our best to learn and implement all the necessary processes to successfully build a website. Moreover, our intention was to incorporate all the learnings from this course with the website building process. While working on the project due to some limitations, there were times when we faced difficulties. However, with our teamwork and combined efforts we succeeded in building the website that connects to a backend server. We will continue to nurture our knowledge of Database Management System and hopefully, in future we will be able to build more efficient websites and projects for making the world a better place.

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