CS6106 – DATABASE MANAGEMENT SYSTEM

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CARE AND GLOW
PERSONALIZED SKINCARE SHOPPING WEBSITE

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Abstract

The project named "CARE AND GLOW", is a web based customer shopping system.

For years, you had to choose from skincare products that, at most, fits one or two of our concerns. Skin is so complex and variable that you should be able to get a perfect-fitting treatment with personalized products.

The biggest problem while shopping skin care is people often end up buying them without actually analyzing what their skin needs. This might result in breakouts, purging, allergies and worse skin problems. In order to avoid that and to provide accurate and efficient recommendations we have come up with this project idea.

This will be an application that will analyze each and every individual's skin through a quiz that they undergo and suggest products according to it. This project is developed in order as every individual's skin is unique and may react differently to different compounds, with personalized skincare products could be the key to a glowing, healthy skin.

Introduction

Most products come in one mass-produced formula. However, even two people who both have dry skin can have wildly varying complexions and needs. Over-the-counter products don't take a person's unique skincare needs into consideration. But personalized skincare products do. But everyone's skin is unique and may react differently to different components. With personalized skincare products, you can get to know that the products that suit your skin best and that are free of ingredients that cause your results boost up quick leaving you a healthy and supple skin.

How can you navigate through the seemingly endless options available to pinpoint the products that are best suited for *your* skin?

When it comes to skin, there isn't a one-size-fits-all solution, Many factors influence your skin condition,This project offers you a **personalized skincare** that is easy to find, and interchangeable depending on your skin type, skin concern, the season, or anything.

Scope of the project

Our project has a really good scope as this really boosts up the awareness and importance of a personalized skincare routine. The customers can get their personalized products by just going through a simple quiz which would create a huge impact on their lifestyle by boosting up their skin health and also save couple of bucks from spending on products which wouldn't be of much help.

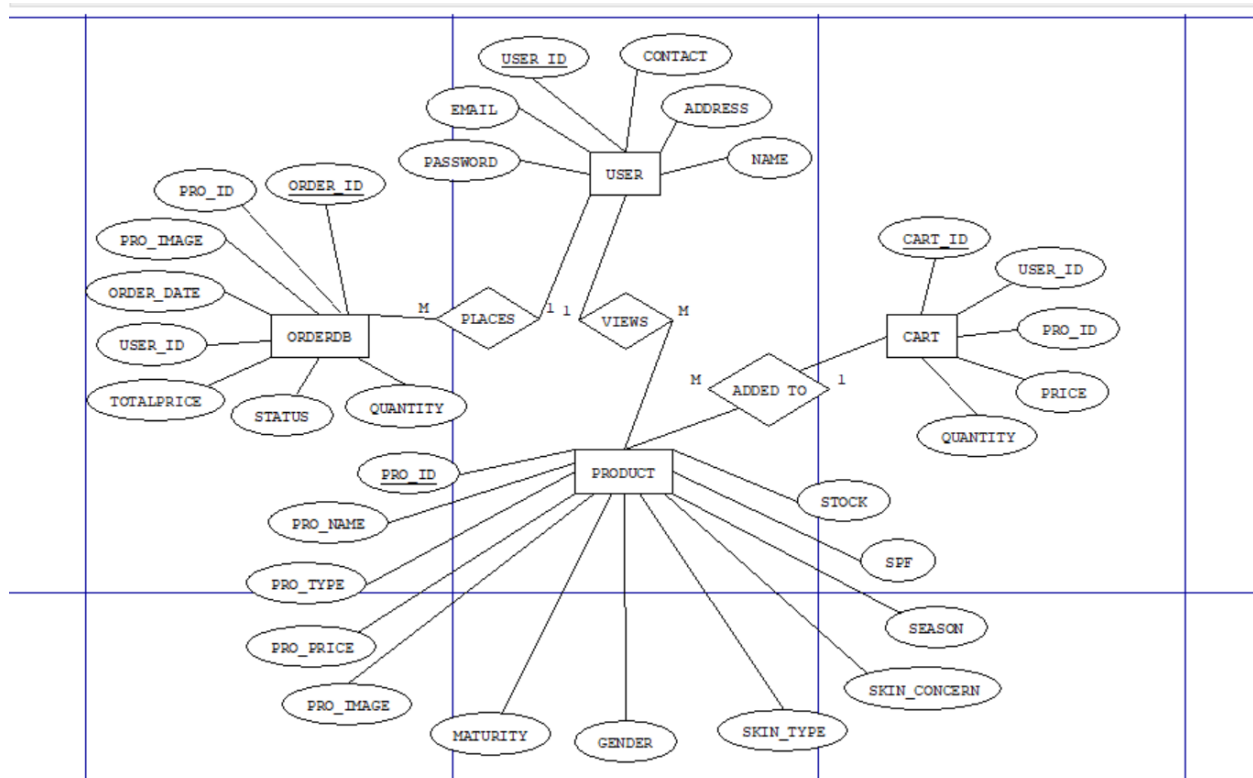# System Specifications

3.1 Hardware Requirements

- ✓ Processor: Pentium-IV(Processor).

- ✓ RAM: 256 MB

- ✓ Speed: 1.1 Ghz

- ✓ Hard Disk: 20 GB

- ✓ Key Board: standard windows Keyboard

- ✓ Mouse: Two / Three button Mouse
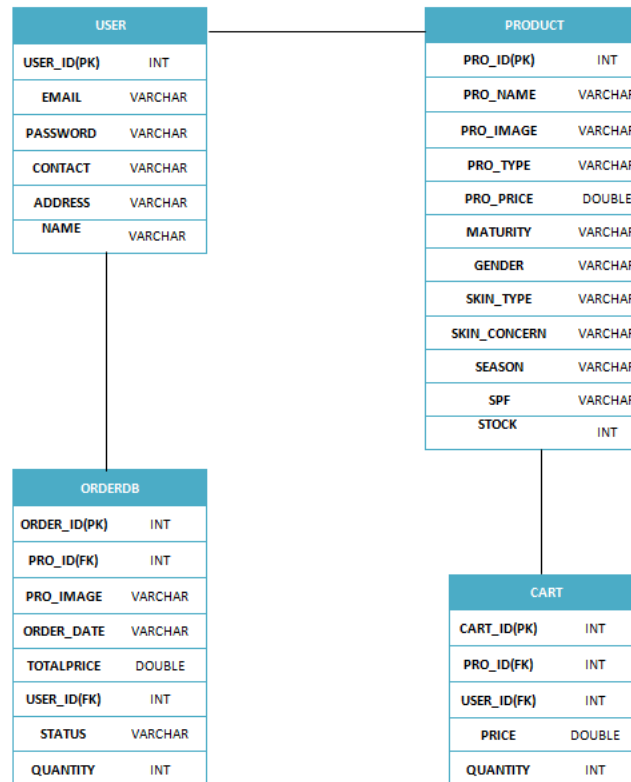
3.2 Software Requirements

- ✓ Technology implemented: Apache server

- ✓ Languages used: PHP

- ✓ Database: My SQL

- ✓ User Interface Design: HTML, CSS, BOOTSTRAP,

  OWL CAROUSEL, JAVASCRIPT

- ✓ Web browser: Google Chrome, Internet Explorer,

  MicrosoftEdge,Mozilla FireFox

- ✓ Server: XAMPP Server

System Design

ER Diagram

Relational schema

Database Tables

User

Products

Cart

Orderdb

Relations used:

- User (**user_id**, name, password, email, contact, address)
- Product (**pro_id**, pro_type, pro_image, pro_name, pro_price, stock, skin_type, skin_concern, maturity, gender, season, spf)
- Cart (**cart_id**, user_id, pro_id, order_id, price, quantity)
- Orderdb (**order_id**, pro_id, pro_image, order_date, order_status, user_id, quantity, totalprice)

Implementation

Flow of the website

The home page consists of all the products that are available on the product database with product image, product type and price. Users can also check out our blogs related to skincare.

Users can go through all the available products and add their favorites in to their shopping cart after logging in to the website.

The significant feature of our website which is the quiz option will be available in the header which customers can take in order to get personalized skin care recommendations.

They can also add the suggested products to the cart which will get updated on the database.

After choosing their desired products from the cart customers can place their orders which are stored in the database.

Users can also edit their account details at any point of time which again is stored for delivery purposes. This is designed keeping in mind that in most e-commerce websites users cannot change their address or contact details after placing the order. As a result when the user wants the order to be delivered someplace else it becomes impossible.

With our site that problem is alleviated and users can change their address and contact details anytime they want. If that is the case they can freely contact our customer support which is available on our **about us** page. We will look into the issue immediately and provide you assistance with everything regarding our services.

Also they can cancel their order at any point before delivery.

The users will be provided with refunds within 7 working days.

We have also clearly given our **PRIVACY POLICY** and **TERMS AND CONDITIONS**.

In case any product goes out of stock user can no longer add it in cart until the stock is restored.

Also users can only add so much amount of products that are available in stock and not more.

The price of individual items, total tax and total amount is calculated and is given in cart page.

The final amount including delivery charges is calculated and provided in my orders page.

Snapshots of implementation

a. INDEX PAGE:
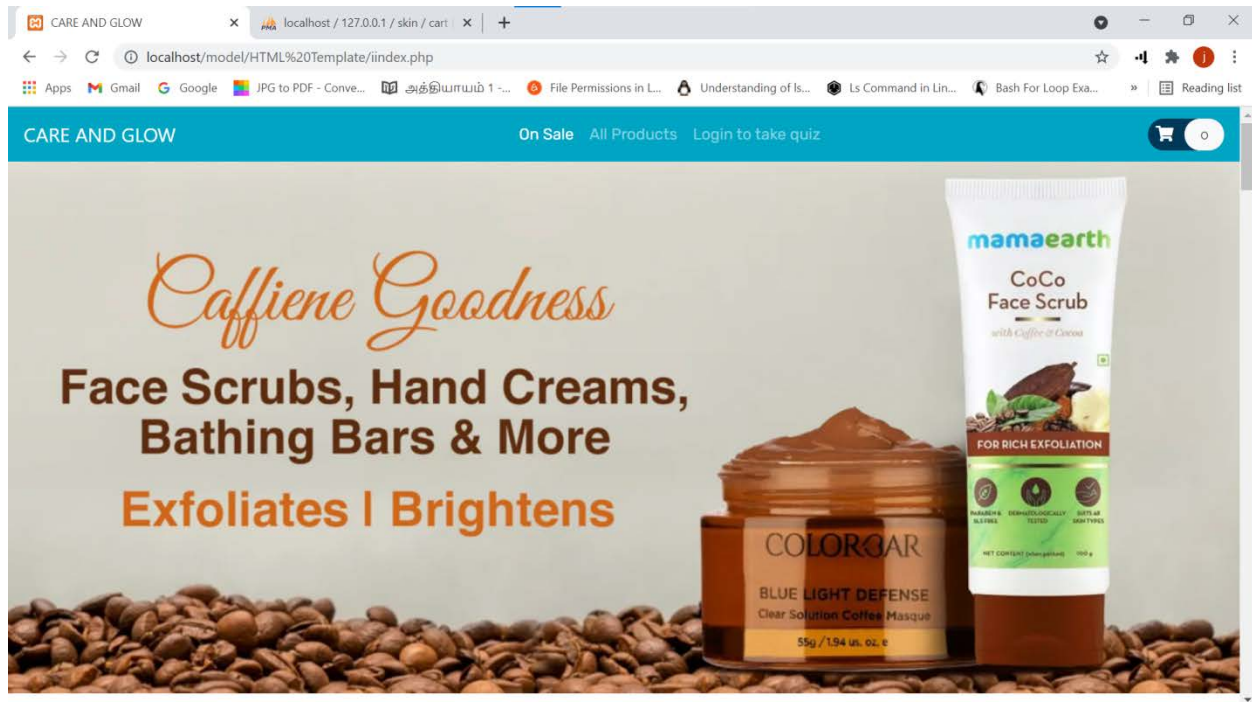
Fig.5.21 Index page of our website

The index page consists of a header which is also a navigation bar which helps to navigate to the different sections of the page with ease. The navigation bar is divided into **On sale, All products and login to take quiz** sections. Next section is a banner with a carousel which shows the offers and top selling products in our site. In index page customers can view top selling products as well as all available products. This has been built by using CSS grid which also helps in categorizing them into cleansers, toners, moisturizers, scrubs, masks and sunscreens.

