

# LAB ASSIGNMENT

CHUNDI INDU

19BCB0002

1. Design a login page for verifying username and passwords with an authentication scheme for Students and Faculty and where faculty can upload the documents and students download the document

## LOGIN PAGE FOR STUDENT AND FACULTY:

CODE:

Index.php

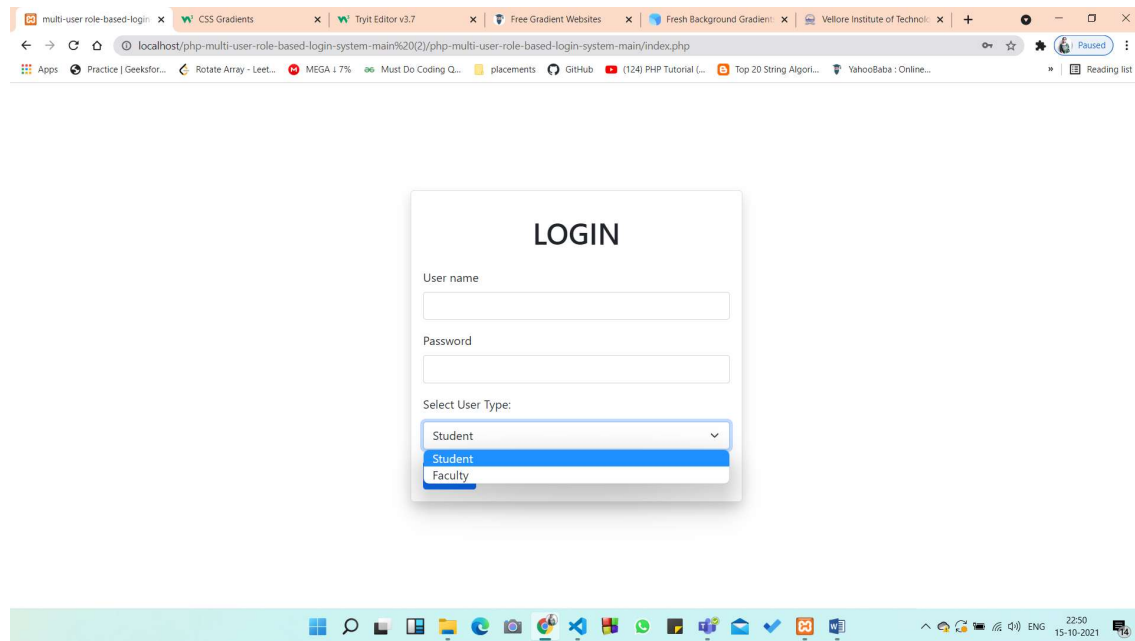
```
<?php
    session_start();
    if (!isset($_SESSION['username']) && !isset($_SESSION['id'])) {    ?>
<!DOCTYPE html>
<html>
<head>
    <title>multi-user role-based-login-system</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-
giJF6kkoqNQ00vy+HMDP7azOuL0xtbfIcaT9wjKHr8RbDVddVHYTfAAsrekWkMP1"
crossorigin="anonymous">
</head>
<body>
    <div class="container d-flex justify-content-center align-items-center"
    style="min-height: 100vh">
        <form class="border shadow p-3 rounded"
            action="php/check-login.php"
            method="post"
            style="width: 450px;">
            <h1 class="text-center p-3">LOGIN</h1>
            <?php if (isset($_GET['error'])) { ?>
            <div class="alert alert-danger" role="alert">
                <?=$_GET['error']?>
            </div>
            <?php } ?>
            <div class="mb-3">
                <label for="username"
                    class="form-label">User name</label>
```

```
        <input type="text"
              class="form-control"
              name="username"
              id="username">
    </div>
    <div class="mb-3">
        <label for="password"
              class="form-label">Password</label>
        <input type="password"
              name="password"
              class="form-control"
              id="password">
    </div>
    <div class="mb-1">
        <label class="form-label">Select User Type:</label>
    </div>
    <select class="form-select mb-3"
          name="role"
          aria-label="Default select example">
        <option selected value="user">Student</option>
        <option value="admin">Faculty</option>
    </select>

    <button type="submit"
          class="btn btn-primary">LOGIN</button>
    </form>
</div>
</body>
</html>
<?php }else{
    header("Location: home.php");
} ?>
```

