PROJECT REPORT

PHP Login Page : Shopping Website

Using LAMP Stack

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Contents

Aim

To create a login form application using LAMP stack .

Introduction

LAMP is an archetypal model of web service stacks, named as an acronym of the names of its original four open-source components: the Linux operating system, the Apache HTTP Server,the MySQL relational database management system (RDBMS), and the PHP programming language. The LAMP components are largely interchangeable and not limited to the original selection. As a solution stack, LAMP is suitable for building dynamic web sites and web applications. Since its creation, the LAMP model has been adapted to other componentry, though typically consisting of free and open-source software.

The reason they call it a stack is because each level derives off its base layer. Operating system, Linux, is the base layer. Then Apache,web daemon sits on top of OS. Then database stores all the information served by web daemon, and PHP (or any scripting language) is used to drive and display all the data, and allow for user interaction.

The github link of our project is :
https://github.com/AkshayEdakochi/Loginform

Software Requirements Specifications

1. Linux Os

Linux is a Unix-like computer operating system assembled under the model of free and open source software development and distribution. Most Linux distributions, as collections of software based around the Linux kernel and often around a package management system, provide complete LAMP setups through their packages.

2. APACHE

The role of LAMPâĂŹs web server has been traditionally supplied by Apache, and has since included other web servers such as Nginx. The Apache HTTP Server has been the most popular web server on the public Internet. A wide variety of features are supported, and many of them are implemented as compiled modules which extend the core functionality of Apache. These can range from server-side programming language support to authentication schemes.

3.MySQL

MySQL is a multithreaded, multi-user, SQL database management system (DBMS), acquired by Sun Microsystems in 2008, which was then acquired by Oracle Corporation in 2010. Since its early years, the MySQL team has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements.

4.PHP

PHP's role as the LAMP application programming language has also been performed by other languages such as Perl and Python. PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP code is interpreted by a web server via a PHP processor module, which generates the resulting webpage. PHP commands can optionally be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the terms of PHP License, which is incompatible with the GNU General Public License (GPL) due to the restrictions PHP License places on the usage of the term PHP.

Installation of LAMP server

1. Default Installation

To install the default LAMP stack in Ubuntu 10.04 and above First refresh your package index
        $ sudo apt-get update
and then install the LAMP stack:
        $ sudo apt-get install lamp-server

2. Apache Installation

To only install the apache2:
        $apache2
It requires a restart for it to work:
        $ sudo /etc/init.d/apache2 restart
Or $ sudo service apache2 restart
To check Apache 2 installation with your web browser, go to the URI http://localhost if you read "It works!", which is the content of the file /var/www/index.html , this proves Apache works.

3. PHP Installation

To only install PHP5 enable the module libapache2-mod-php5 by doing
        $ sudo a2enmod php5
which creates a symbolic link /etc/apache2/mods-enabled/php5 pointing to /etc/apache2/mods-available/php5 . Relaunch Apache2 again:
        $ sudo service apache2 restart

4. Installing MYSQL with PHP 5

Use any method to install
        $ mysql-server libapache2-mod-auth-mysql php5-mysql

After Installing MySql

1. Set mysql bind address

Before you can access the database from other computers in your network, you have to change its bind address. Note that this can be a security problem, because your database can be accessed by other computers than your own. Skip this step if the applications which require mysql are running on the same machine. type:

      $ sudo nano /etc/mysql/my.cnf

and change the line:

      bind-address = localhost to your own internal ip address e.g. 192.168.1.20
      bind-address = 192.168.1.20

2. Set mysql root password

Before accessing the database by console you need to type:

      $ mysql -u root

At the mysql console type:

      $ mysql > SET PASSWORD FOR `root@localhost` = PASSWORD(yourpassword);

A successful mysql command will show:

      Query OK, 0 rows affected (0.00 sec)

Create Database

1. login.php

```php
<?php include('server.php') ?>
<!DOCTYPE html>
<html>
<head>
  <title>Registration system PHP and MySQL</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="header"><h2>Login</h2></div>
  <form method="post" action="login.php" id="form1">
        <?php include('errors.php'); ?>
        <div class="input-group">
                <label>Username</label>
                <input type="text" name="username" ></div>
        <div class="input-group">
                <label>Password</label>
                <input type="password" name="password"></div>
        <div class="input-group">
                <button type="submit" class="btn" name="login_user">Login</button></div>
        <p>Not yet a member? <a href="register.php">Sign up</a></p>
  </form>
  </body>
  </html>
```