Some of the features are restricted here and can only be accessed when logged in. This includes adding products to cart, taking skin analysis quiz, accessing my account, edit account and my orders pages. The customers can however checkout the **latest blogs**, our **privacy policy**, the **terms and conditions** and the **about us** pages.
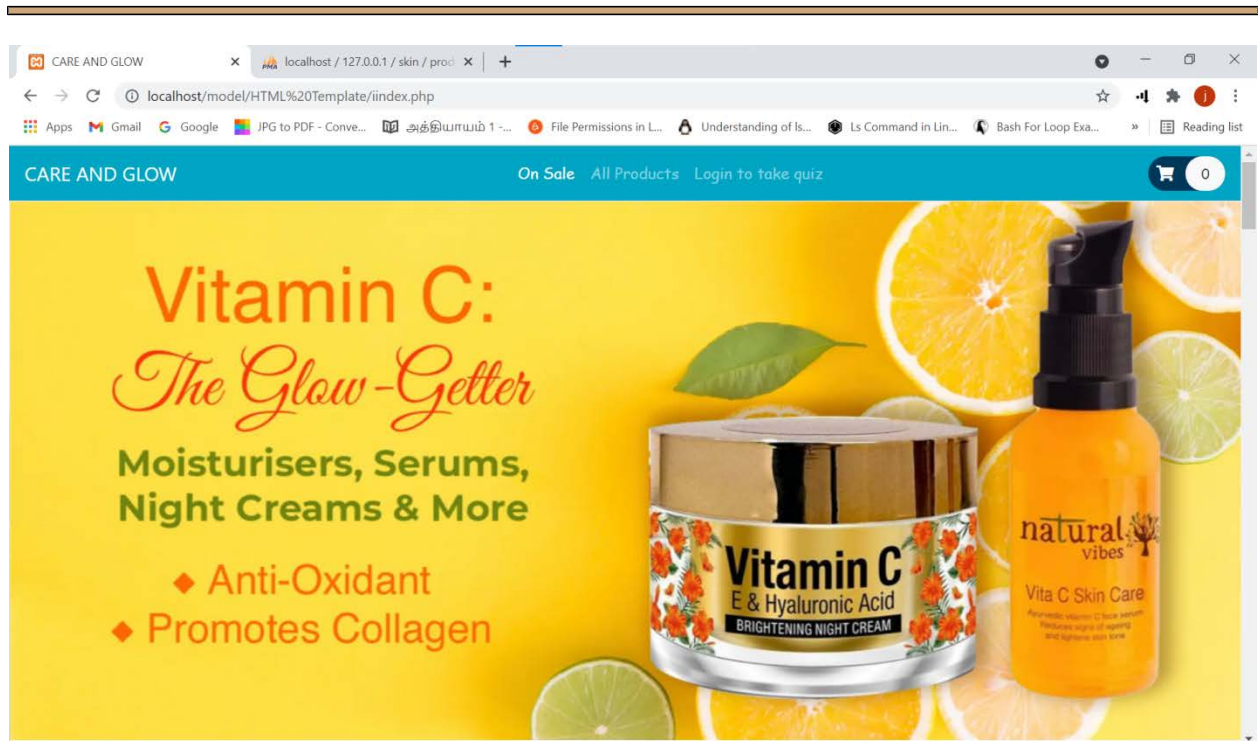
Fig.5.22 Index page-banner section
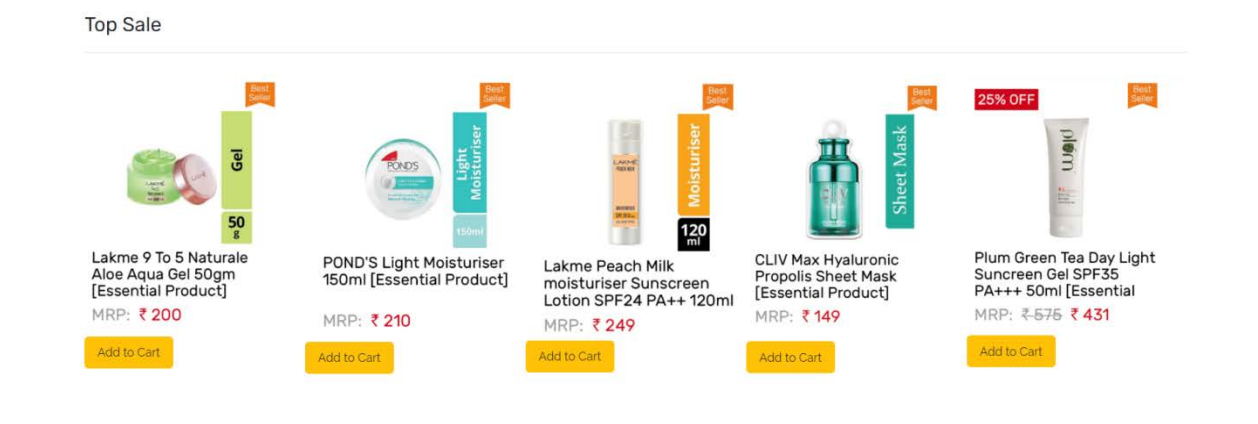
Fig.5.23 Index page-topsale section
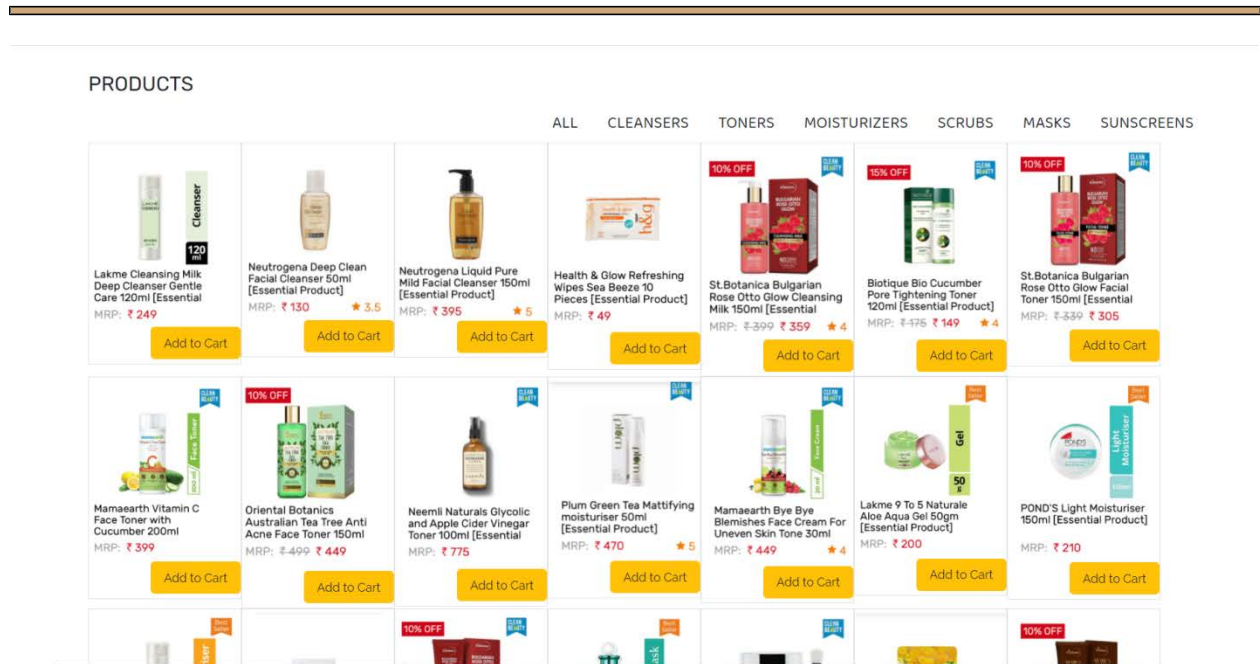
Fig.5.24 Index page-all products section
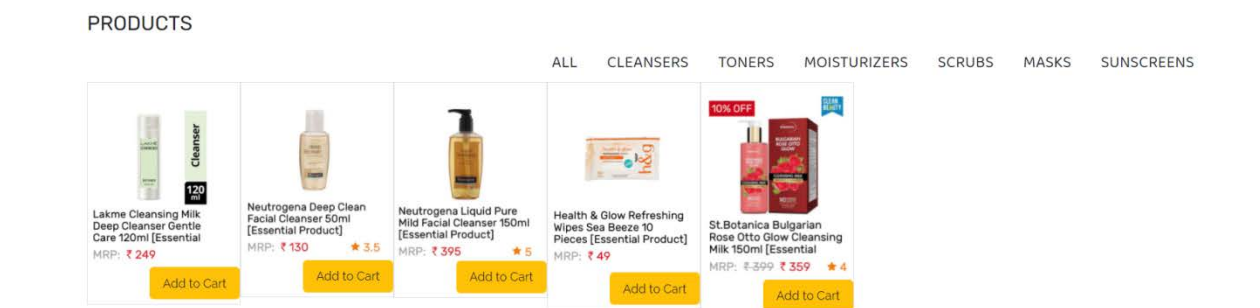
Fig.5.25 Index page-all products section-cleansers
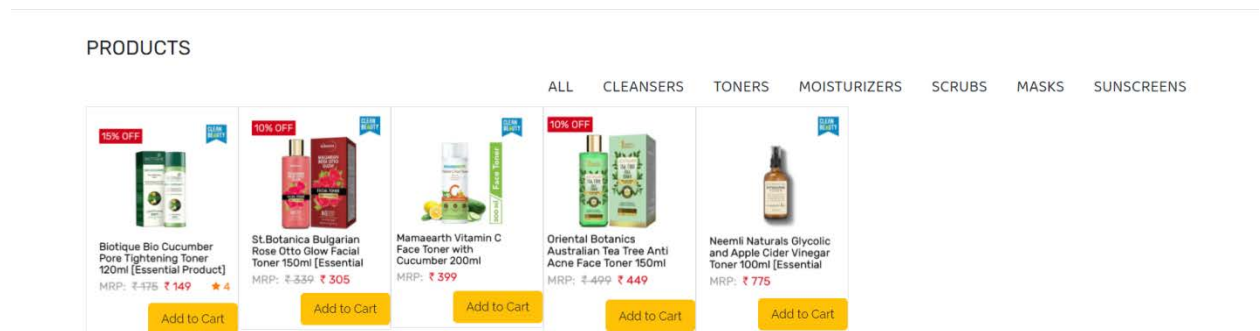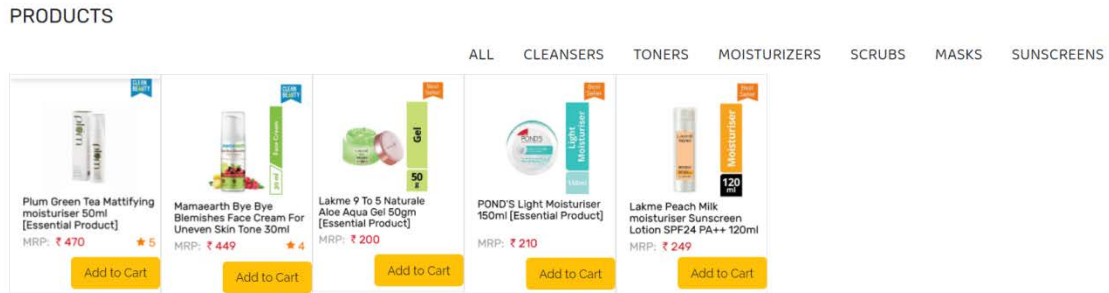
Fig.5.27 Index page-all products section-moisturizers
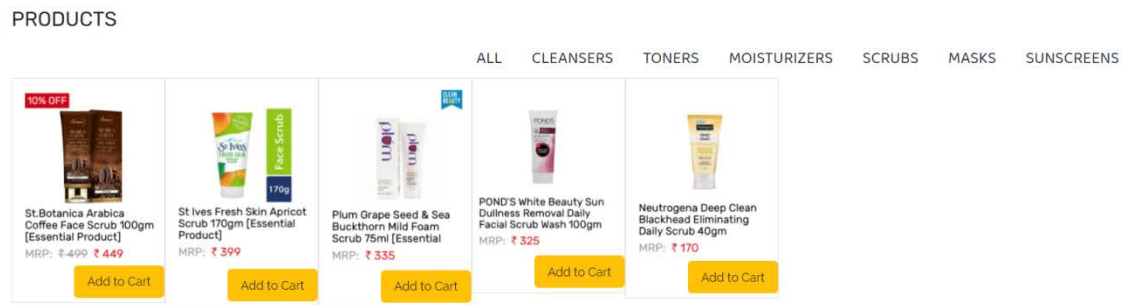
Fig.5.28 Index page-all products section-scrubs
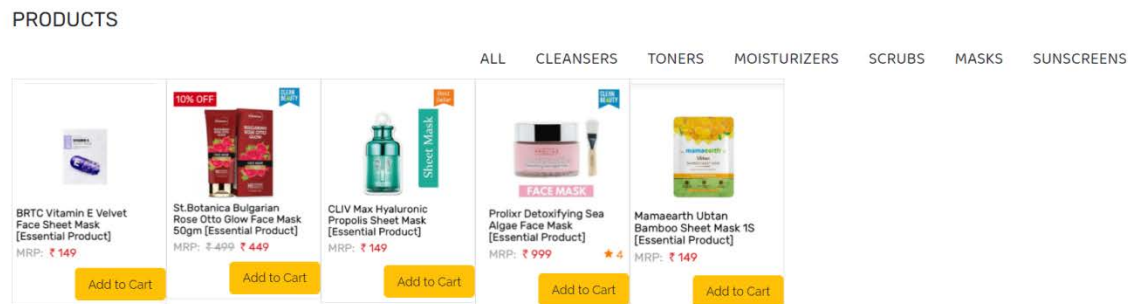
Fig.5.29 Index page-all products section-masks