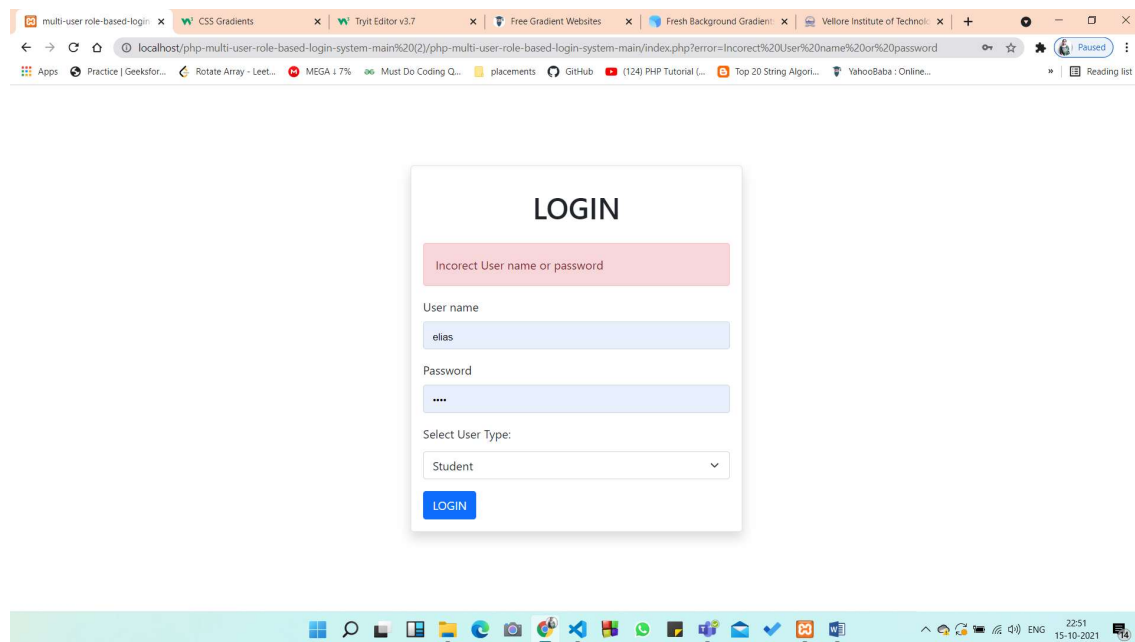
LAYOUT:

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## VALIDATION FOR STUDENT:

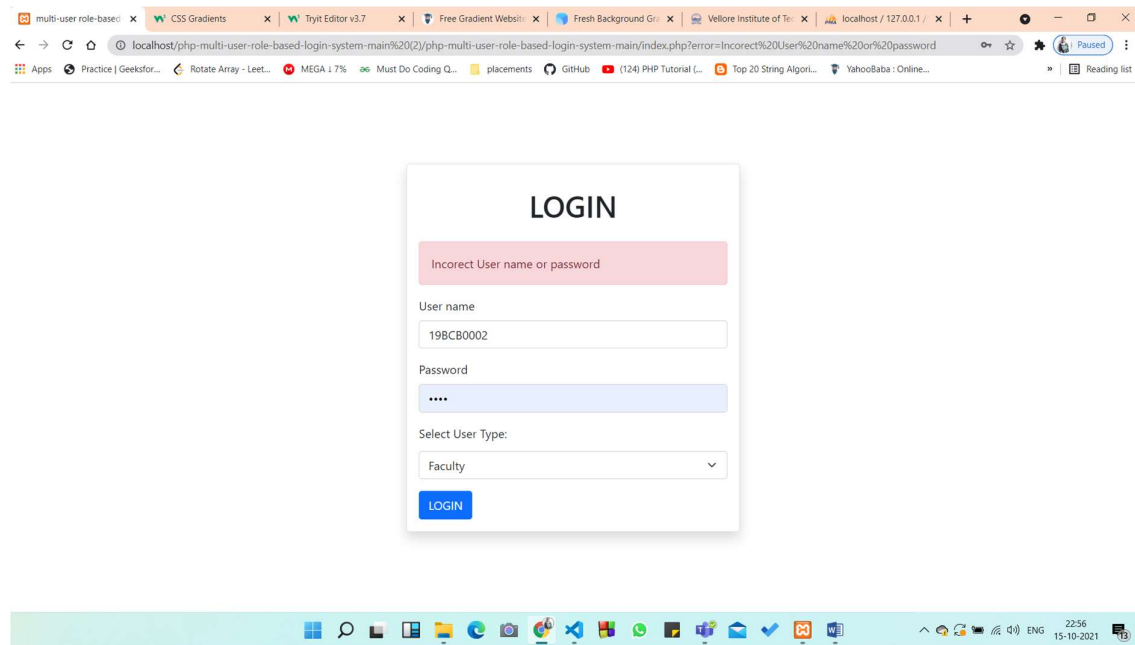
When student enters wrong credentials shows alert message:



## VALIDATION FOR FACULTY:

When Faculty enters wrong credentials shows alert message

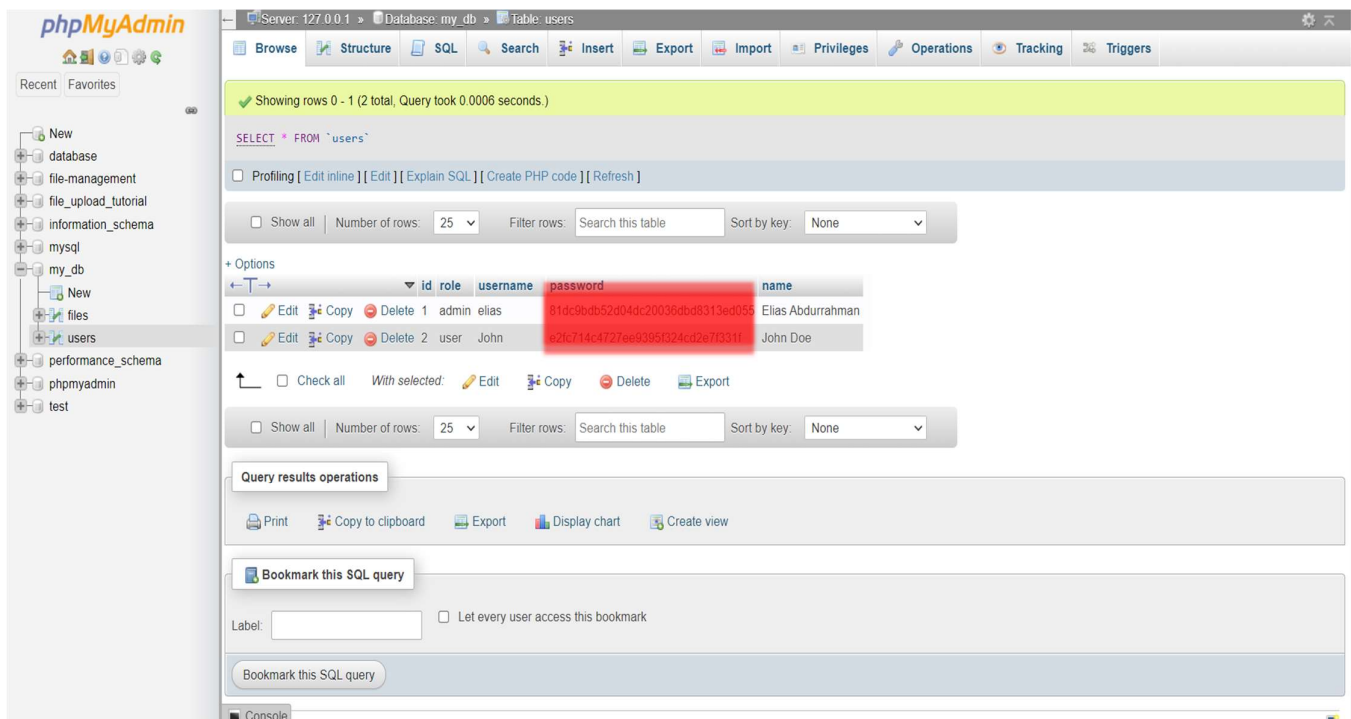
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**Password Encryption for Student And Faculty:**