2. Server.php

```php
<?php
session_start();
$username = "";          // initializing variables
$email = "";
$errors = array();
$db = mysqli_connect('localhost', 'root', 'Akshay@1999', 'register');// connect to database
if (isset($_POST['reg_user'])) {          // REGISTER USER
// receive all input values from the form
```

```php
$username = mysqli_real_escape_string($db, $_POST['username']);
$email = mysqli_real_escape_string($db, $_POST['email']);
$password_1 = mysqli_real_escape_string($db, $_POST['password_1']);
$password_2 = mysqli_real_escape_string($db, $_POST['password_2']);
// form validation: ensure that the form is correctly filled ...
// by adding (array_push()) corresponding error unto $errors array
if (empty($username)) { array_push($errors, "Username is required"); }
if (empty($email)) { array_push($errors, "Email is required"); }
if (empty($password_1)) { array_push($errors, "Password is required"); }
if ($password_1 != $password_2) {
  array_push($errors, "The two passwords do not match");  }
$user_check_query = "SELECT * FROM users WHERE username='$username' OR
email='$email' LIMIT 1";
$result = mysqli_query($db, $user_check_query);
$user = mysqli_fetch_assoc($result);
if ($user) { // if user exists
      if ($user['username'] === $username) {
      array_push($errors, "Username already exists");     }
      if ($user['email'] === $email) {
      array_push($errors, "email already exists");          }        }
if (count($errors) == 0) {
   $password = md5($password_1);//encrypt the password before saving in the database
   $query = "INSERT INTO users (username, email, password)
            VALUES('$username', '$email', '$password')";
   mysqli_query($db, $query);
      $query= " SELECT id FROM users WHERE username = '$username'";
      $result= mysqli_query($db,$query);
      $usr = mysqli_fetch_assoc($result);
      $id = $usr['id'];
      $query = "INSERT INTO accounts (id) VALUES ('$id')";
      mysqli_query($db, $query);
      $_SESSION['username'] = $username;
      $_SESSION['success'] = "You are now logged in";
      $_SESSION['balance'] = "5000 added to your wallet";
      $_SESSION['balanceno'] = 5000;
   header('location: index.php');      }      }              // LOGIN USER
if (isset($_POST['login_user'])) {
 $username = mysqli_real_escape_string($db, $_POST['username']);
 $password = mysqli_real_escape_string($db, $_POST['password']);
 if (empty($username)) {
      array_push($errors, "Username is required");          }
 if (empty($password)) {
      array_push($errors, "Password is required");          }
```

```php
  if (count($errors) == 0) {
        $password = md5($password);
        $query = "SELECT * FROM users WHERE username='$username' AND
password='$password'";
 //  $query2= "SELECT a.balance , a.id , u.id FROM accounts as a AND users as u WHERE
a.id = u.id"
        $results = mysqli_query($db, $query);
        $usr =mysqli_fetch_assoc($results);
        $id=$usr['id'];
        $query2= "SELECT balance FROM accounts WHERE id = $id";
        $res =mysqli_query($db, $query2);
        $bal = mysqli_fetch_assoc($res);
        $balance=$bal['balance'];
        if (mysqli_num_rows($results) == 1) {
        $_SESSION['username'] = $username;
        $_SESSION['success'] = "You are now logged in";
        $_SESSION['balanceno'] = $balance;
        header('location: index.php');
        }else {
        array_push($errors, "Wrong username/password combination");    }        }        }
?>
```

3.   register.php

```php
<?php include('server.php') ?>
<!DOCTYPE html>
<html>
<head>
  <title>Registration system PHP and MySQL</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="header">
    <h2>Register</h2>
  </div>
  <form method="post" action="register.php" id="form1">
    <?php include('errors.php'); ?>
    <div class="input-group">
     <label>Username</label>
     <input type="text" name="username" value="<?php echo $username; ?>">   </div>
    <div class="input-group">
     <label>Email</label>
```

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```html
      <input type="email" name="email" value="<?php echo $email; ?>">
    </div>
    <div class="input-group">
      <label>Password</label>
      <input type="password" name="password_1">
    </div>
    <div class="input-group">
      <label>Confirm password</label>
      <input type="password" name="password_2">
    </div>
    <div class="input-group">
      <button type="submit" class="btn" name="reg_user">Register</button>
    </div>
    <p>
        Already a member? <a href="login.php">Sign in</a>
    </p>
  </form>
</body>
</html>
```

4.   index.php