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PRODUCTS

ALL   CLEANSERS   TONERS   MOISTURIZERS   SCRUBS   MASKS   SUNSCREENS
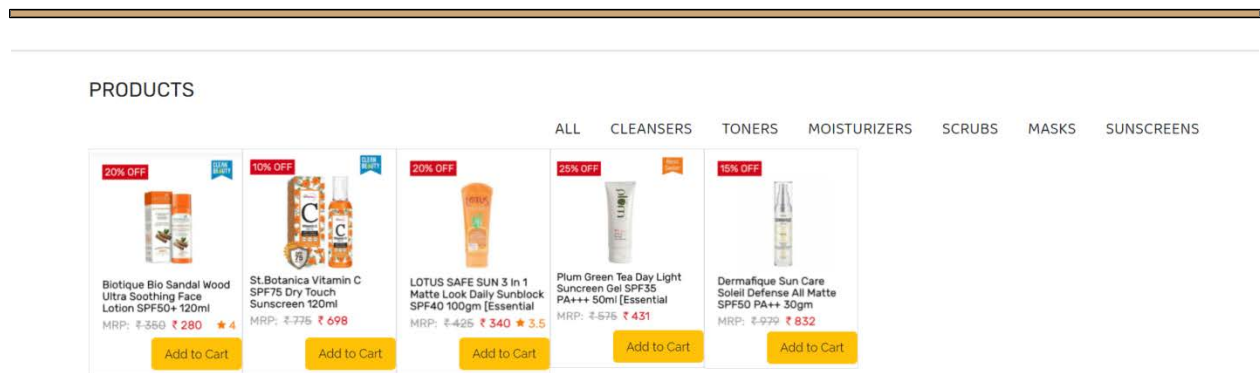
Fig.5.30 Index page-all products section-sunscreens
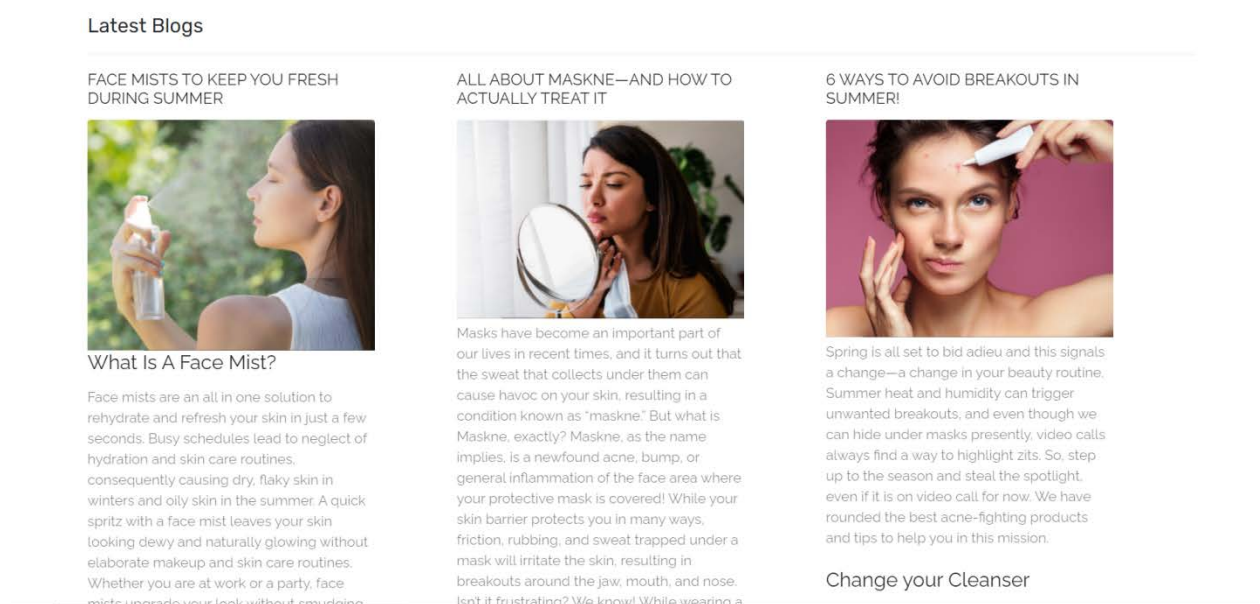
Latest Blogs

Fig.5.31 Index page-latest blogs section
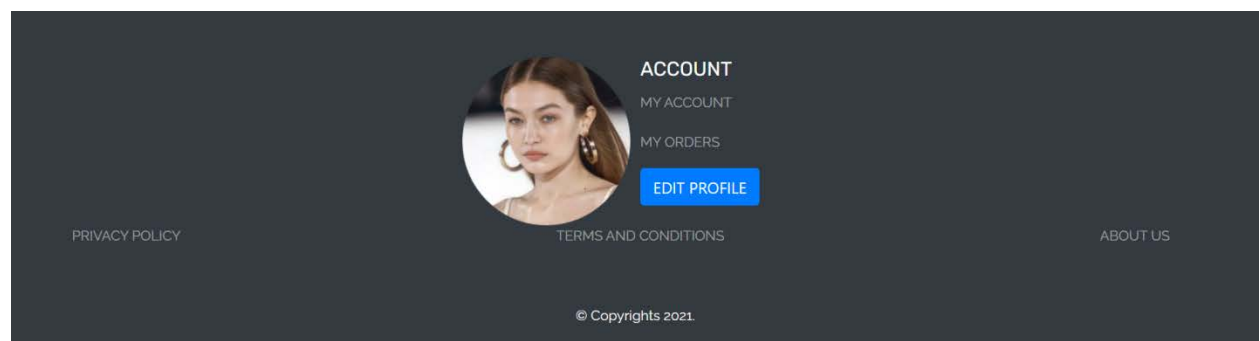
Fig.5.32 Index page-footer section

b. ABOUT US PAGE:

In about us page we have clearly given who we are, what we do and why we do what we do also why care and glow will be your perfect beauty partner. Along with that we have given our contact details in case customers need guidance with our services or report any grievances and also share their reviews about products and services.
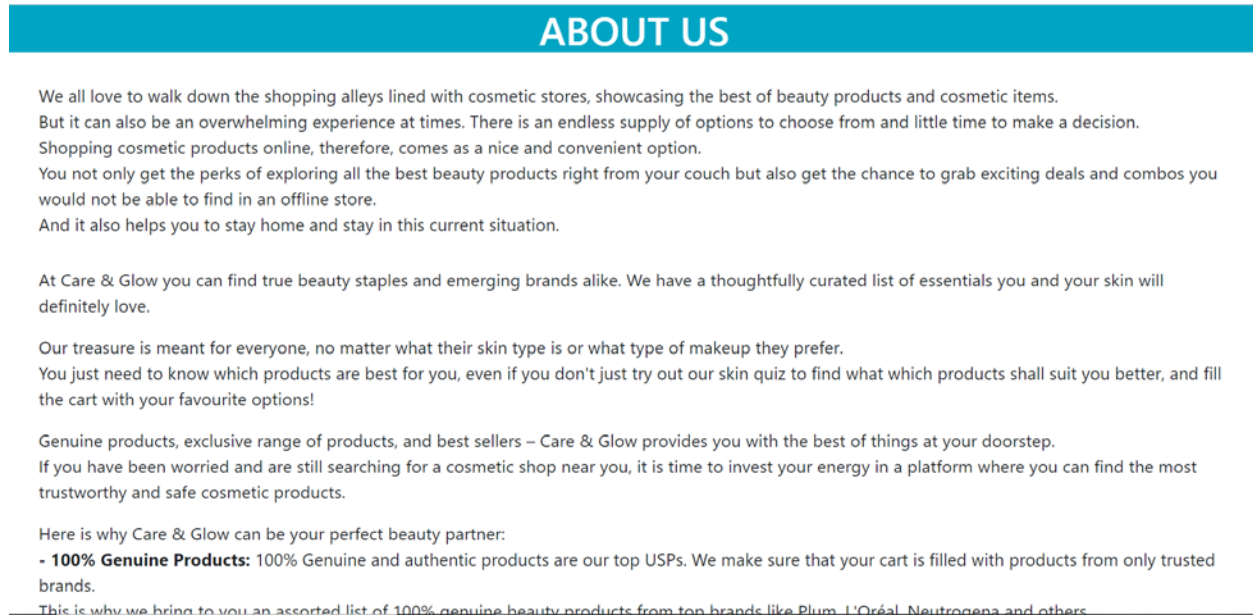
Fig.5.33 About us page

c. PRIVACY POLICY PAGE:

Our privacy policy page clearly explains policies adopted by Care & Glow Private Limited for collecting, storing, retrieving or using personal data and sensitive personal data or information it may receive from its users of the website. We understand the importance of safeguarding customers' personal information, and have formulated a Privacy Policy to ensure that your information is sufficiently protected.

OUR PRIVACY AND POLICY

Care & Glow Private Limited is committed to respecting and safeguarding the privacy of all its service recipients and users of Care & Glow app and/or website. This privacy policy **("Policy")** discloses the practices and policies adopted by Care & Glow Private Limited for collecting, storing, retrieving or using personal data and sensitive personal data or information it may receive from its users of the app and/or website.

All terms and conditions of the use of the app and/or website are incorporated in this Policy by reference. The Policy seeks to comply with the Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 **("Rules")** .

This Policy is applicable to all personal information and sensitive personal data or information that is disclosed by or obtained from any person who visits or uses or accesses the app and/or website **("User")** .

Care & Glow Private Limited reserves the right to modify or review the provisions in this Policy without prior notice and the revised Policy will be in effect from the day of uploading. Therefore, Users are requested to periodically visit the app and/or website and review the policyYour Account **"Your information"** is defined as any information you provide to us in the registration, buying or listing process, in the feedback area through email or other feature of the app and/or website. Care & Glow Private Limited will only accept content from you if you are a valid user of the app and/or website. You will be responsible for maintaining confidentiality of your account, password, and restricting access to your computer, and you hereby accept responsibility for all activities that occur under your account and password.

If you know or have reason to believe that the security of your account has been breached, you should contact us immediately at the **'Contact Information'** provided below.

If we have found a breach or suspected breach of the security of your account, we may require you to change your password, or suspend your account without any liability to Care & Glow Private Limited.

Fig.5.34 Privacy policy page

d. TERMS AND CONDITIONS PAGE:

 Our terms and conditions page clearly puts forward that customers signify their agreement to the Terms and Conditions / Terms of Use. It also states the eligibility, license to use and access, intellectual property rights and disclaimer of warranty and limitation of liability.

TERMS AND CONDITIONS

Welcome to Care & Glow website. This website is owned and operated by **Care & Glow Private Limited.**

By using the app website, you signify your agreement to the Terms and Conditions / Terms of Use, whether or not you have read the same. Care & Glow Private Limited reserves the right to change the terms and conditions contained in the Terms of Use from time to time and at any time, without notice and in its sole discretion. If Care & Glow Private Limited decides to change the Terms of Use or the Policies, Care & Glow Private Limited will post a new version of the Terms of Use and Policies on the website and update the date specified above. Any change or modification to the Terms of Use and the Policies will be effective from the date such Terms of Use and Policies are uploaded on the website. Your continued use of the website following the modifications to the Terms of Use and Policies constitutes your acceptance of the modified Terms of Use and Policies. For this reason, you should frequently review these Terms of Use and the Policies, including their dates, to understand the terms and conditions that websitely to the use of the website.

Eligibility
Only persons 'competent to contract' as provided in the Indian Contract Act, 1872 are eligible to use this website. However, parents or legal guardians may transact on behalf of minors i.e. persons below the age of 18 years. Care & Glow Private Limited reserves the right to prevent any person from using the website or both.