**Implemented**

**Message Digest Algorithm 5 (MD5) - cryptographic hash algorithm**



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**Admin: Faculty**

**User: Student**

**Code:**

**CHECK\_LOGIN.PHP**

```
<?php
session_start();
include "../db_conn.php";

if (isset($_POST['username']) && isset($_POST['password']) &&
isset($_POST['role'])) {

    function test_input($data) {
        $data = trim($data);
        $data = stripslashes($data);
        $data = htmlspecialchars($data);
        return $data;
    }

    $username = test_input($_POST['username']);
    $password = test_input($_POST['password']);
    $role = test_input($_POST['role']);

    if (empty($username)) {
        header("Location: ../index.php?error=User Name is Required");
    }else if (empty($password)) {
        header("Location: ../index.php?error=Password is Required");
    }else {
        // Hashing the password
        $password = md5($password);

        $sql = "SELECT * FROM users WHERE username='$username' AND
password='$password'";
        $result = mysqli_query($conn, $sql);

        if (mysqli_num_rows($result) === 1) {
            // the user name must be unique
            $row = mysqli_fetch_assoc($result);
            if ($row['password'] === $password && $row['role'] == $role) {
                $_SESSION['name'] = $row['name'];
                $_SESSION['id'] = $row['id'];
                $_SESSION['role'] = $row['role'];
                $_SESSION['username'] = $row['username'];
            }
        }
    }
}
```

```
        if($row['role'] == "admin"){
            header("Location: ../upload.php");
        }
        else{
            header("Location: ../downloads.php");
        }

    }else {
        header("Location: ../index.php?error=Incorect User name or password");
    }
    }else {
        header("Location: ../index.php?error=Incorect User name or password");
    }
}

}

}else {
    header("Location: ../index.php");
}
```

#### UPLOAD FILES BY FACULTY:

##### Upload.php:

```
<?php include 'filesLogic.php';?>
<!DOCTYPE html>
<html lang="en">
    <head>
        <link rel="stylesheet" href="style.css">
        <title>Files Upload and Download</title>
    </head>
    <body class = "grad1">
        <div class="container">
            <div class="row">
                <form action="download.php" method="post" enctype="multipart/form-data" >
                    <h3>Upload File</h3>
                    <input type="file" name="myfile"> <br>
                    <button type="submit" name="save">upload</button>
                </form>
            </div>
        </div>
    </div>
```