```php
<?php
  session_start();
  if (!isset($_SESSION['username'])) {
     $_SESSION['msg'] = "You must log in first";
     header('location: login.php');        }
  if (isset($_GET['logout'])) {
     session_destroy();
     unset($_SESSION['username']);
     header("location: login.php");        }        ?>
<!DOCTYPE html>
<html>
<head>
   <title>Home</title>
   <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
<div class="header">
   <h2>Home Page</h2>
</div>
<div class="content">
 <?php if (isset($_SESSION['success'])) : ?><div class="error success" ><h3><?php
```

```php
echo $_SESSION['success']; ?><br>
        <?php
                unset($_SESSION['success']);
        if(isset($_SESSION['balance']))
        {echo $_SESSION['balance'];
                unset($_SESSION['balance']);          }          ?></h3></div>
    <?php endif ?>
        <?php  if (isset($_SESSION['username'])) : ?>
         <p>Welcome <strong><?php echo $_SESSION['username'];?> </strong> <br>
Balance:<?php echo $_SESSION['balanceno'];?> </p>
         <p> <a href="index.php?logout='1'" style="color: red;">logout</a> </p>
        <?php endif ?>
</div>
<link rel="stylesheet" type="text/css" href="style1.css">
<link rel="stylesheet" type="text/css" href="style2.css">
<form action="wallet.php" method="get">
<div class="row">
        <div class="column">
        <div class="card">
                <img src="watch.jpg">
                <p>Rolex Brand Watch</p>
                <p>Rs.1700/-</p>
                <!--<button type="button" style="color: red">SHOP</button> -->
                <input type="checkbox" name="item[]" value="watch"> Buy this <br></div>
        </div>
        <div class="column">
        <div class="card">
                <img src="bag.jpg">
                <p>Street Style shoe K12F7</p>
                <p>Rs.2000/-</p>
                <!-- <button type="button" style="color: red">SHOP</button> -->
                <input type="checkbox" name="item[]" value="Bag" > Buy this<br>
        </div></div>
        <div class="column">
        <div class="card">
                <img src="shirt.jpg">
                <p>Van Heusen FLAT 500 OFF</p>
                <p>Rs.900/-</p>
                <!-- <button type="button" style="color: red">SHOP</button> -->
                <input type="checkbox" name="item[]" value="Shirt" > Buy this<br>
        </div></div>
        <div class="column">
        <div class="card">
```

```
                <img src="shoe.jpg">
                <p>NEW WOODLAND</p>
                <p>RS.500/-</p>
                <!-- <button type="button" style="color: red">SHOP</button> -->
                <input type="checkbox" name="item[]" value="Shoe" > Buy this<br>
        </div>
        </div>
        </div>
        <input type="submit" value="Submit">
    </form></body>
</html>
```

5. wallet.php

```
<!DOCTYPE html>
<html>
<head>
   <title>Wallet Status</title>
   <link rel="stylesheet" type="text/css" href="style.css">
   <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2M
Zw1T" crossorigin="anonymous">
</head>
<body>
<div class="header"><h2>Wallet Status</h2></div>
<div class="container">
  <div class="jumbotron">
        <h1>Thank You for Your Purchase</h1>
        <img src="emoji.jpg" style="float: right">
<?php
session_start();
$name = $_GET['item'];
$bal = $_SESSION['balanceno'];
foreach ($name as $color){
        echo $color."<br />";
        if ($color=="watch") {
         $bal=$bal-1700;       }
        elseif ($color=="Bag") {
         $bal=$bal-2000;       }
        elseif ($color=="Shirt") {
         $bal=$bal-900;        }
```