License to use and Access
Subject to your compliance with these Terms of Use, we grant you a limited, non-exclusive, non-transferable, non-sub-licensable license to access, and make personal and non-commercial use of the website. All rights not expressly granted to you in these Terms of Use, are reserved and retained by the website and its affiliates.
Care & Glow Private Limited reserves the right, at any time, without notice, and at its sole discretion, to terminate your license to use the website and to

Fig.5.35 Terms and conditions page

e. SIGNUP/SIGNIN PAGE:

The signup page is used to create a new account which is done by inserting the given values into the user table. The signin page checks if the entered values are present in user table. If so it takes the customer to the account page and if not it displays login failed message.
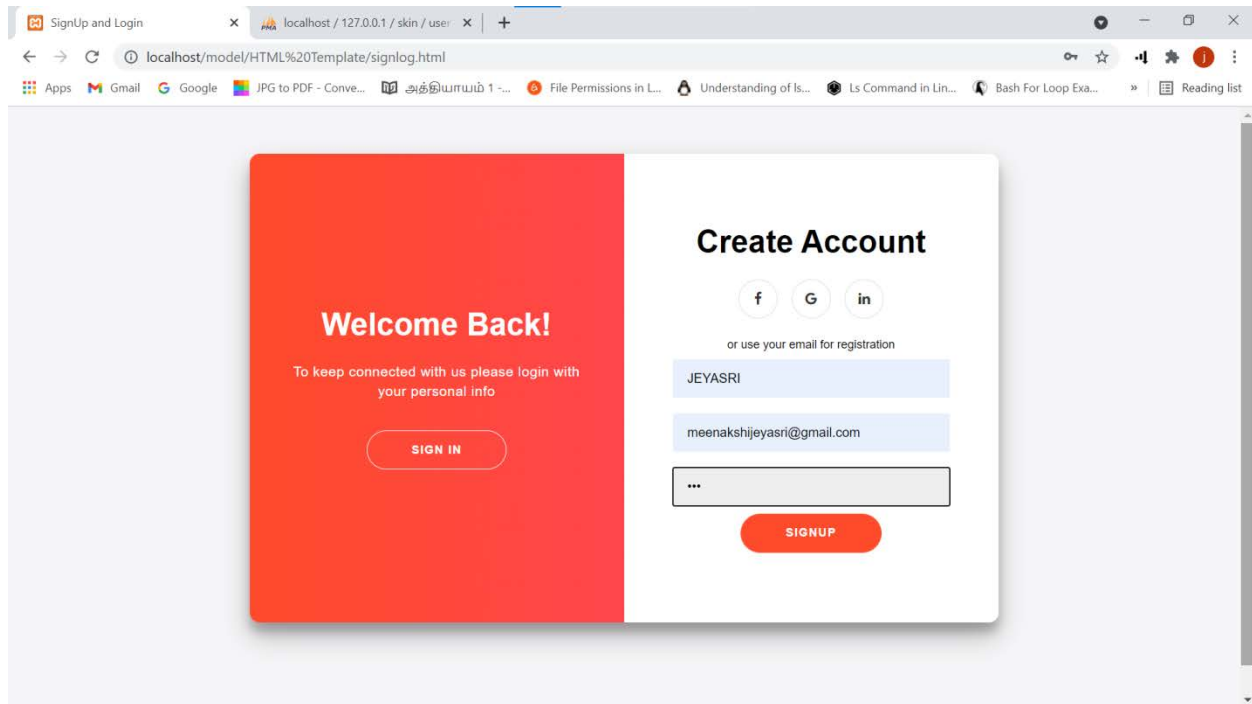
Fig.5.36 Signup tab
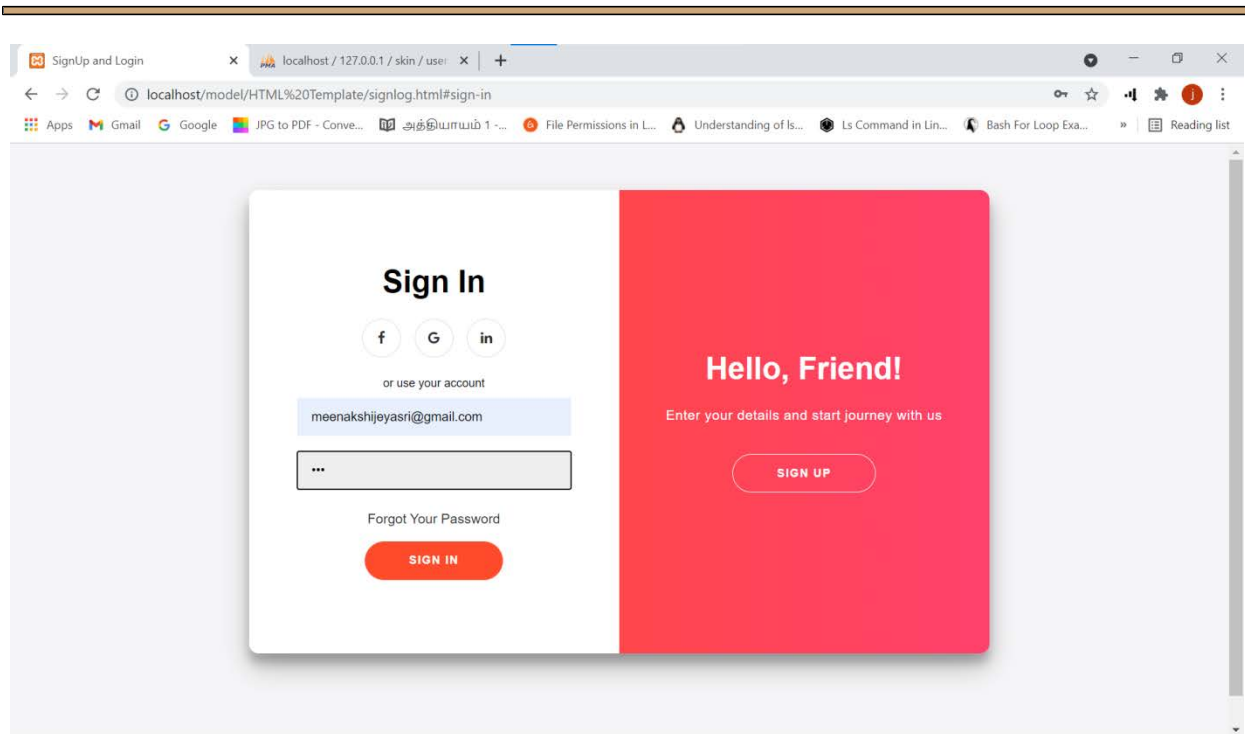
Fig.5.37 Signin tab

f. ACCOUNT PAGE:

Account page includes everything in index page with some additional features. The header section of the page will have **On sale, Take quiz, All products, logout** sections. It also displays a welcome message with the name of the customer from the user table. Add to cart feature is enabled in this page so customers can add their desired products into cart. The other sections including **top sale, all products, latest blogs** are same as that of the index page. In the footer section **my account, my orders and edit account pages** are enabled here which are briefed in the following sections of this report.
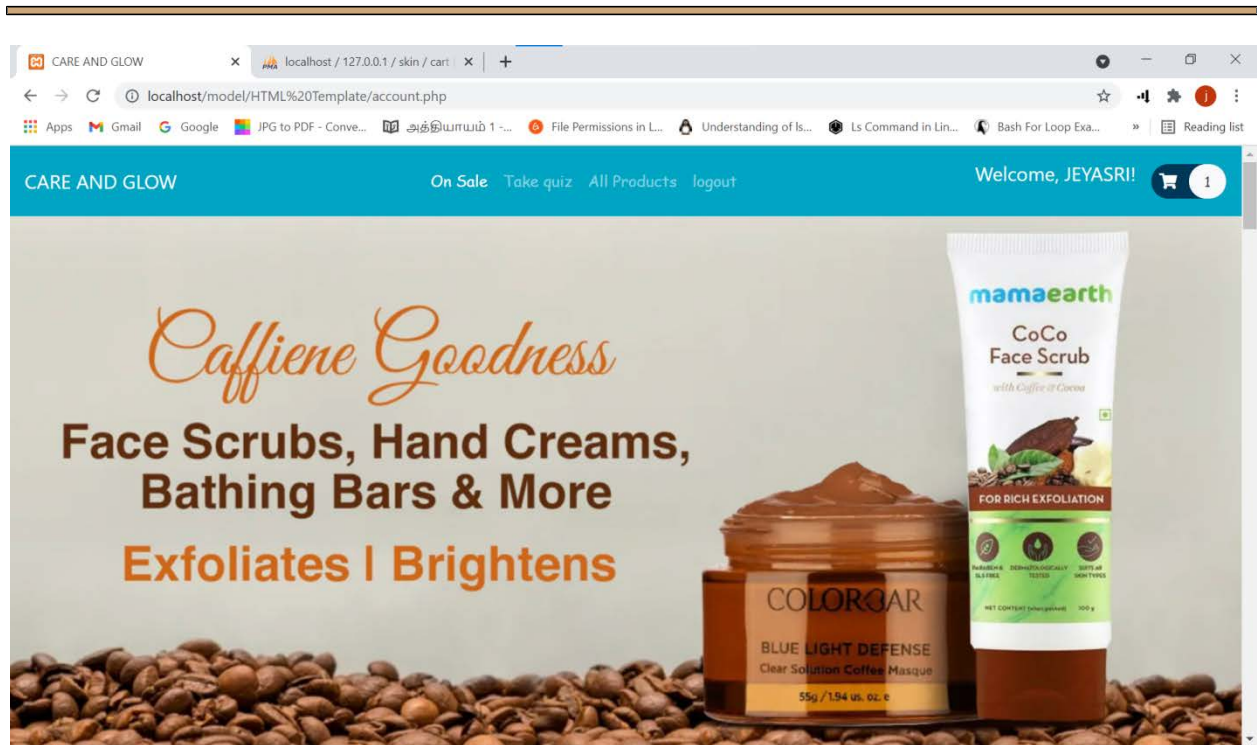
Fig.5.38 Account page

g. CART PAGE:

The cart page consists of all the items which are added to cart by the customer which is stored and retrieved from the database. It has additional features like **displaying the total cost and total tax, updating the quantity of each product and removing the product from cart**. **Updation and deletion** will affect the cart table in the database. Once the cart is filled with desired products the user can click checkout which will result in storing the details into orderdb table. If the cart table is empty then empty cart page will be loaded. Customers cannot add a product with stock=0 to the cart which in response will throw an **out of stock** message.

Fig.5.39 Cart page

Fig.5.40 Cart page after updating the quantity
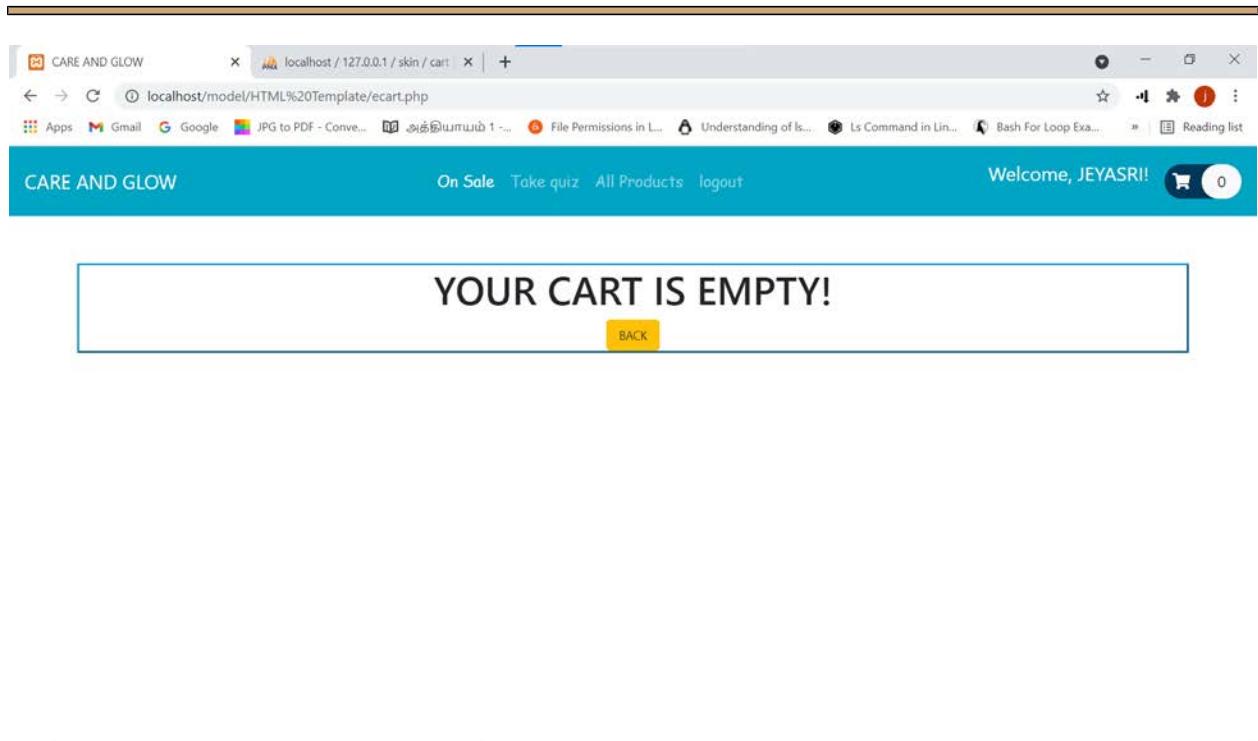
Fig.5.41 Empty cart page