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

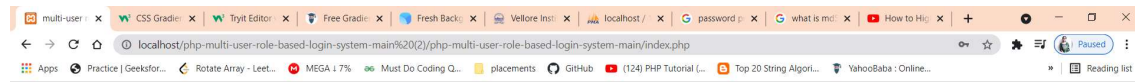
### Filelogic.php: for Uploading Files

Code:

```
<?php  
// connect to the database  
$conn = mysqli_connect('localhost', 'root', '', 'my_db');  
  
$sql = "SELECT * FROM files";  
$result = mysqli_query($conn, $sql);  
  
$files = mysqli_fetch_all($result, MYSQLI_ASSOC);  
  
// Uploads files  
if (isset($_POST['save'])) { // if save button on the form is clicked  
    // name of the uploaded file  
    $filename = $_FILES['myfile']['name'];  
  
    // destination of the file on the server  
    $destination = 'uploads/' . $filename;  
  
    // get the file extension  
    $extension = pathinfo($filename, PATHINFO_EXTENSION);  
  
    // the physical file on a temporary uploads directory on the server  
    $file = $_FILES['myfile']['tmp_name'];  
    $size = $_FILES['myfile']['size'];  
  
    if (!in_array($extension, ['zip', 'pdf', 'docx'])) {  
        echo "You file extension must be .zip, .pdf or .docx";  
    } elseif ($_FILES['myfile']['size'] > 1000000) { // file shouldn't be  
larger than 1Megabyte  
        echo "File too large!";  
    } else {  
        // move the uploaded (temporary) file to the specified destination  
        if (move_uploaded_file($file, $destination)) {  
            $sql = "INSERT INTO files (name, size, downloads) VALUES  
('$filename', $size, 0)";  
            if (mysqli_query($conn, $sql)) {  
                echo "File uploaded successfully";  
            }  
        } else {  
            echo "Failed to upload file.";  
        }  
    }  
}
```

```
}
```

## FILE UPLOADED SUCCESSFULLY BY FACULTY AFTER SUCCESSFUL LOGIN



### LOGIN

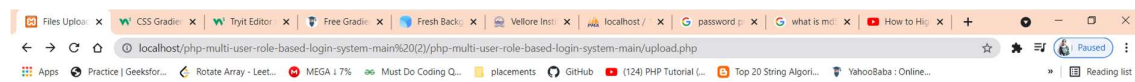
User name

Password

Select User Type:

Faculty

LOGIN



### Upload File

Choose file

WEB SECURITY.pdf

upload



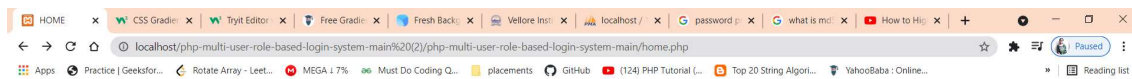
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File uploaded successfully

| ID | Filename                   | size (in mb) | Downloads | Action                   |
|----|----------------------------|--------------|-----------|--------------------------|
| 1  | DSA Online Calculators.pdf | 21 KB        | 1         | <a href="#">Download</a> |
| 2  | DSA Online Calculators.pdf | 21 KB        | 0         | <a href="#">Download</a> |
| 3  | VL2021220103962_DA.pdf     | 50 KB        | 0         | <a href="#">Download</a> |
| 4  | VL2021220103962_DA.pdf     | 50 KB        | 0         | <a href="#">Download</a> |
| 5  | WEB SECURITY.pdf           | 630 KB       | 0         | <a href="#">Download</a> |



**Faculty Logouts after uploading the materials:**





Elias Abdurrahman

Logout

## Members

| # | Name              | User name | Role  |
|---|-------------------|-----------|-------|
| 1 | Elias Abdurrahman | elias     | admin |



Download.php:

```
<?php include 'filesLogic.php';?>
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <link rel="stylesheet" href="style.css">
```

```
<title>Download files</title>
</head>
<body>

<table>
<thead>
    <th>ID</th>
    <th>Filename</th>
    <th>size (in mb)</th>
    <th>Downloads</th>
    <th>Action</th>
</thead>
<tbody>
    <?php foreach ($files as $file): ?>
        <tr>
            <td><?php echo $file['id']; ?></td>
            <td><?php echo $file['name']; ?></td>
            <td><?php echo floor($file['size'] / 1000) . ' KB'; ?></td>
            <td><?php echo $file['downloads']; ?></td>
            <td><a href="downloads.php?file_id=<?php echo $file['id']
?>">Download</a></td>
        </tr>
    <?php endforeach;?>

</tbody>
</table>

</body>
</html>
```