```php
        elseif ($color=="Shoe") {
          $bal=$bal-500;          }          }
if ($bal<0) {
   echo "Balance insufficient ";}
else
{        echo "Current balance  : ";
        echo $bal ;
        $username = $_SESSION['username'];
        $db = mysqli_connect('localhost', 'root', 'Akshay@1999', 'register');
        $query = "SELECT * FROM users WHERE username='$username'";
        $results = mysqli_query($db, $query);
        $usr =mysqli_fetch_assoc($results);
        $id=$usr['id'];
        $query2= "UPDATE accounts set balance=$bal WHERE id = $id";
        $res =mysqli_query($db, $query2);
        $bal = mysqli_fetch_assoc($res);
        $balance=$bal['balance'];
}        ?>
  </div>
  <h1>VISIT AGAIN</h1>
  <p> <a href="index.php?logout='1'" style="color: red;">logout</a> </p>
</div>
</body>
</html>
```
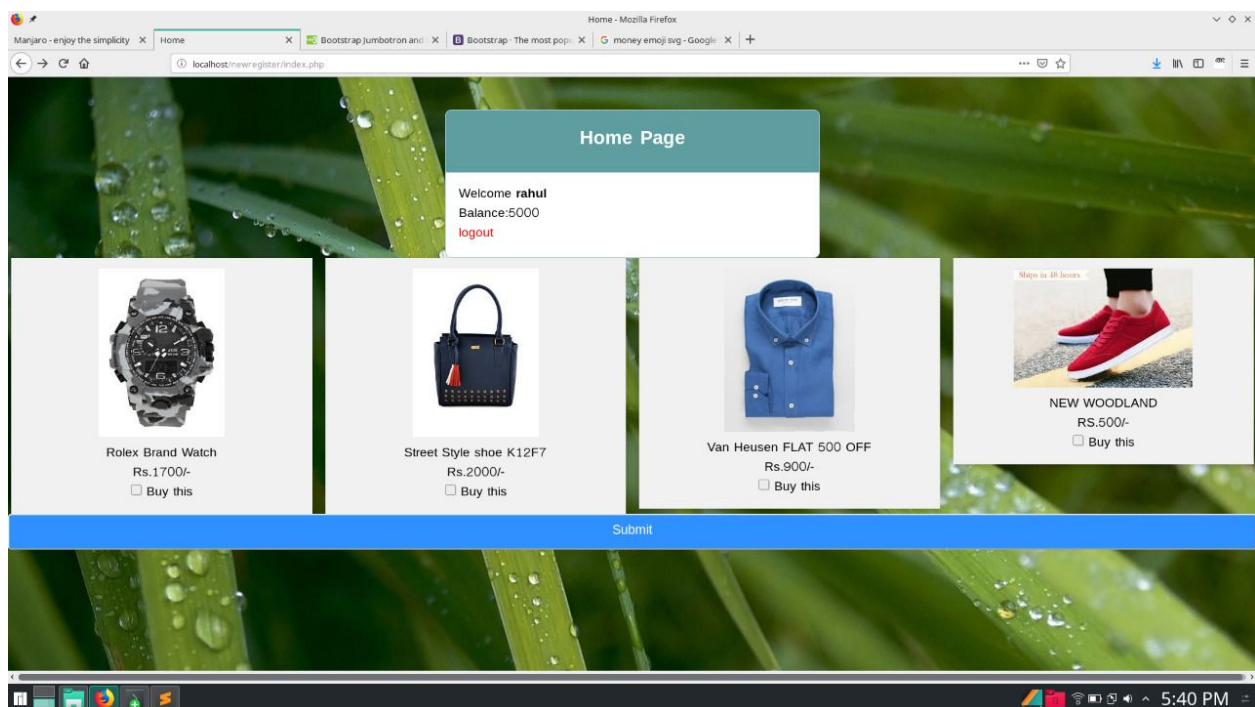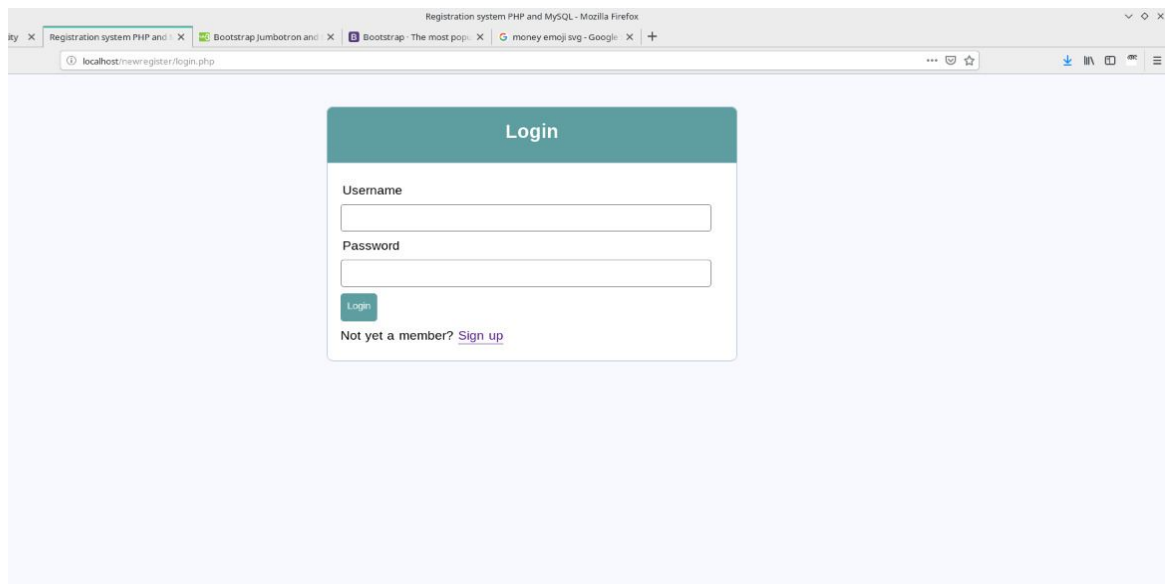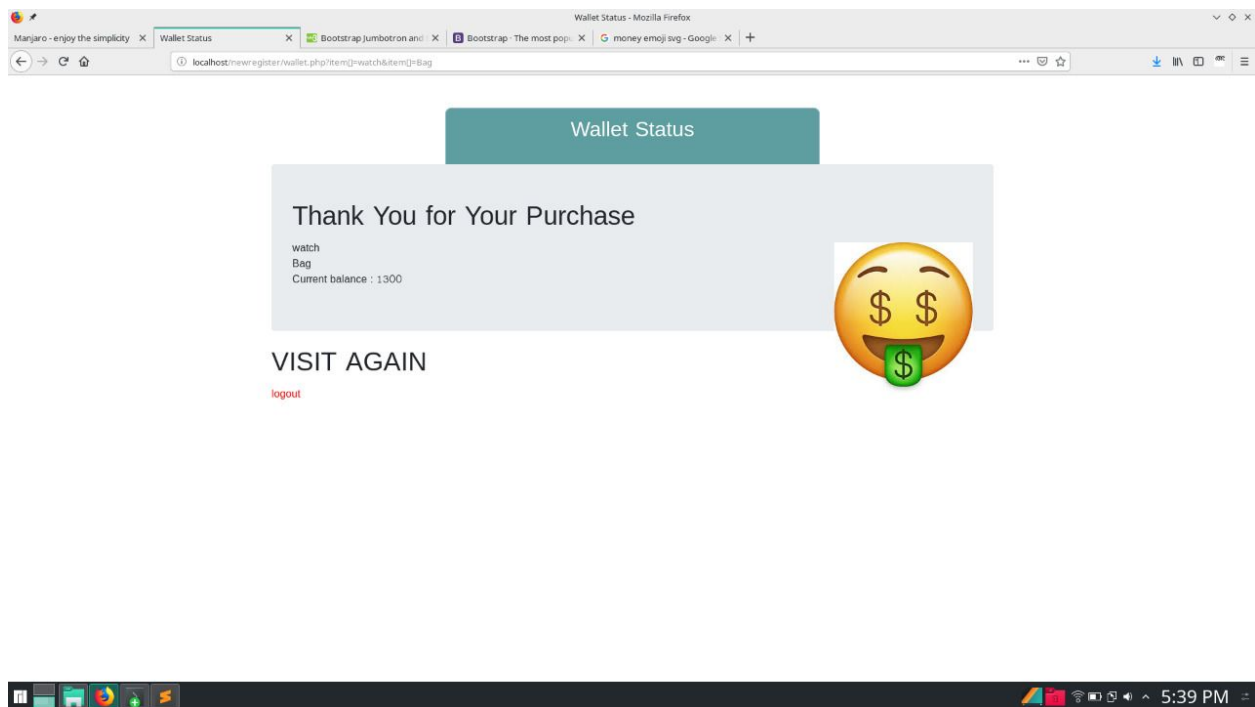
6.   errors.php

```php
<?php  if (count($errors) > 0) : ?>
  <div class="error">
    <?php foreach ($errors as $error) : ?>
     <p><?php echo $error ?></p>
    <?php endforeach ?>
  </div>
<?php  endif ?>
```

Screenshots of Login Form

Conclusion

We were able to successfully create a login page using php.First of all,we learnt the basics of php,sql and html and with the help of one of our friends, we could complete the login page within 1 day. This project has helped us improve our knowledge of php and sql.We sincerely thank our teachers to give us an opportunity to form groups and complete the project as we could share our ideas and have a fruitful discussions.

References

1.http://w3schools.com/
2.http://youtube.com/
3.http://stackoverflow.co.in/