Fig.5.42 Account page – out of stock message
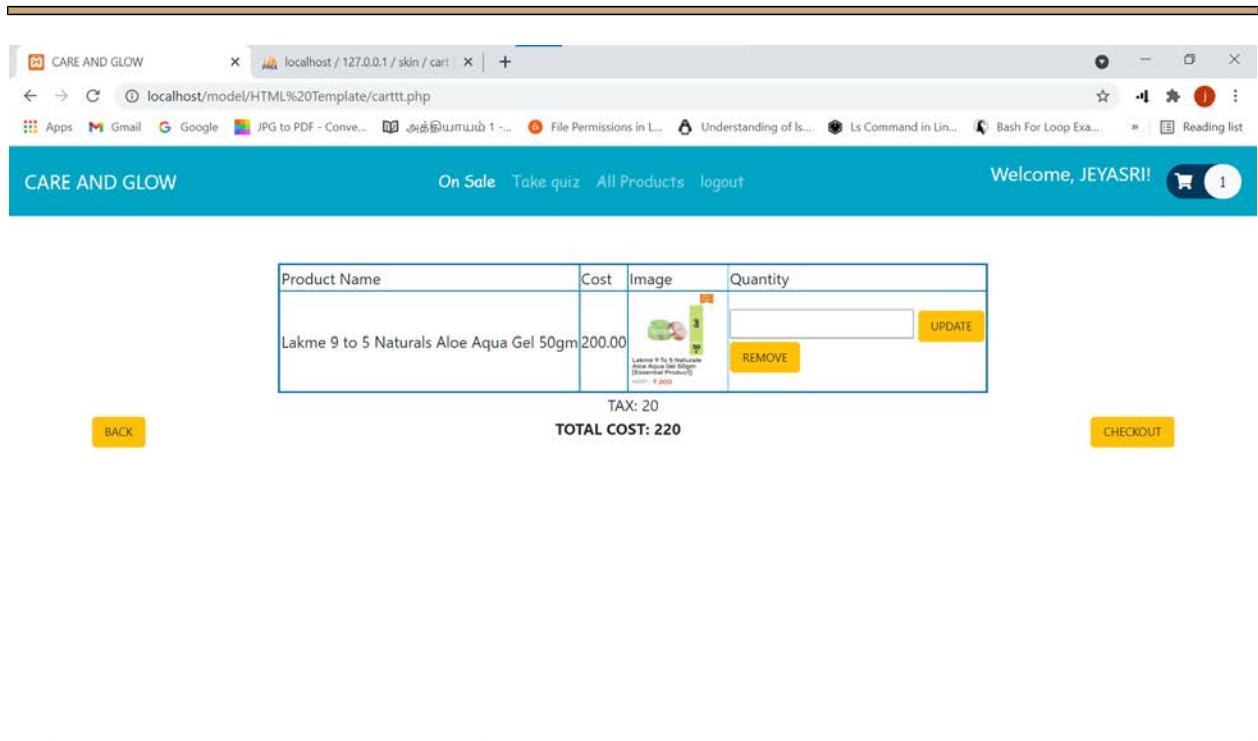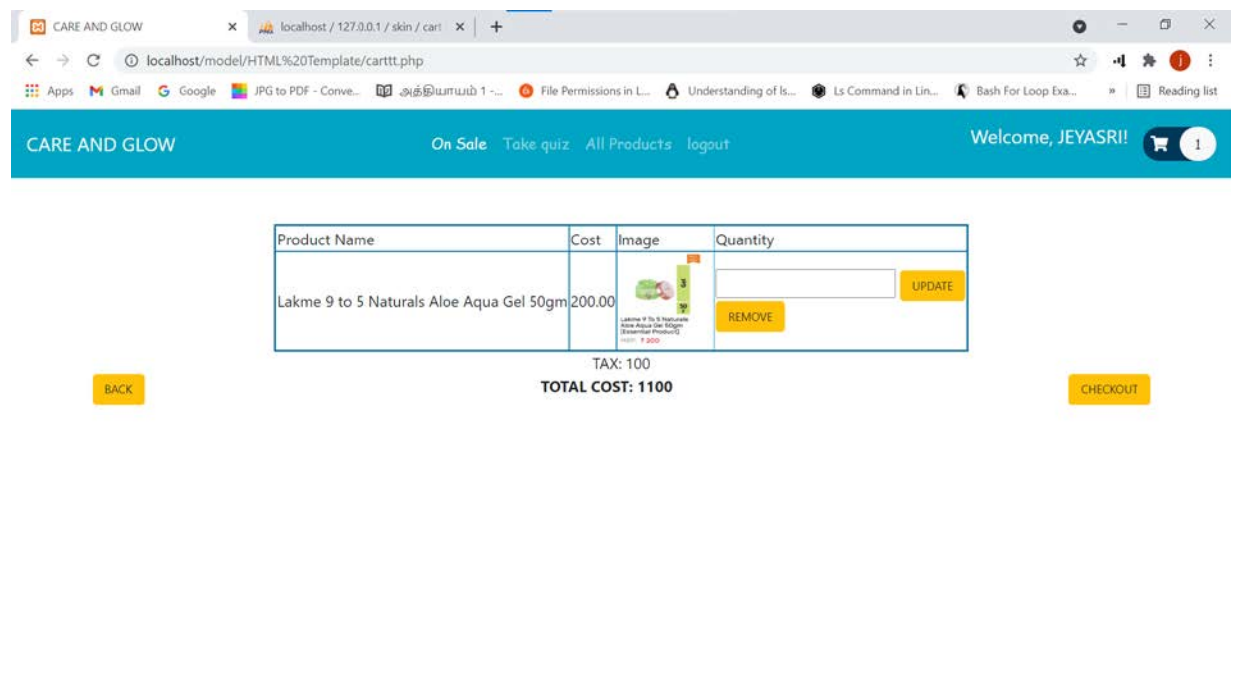
h. MY ORDERS PAGE:

In my orders page customers can find the summary of the orders they have placed. This page is directed by the cart page. Once the customer clicks checkout the order details are updated in orderdb table which is stored in database and fetched from the same to be displayed in my orders page. This page will display details including order date and time, order quantity, total price including delivery charges and order status thereby helping in tracking the order. It also contains a **cancel order** button which when clicked will remove the entries from the orderdb table for a particular order. This way we make it easy for the customers to use the application and we have included all the necessary features for a better experience. When the orderdb table becomes empty

empty order page will be loaded. This page also has an additional feature which when the delivery address is not provided will throw a message and will have a button to direct the customers to edit account page which can be seen in the following snapshots.
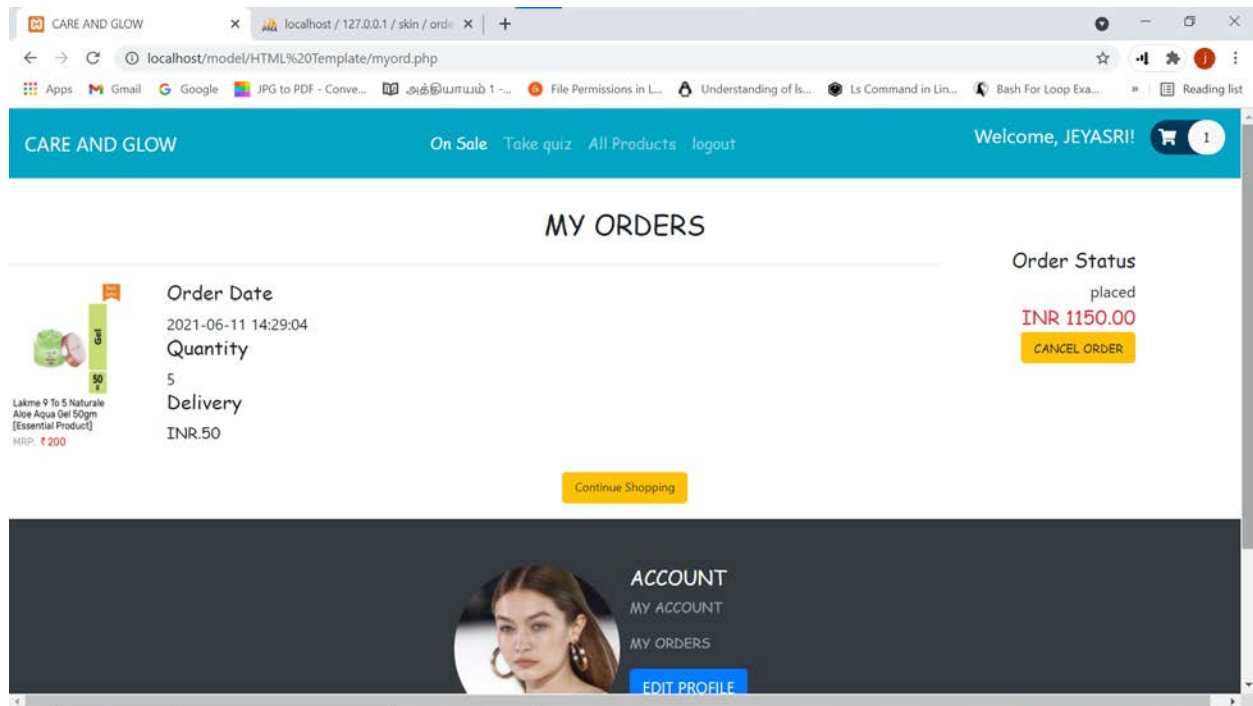
Fig.5.43 My orders page
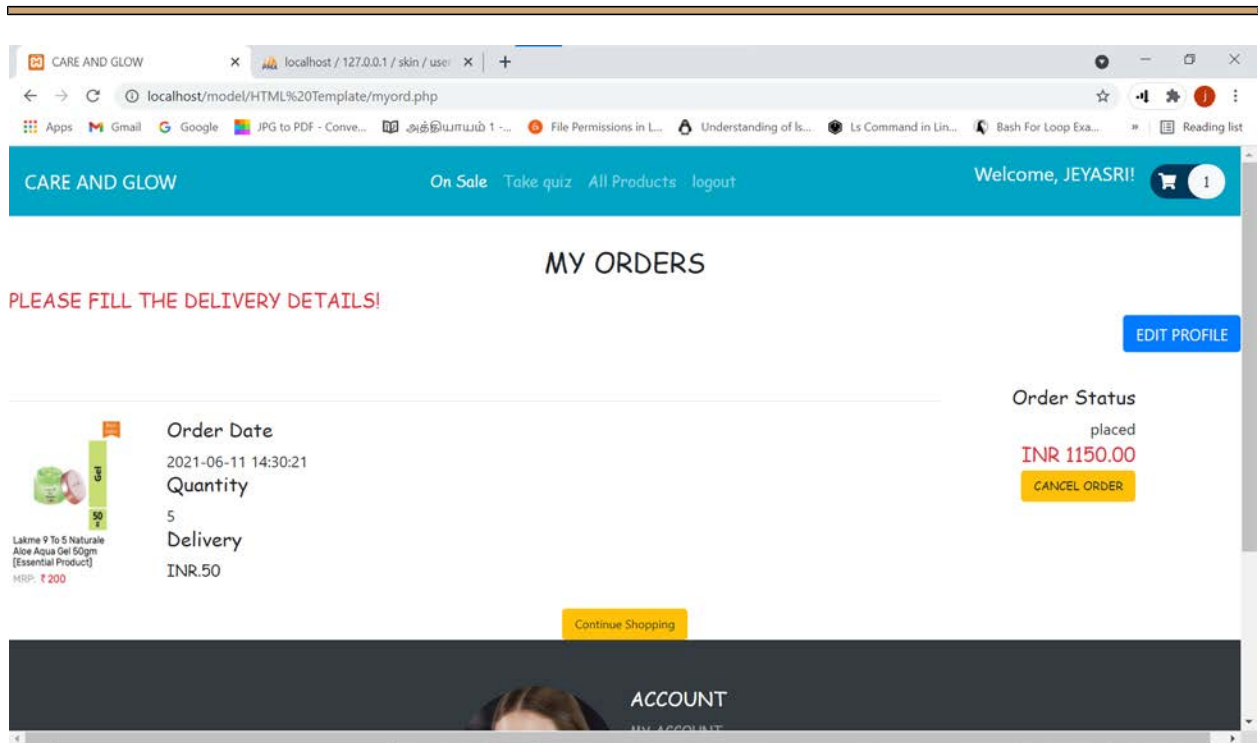
Fig.5.44 My orders page – when delivery address is not given
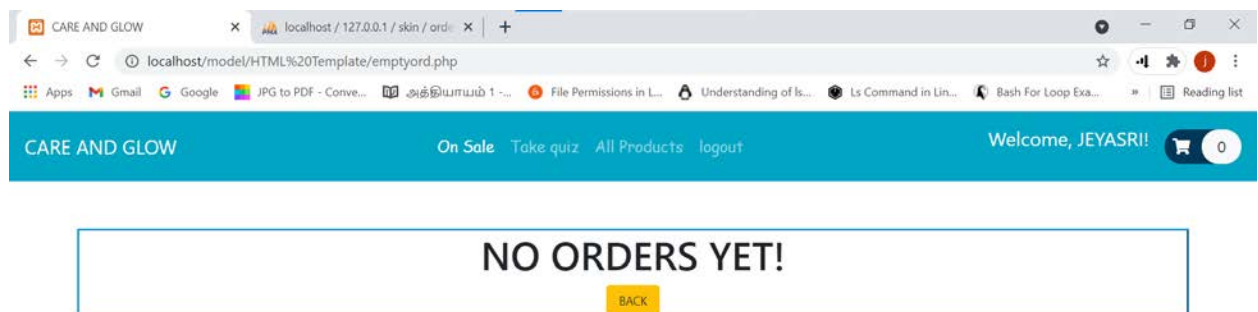
Fig.5.45 Empty orders page

i. SKIN ANALYSIS PAGE:

The most significant page of our site is the skin analysis page or quiz page. We have meticulously framed the quiz in order to cover all the areas of skin care. This skin care quiz can be taken by anyone above the age of 16. It is gender neutral so people of all gender can take it. Once the quiz is taken the suggested products will be displayed in the **suggested products** section. Customers can add desired products to cart and proceed to checkout from the suggested products section itself.