#### FileLogic.php for Downloading Files:

```
// Downloads files
if (isset($_GET['file_id'])) {
    $id = $_GET['file_id'];

    // fetch file to download from database
    $sql = "SELECT * FROM files WHERE id=$id";
    $result = mysqli_query($conn, $sql);

    $file = mysqli_fetch_assoc($result);
    $filepath = 'uploads/' . $file['name'];

    if (file_exists($filepath)) {
        header('Content-Description: File Transfer');
        header('Content-Type: application/octet-stream');
        header('Content-Disposition: attachment; filename=' .
basename($filepath));
```

```
header('Expires: 0');
header('Cache-Control: must-revalidate');
header('Pragma: public');
header('Content-Length: ' . filesize('uploads/' . $file['name']));

//This part of code prevents files from being corrupted after download
ob_clean();
flush();

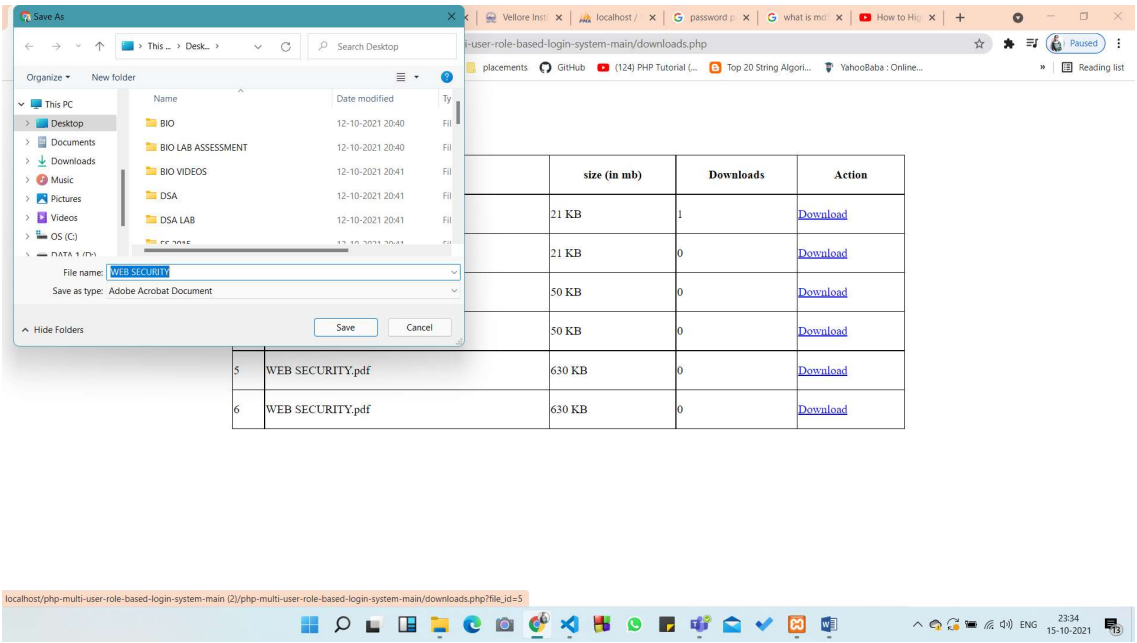
readfile('uploads/' . $file['name']);

// Now update downloads count
$newCount = $file['downloads'] + 1;
$updateQuery = "UPDATE files SET downloads=$newCount WHERE id=$id";
mysqli_query($conn, $updateQuery);
exit;
}
}
```

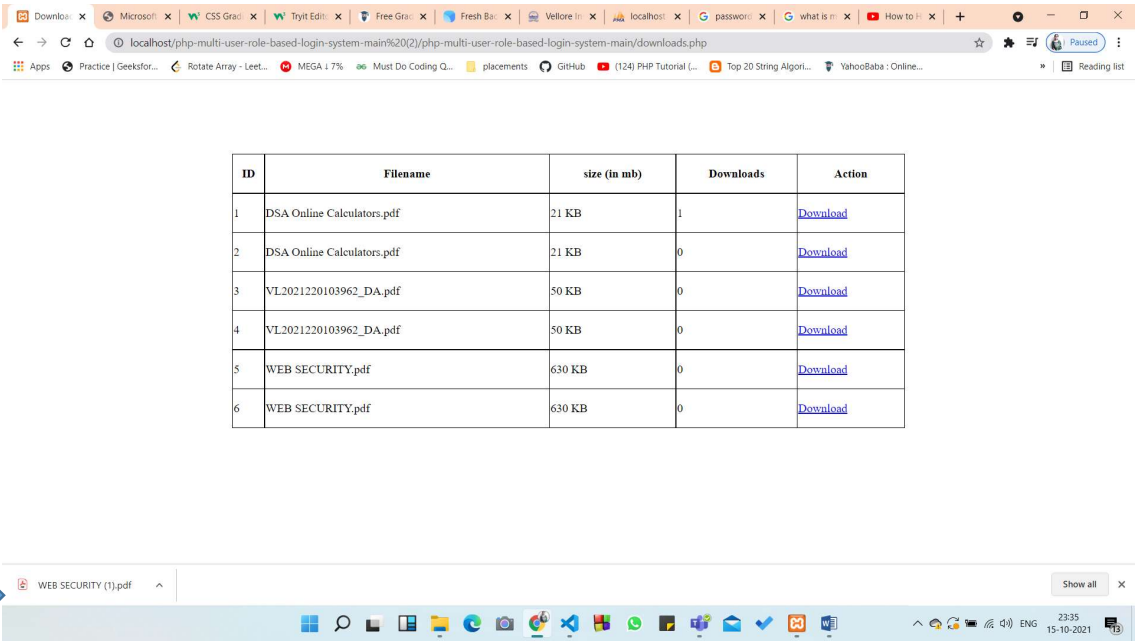
**Student download materials Uploaded by faculty after Successful login:**

The screenshot displays a web browser window with multiple tabs open. The active tab shows a login page titled "LOGIN". The form contains three input fields: "User name" with the value "john", "Password" with masked characters "\*\*\*\*", and "Select User Type:" with a dropdown menu showing "Student". A blue "LOGIN" button is positioned below the dropdown. The browser's address bar indicates the URL is "localhost/php-multi-user-role-based-login-system-main%20(2)/php-multi-user-role-based-login-system-main/index.php". The Windows taskbar at the bottom shows the system clock as 23:33 on 15-10-2021.