Fig.5.46 Quiz page – Skin analysis section

Fig.5.47 Quiz page – suggested products section – before taking quiz
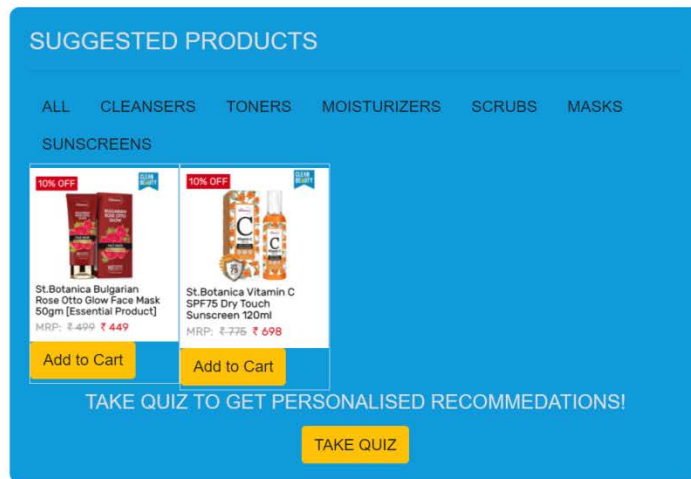
Fig.5.48 Quiz page – suggested products section – after taking quiz

j. MY ACCOUNT PAGE:

My account page shows the personal information about the customers which is fetched from user table. It includes customer **name, email, contact number and delivery address**. Customers can edit their personal details at any time. This page also contains edit profile button which takes to the edit account page and my orders button to go to my orders page and a back button to go to the account page.
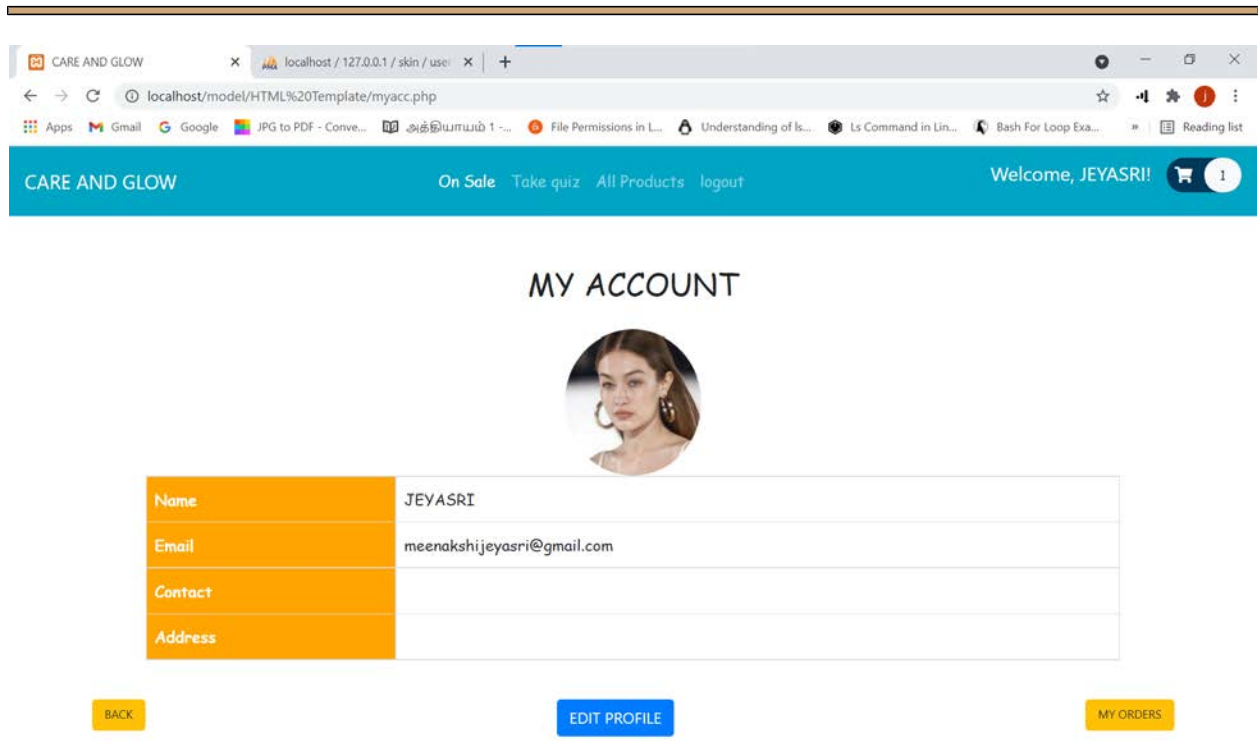
Fig.5.49 My account page – before editing profile
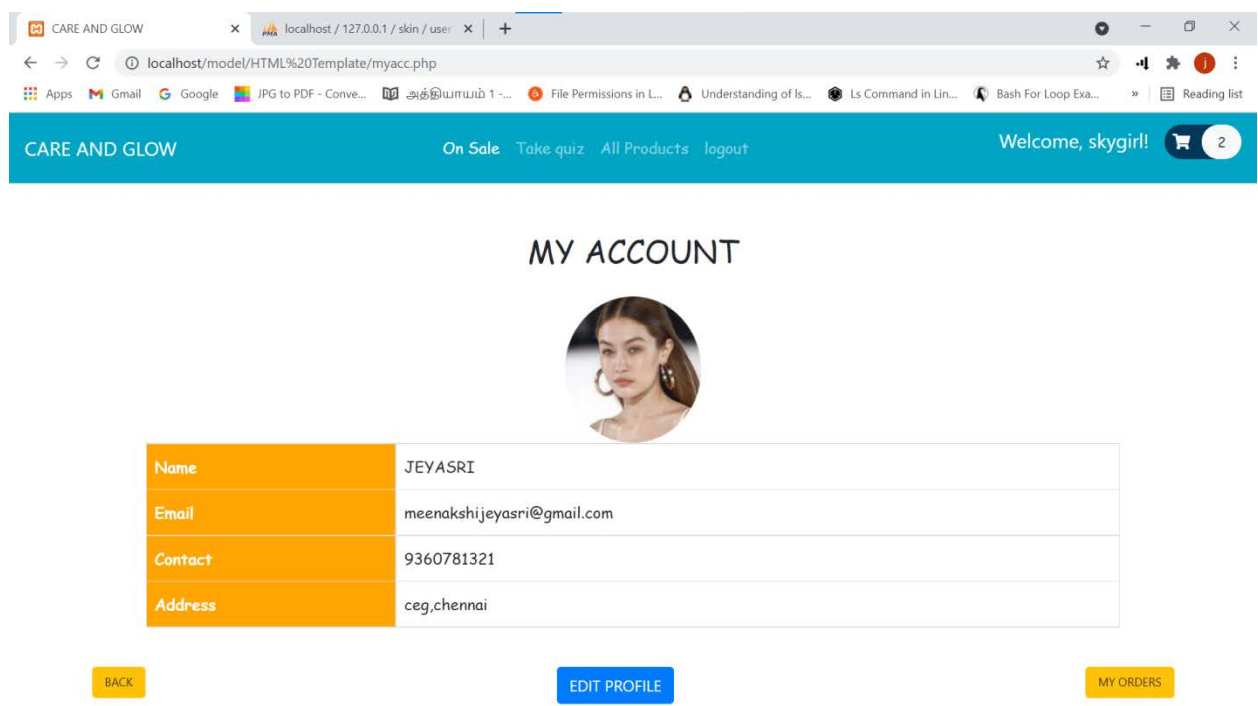
Fig.5.50 My account page – after editing profile

k. EDIT ACCOUNT PAGE:

The edit account page helps the customers to edit their account details at any time. The fields that can be edited include name, password, email, contact and address. It also has my orders button and a back button.

Fig.5.51 Edit profile page

SQL OPERATIONS

CREATING TABLES:
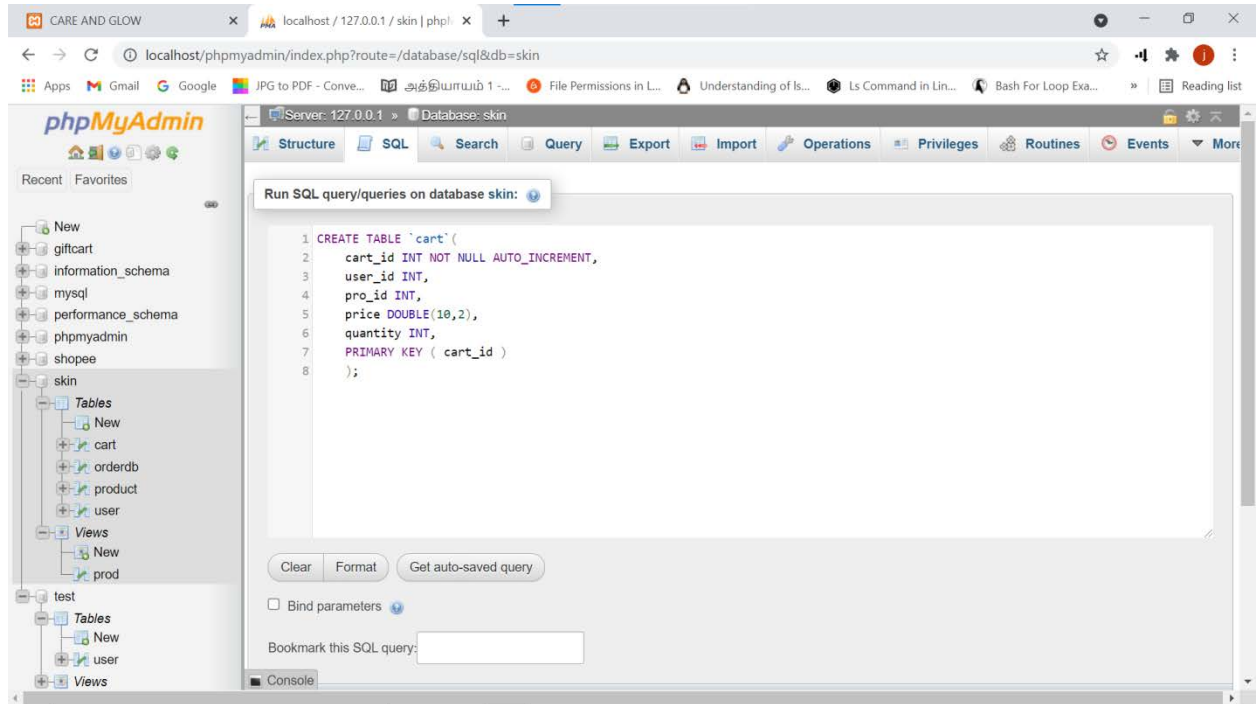
Fig.5.52 creating cart table
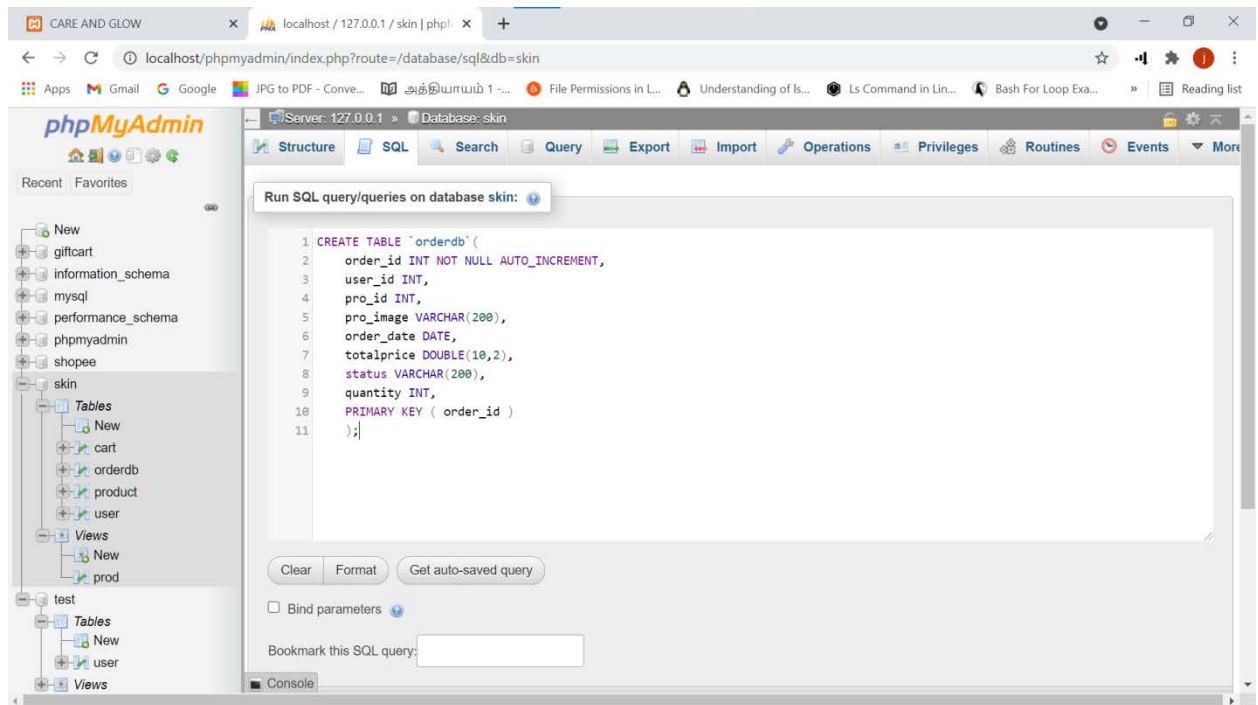
Fig.5.53 creating orderdb table
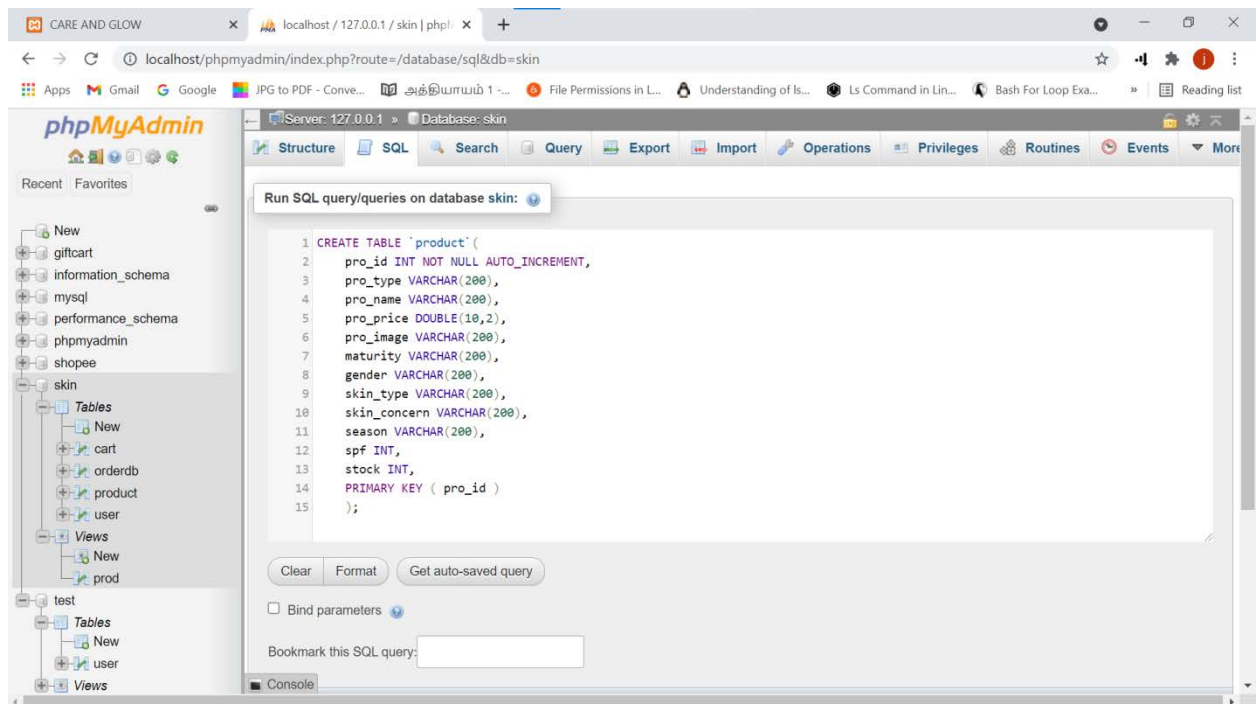
Fig.5.54 creating product table

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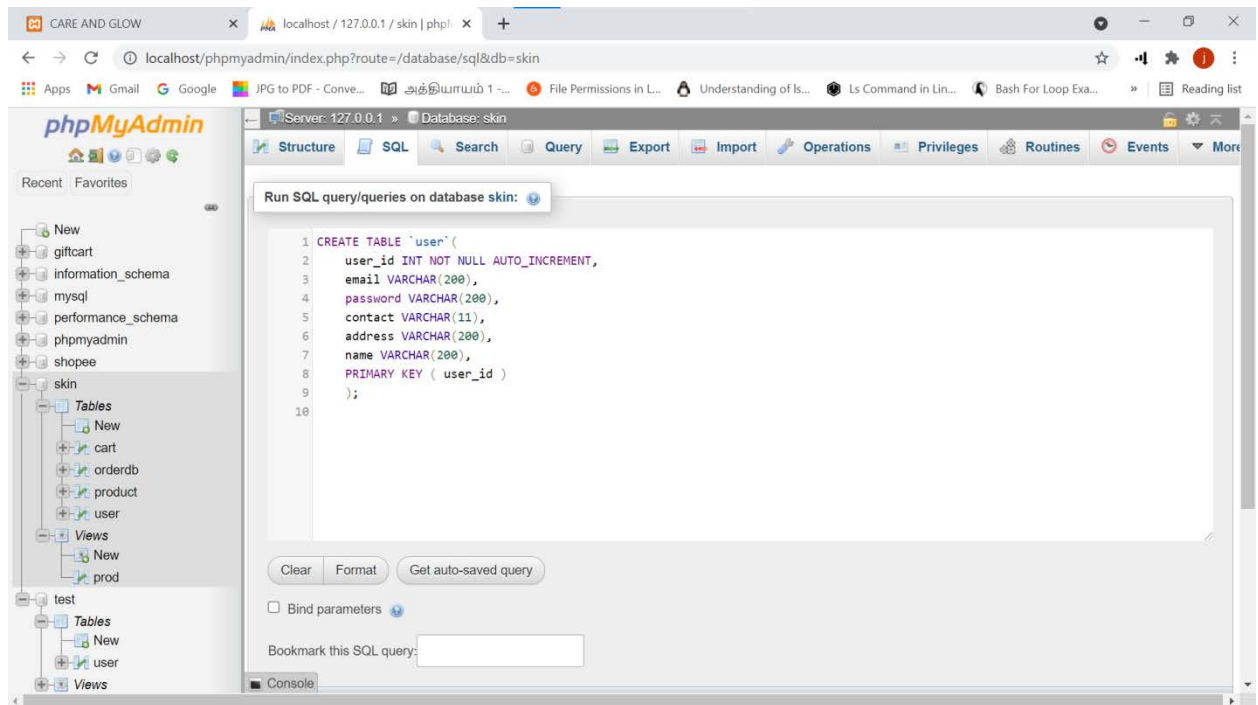
Fig.5.55 creating user table

CREATING VIEW:
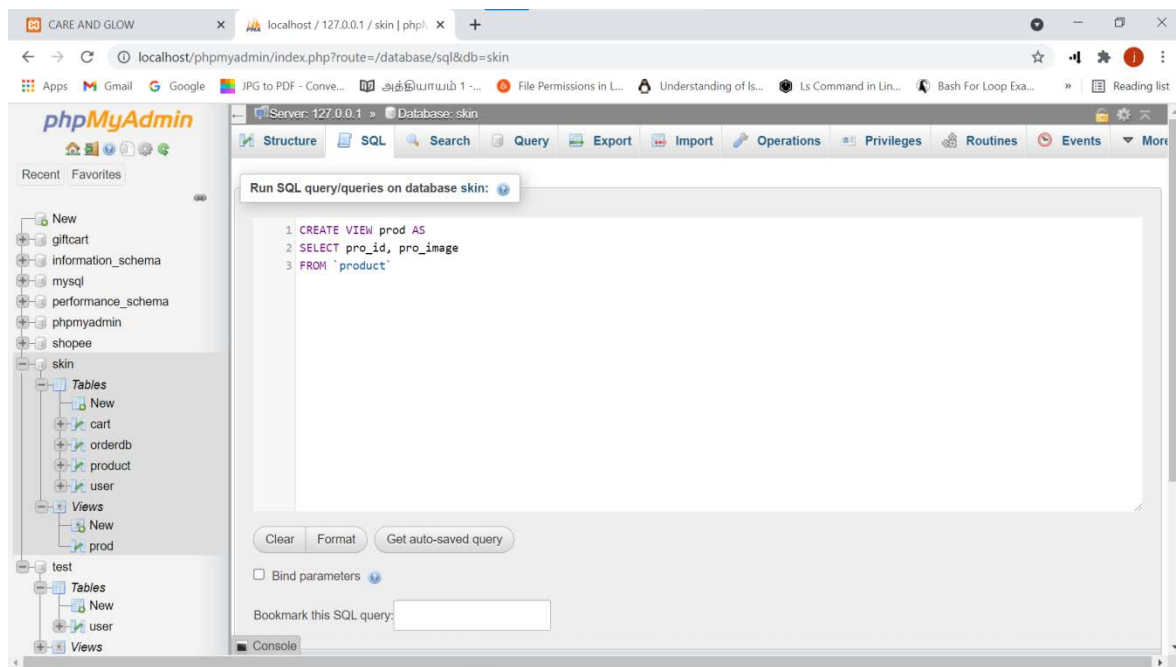
Fig.5.56 creating view prod

CREATING TRIGGER:
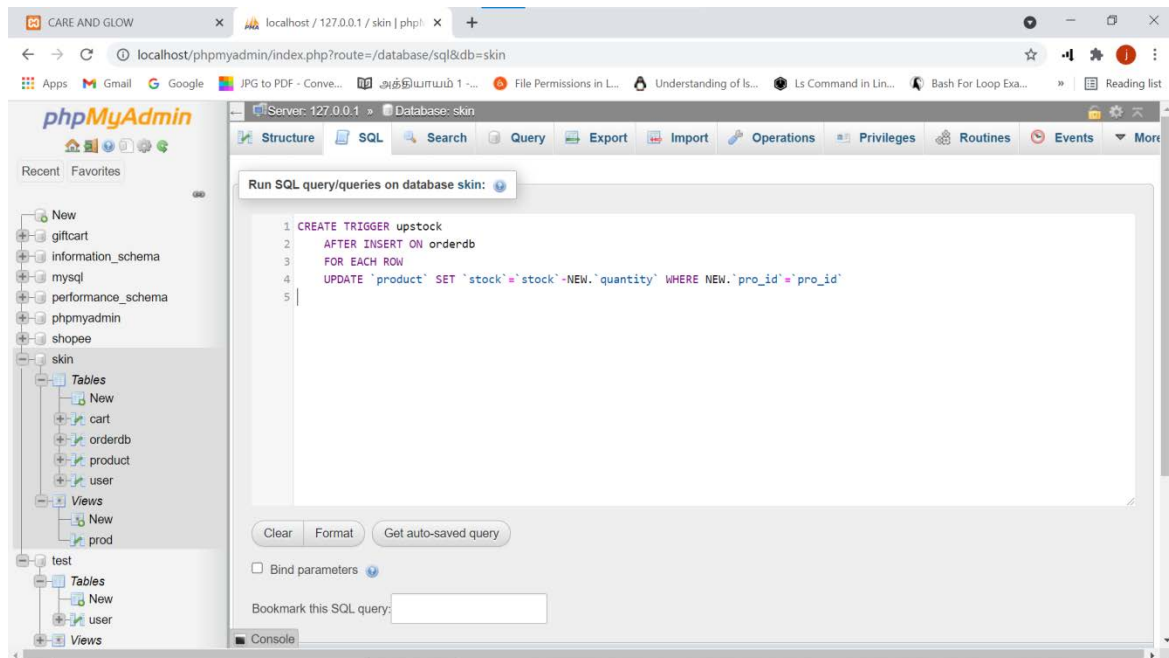
Fig.5.57 creating trigger upstock

INSERTING VALUES:

The values have been inserted manually in product table. Other tables are populated by various actions performed on the website. The cart table is populated when the customer clicks add to cart button in account page. The user table is populated when customers signup. The orderdb table is populated when customers checkout their products from cart.
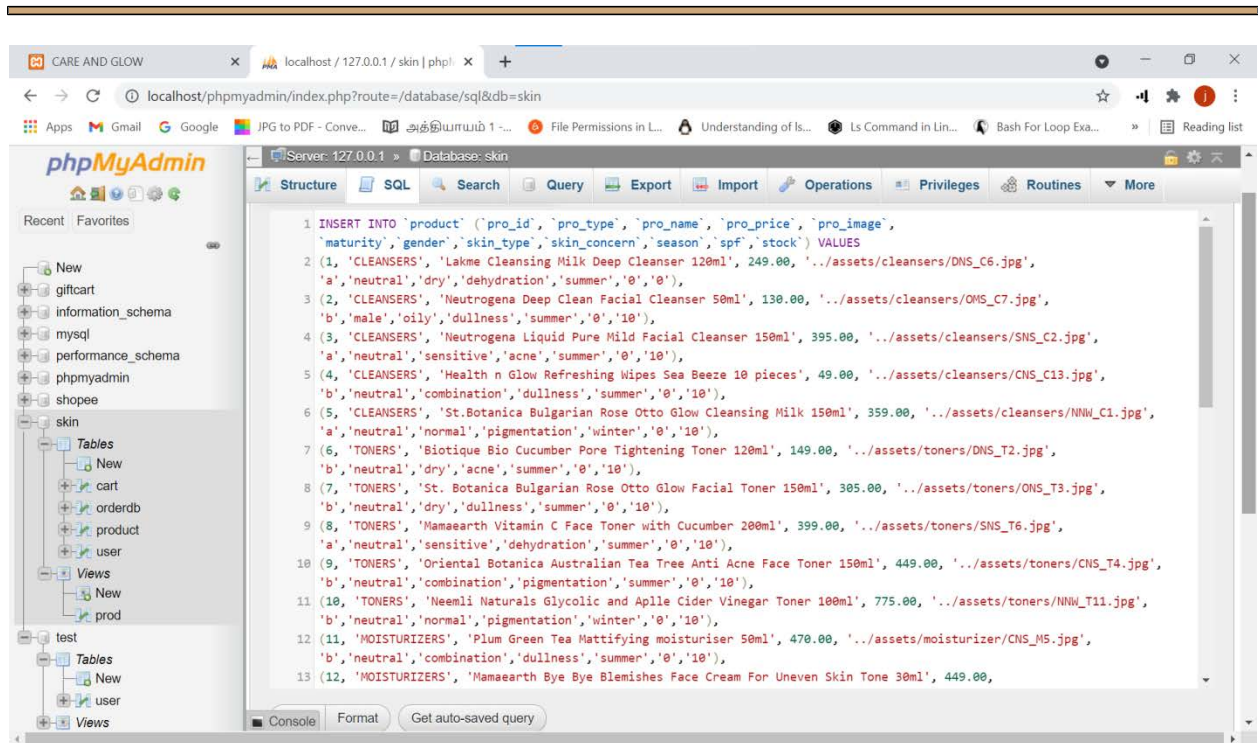
Fig.5.58 inserting into product table

CODE SNIPPETS:


```php
<a href="#"><img src="<?php
$sql=mysqli_query($conn,"SELECT * from prod where pro_id=13");
$top=mysqli_fetch_assoc($sql);
echo $top["pro_image"];?>" alt="product1" class="img-fluid"></a>
<form action="account.php" method='post'>
<input type="hidden" name="prodid" value="<?php echo $top["pro_id"];?>">

<input type="submit" class="btn btn-warning font-size-12" name="atc" value="Add to Cart">
```

Fig.5.59 using view prod to fetch products for top sale section

```php
    <?php do{
    ?>
    <div class="grid-item <?php echo $result["pro_type"];?> border">
    <div class="item py-1" style="width: 150px;">
    <div class="product font-rale">
        <a href='#'><img src="<?php echo $result["pro_image"];?>" alt="product1" class="img-fluid"></a>
        <form action="account.php" method='post'>
        <input type="hidden" name="prodid" value="<?php echo $result["pro_id"];?>">

        <input type="submit" class="btn btn-warning font-size-12" name="atc" value="Add to Cart">
    </form>
     </div>
     </div>
     </div>

<?php } while($result = mysqli_fetch_assoc($sqla)); ?>
```

Fig.5.60 fetching products from product table in a loop for all products section

```php
        $price=$cut["pro_price"];
        $sqlc=mysqli_query($conn,"SELECT * FROM cart");
        $cart=mysqli_fetch_assoc($sqlc);
        if(mysqli_num_rows($sqlc)>0){
          while($cart=mysqli_fetch_assoc($sqlc)){
            if($prodid==$cart["pro_id"]){
              $flag=1;
              ?>
              <script>
                alert("ITEM ALREADY IN CART");
              </script>
              <?php
              break;
            }
          }
          if($flag==0){
          $ins=mysqli_query($conn,"INSERT INTO cart(user_id,pro_id,price,quantity) values
          ('$user','$prodid','$price','1')");
         }
        }
        else{
            if($flag==0){
            $ins=mysqli_query($conn,"INSERT INTO cart(user_id,pro_id,price,quantity) values
            ('$user','$prodid','$price','1')");

        }}
        $_SESSION["count"]=$_SESSION["count"]+1;
}
  ?>
```

Fig.5.61 add to cart code

```php
$_SESSION["count"]=mysqli_num_rows($result);
if ($_SESSION["count"]==0)
{
    header("Location: ecart.php");
}
?>
```

Fig.5.62 empty cart redirect code

```php
if(isset($_POST["update"])){
  $flag=0;
  $quantity = $_POST["text"];
  $cart_id = $_POST["cart_id"];
  $stock=$_POST["stock"];
  if($quantity>$stock){
    $flag=1;
  }
  if($flag==0){
  mysqli_query($conn,"UPDATE cart set quantity='".$quantity."' where cart_id='".$cart_id."'");
  }
  header("Location:carttt.php");
}
```

Fig.5.63 updating quantity in cart code

```php
include "DBController.php";
$cart_id = $_GET['cart_id'];

mysqli_query($conn,"delete from cart where cart_id=$cart_id");
```

Fig.5.64 removing items from cart code

```php
$price=$row['quantity']*$row['pro_price'];
$cost=$cost + ($row['quantity']*$row['pro_price']);
$tax=$tax+0.1*$price;?>
```

Fig.5.65 calculating total cost and tax for items in cart code

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```php
<?php
$servername ="localhost";
$username = "root";
$password = "";
$dbname = "skin";


$conn = new mysqli($servername, $username, $password, $dbname);


if($conn->connect_error){
    die("connection failed");
}


?>
```

Fig.5.66 Database connectivity code(DBController.php)

```php
<?php

session_start();
include "DBController.php";
$order=$_GET["order_id"];
$pro=$_GET["pro_id"];
$quantity=$_GET["quantity"];
$upd="";
$del="";
$upd=mysqli_query($conn,"UPDATE product set stock=stock+'$quantity' where pro_id='$pro'");
$del=mysqli_query($conn,"DELETE from orderdb where order_id='$order'");
if($upd && $del){
?>
<script>
alert("Values updated");
</script>
<?php
}

header("Location:myord.php");
?>
```

Fig.5.67 Cancel order code

```php
if(isset($_POST["edit"])){
  $name=$_POST["name"];
  $pass=$_POST["password"];
  $email=$_POST["email"];
  $contact=$_POST["contact"];
  $address=$_POST["address"];
  $curr=$_POST["cur_password"];
  $password = $_POST["cur_pass"];

  $upd="";
  if($password==null ){
   $upd=mysqli_query($conn,"UPDATE user SET name='$name', email='$email',
   contact='$contact', address='$address' where user_id='$user'");
   }
  if($password==$curr ){
  $upd=mysqli_query($conn,"UPDATE user SET name='$name', password='$pass',
  email='$email', contact='$contact', address='$address' where user_id='$user'");
  }

 if($upd){
   $flag=1;
?>
   <script>
   alert("Values have been updated!");
   </script>
<?php

}
```

Fig.5.68 Edit profile code

```php
<?php
session_start();
session_destroy();
header("Location: iindex.php");
?>
```

Fig.5.69 Logout code

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

  $result = mysqli_query($conn,"SELECT c.cart_id,c.quantity,p.pro_id,p.pro_name,p.pro_price,p.pro_image from cart
  as c INNER JOIN product as p on p.pro_id=c.pro_id where c.user_id=$user");
    while($row = mysqli_fetch_array($result)){
      $flag=0;

      $med=($row['quantity']*$row['pro_price']);
      $price=$med+(0.1*$med)+50;
      $id=$row["pro_id"];
      $image=$row["pro_image"];
      $quantity=$row["quantity"];
      $ins=mysqli_query($conn,"INSERT INTO orderdb (pro_id,pro_image,order_date,user_id,totalprice,status,quantity)
       values('$id','$image',now(),'$user','$price','placed','$quantity')");
      if($ins){
        $flag=1;
      }
      }

      if($flag){
      ?>
     <script>
    alert('Values have been inserted');
    </script>
    <?php
      }
}
```

Fig.5.70 Place order code

```php
if($val['address']==null){
  echo '<div class="font-size-20 text-danger font-baloo">PLEASE FILL THE DELIVERY DETAILS!</div>';?>
  <div style="float:right;">
  <input type="button" value="EDIT PROFILE" onclick="document.location.href='editacc.php'"
  class="btn btn-primary mb-2">
  </div>
```

Fig.5.71 code to display a message in my orders page when delivery address is not given

```php
<?php
if(isset($_POST["test"]))
{
    if(isset($_POST["question1"])){
      $age=$_POST["question1"];
      }
      if(isset($_POST["question2"])){
      $gender=$_POST["question2"];
      }
      if(isset($_POST["question3"])){
      $skint=$_POST["question3"];
      }
      if(isset($_POST["question4"])){
      $skinc=$_POST["question4"];
      }
      if(isset($_POST["question5"])){
      $season=$_POST["question5"];
      }
      if(isset($_POST["question6"])){
      $sun=$_POST["question6"];
      }

    $quiz = mysqli_query($conn," SELECT * from product where maturity = '".$age."' and
    (gender = '".$gender."' or gender='neutral') and
    skin_type = '".$skint."' and
    skin_concern = '".$skinc."' and
    season = '".$season."' union
    SELECT * from product where spf = '".$sun."'");

    $row = mysqli_fetch_assoc($quiz);
    $count=mysqli_num_rows($quiz);
```

Fig.5.72 skin analysis code which fetches the required products from the product table which satisfies the conditions given by the customers in quiz

```php
$email = $_POST["email"];
$password = $_POST["password"];
$sql = mysqli_query($conn, "SELECT * from user WHERE email = '".$email."' and
    password = '".$password."'");
$row = mysqli_fetch_assoc($sql);
if($row){
    $_SESSION["user"] = $row["user_id"];
    $_SESSION["name"] = $row["name"];
    $_SESSION["login"]= true;
    ?>
    <script>
        alert('Login successful');
    </script>

    <?php
    header("Location: account.php");
}
else{
    $_SESSION["login"]= false;
    ?>
    <script>
        alert('Login failed');
    </script>
    <?php
}
```

Fig.5.73 signin code

```php
$name = $_POST["name"];
$email = $_POST["email"];
$password = $_POST["password"];
$sql = "INSERT INTO user (name, email, password)
VALUES ('$name', '$email', '$password')";
if($conn->query($sql) === TRUE ){
    ?>
    <script>
        alert('Values have been inserted');
    </script>
    <?php
}
else{
    ?>
    <script>
        alert('Values did not insert');
    </script>
    <?php
}
header("Location: signlog.html#sign-in");
```

Fig.5.74 signup code

Conclusion

From analyzing the requirements of user and admin in system design and consolidating everything, each step requires in-depth understanding and commitment towards achieving the objectives of this project.

This is a customer friendly project, as the main objective behind our project is to provide our customers a best skin care routine suited for them according to their skin issues.

This project gave us the opportunity to try our new skills in practice. While doing this project we also gained deeper understanding on database design and how it can be implemented in real life situations.

Project link

https://github.com/JEYASRII/DBMS-PROJECT

References

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- www.tutorialspoint.com
- www.youtube.com
- www.images.google.com