**Student Download materials :**

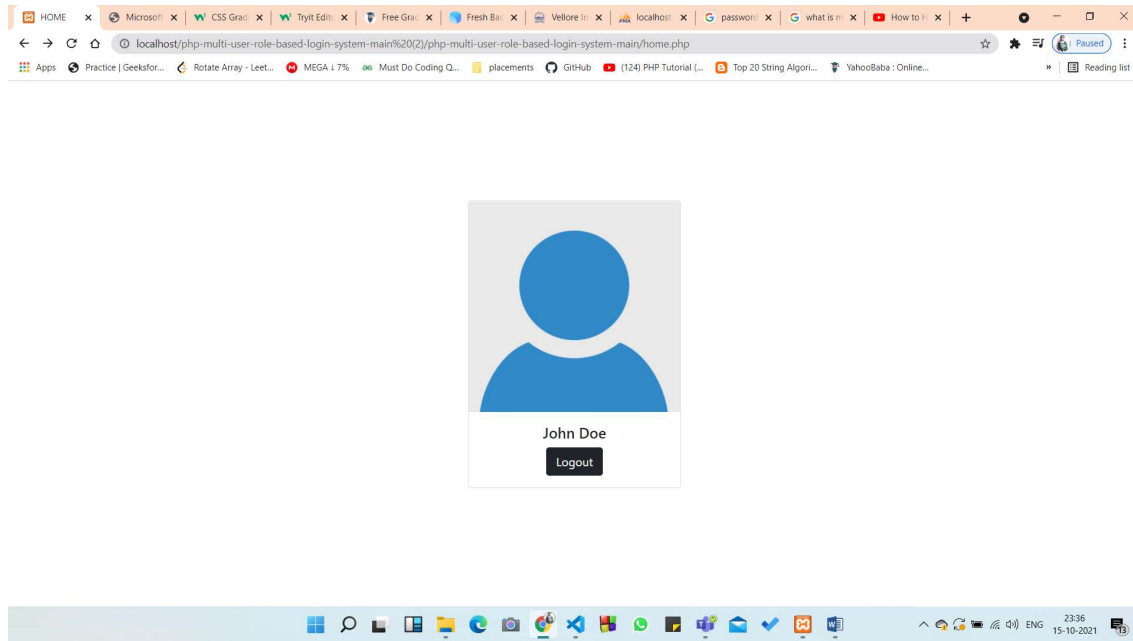


File downloaded Successfully:



Student Logouts after Downloading the Materials

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#### Database:

```
-- phpMyAdmin SQL Dump
-- version 4.9.0.1
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1
-- Generation Time: Feb 03, 2021 at 03:39 PM
-- Server version: 10.4.6-MariaDB
-- PHP Version: 7.3.9

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET AUTOCOMMIT = 0;
START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `my_db`
--
--
--
```

```
-- Table structure for table `users`
--

CREATE TABLE `users` (
  `id` int(11) NOT NULL,
  `role` enum('user','admin') NOT NULL,
  `username` varchar(255) NOT NULL,
  `password` varchar(255) NOT NULL,
  `name` varchar(255) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `users`
--

INSERT INTO `users` (`id`, `role`, `username`, `password`, `name`) VALUES
(1, 'admin', 'elias', '81dc9bdb52d04dc20036dbd8313ed055', 'Elias
Abdurrahman'),
(2, 'user', 'John', 'e2fc714c4727ee9395f324cd2e7f331f', 'John Doe');

--
-- Indexes for dumped tables
--

--
-- Indexes for table `users`
--
ALTER TABLE `users`
  ADD PRIMARY KEY (`id`);

--
-- AUTO_INCREMENT for dumped tables
--

--
-- AUTO_INCREMENT for table `users`
--
ALTER TABLE `users`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
COMMIT;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

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```
<?php

$name = "localhost";
$username = "root";
$password = "";

$db_name = "my_db";

$conn = mysqli_connect($name, $username, $password, $db_name);

if (!$conn) {
    echo "Connection Failed!";
    exit();
}
```

**Logout.php:**

```
<?php
session_start();

session_unset();
session_destroy();

header("Location: index.php");
```

**style.css:**

```
form {
    width: 30%;
    margin: 100px auto;
    padding: 30px;
    border: 1px solid #555;
}
input {
    width: 100%;
    border: 1px solid #f1e1e1;
    display: block;
    padding: 5px 10px;
}
button {
    border: none;
    padding: 10px;
    border-radius: 5px;
}
```

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```
table {  
    width: 60%;  
    border-collapse: collapse;  
    margin: 100px auto;  
}  
th,  
td {  
    height: 50px;  
    vertical-align: center;  
    border: 1px solid black;  
}
```

### Members.php

```
<?php  
  
if (isset($_SESSION['username']) && isset($_SESSION['id'])) {  
  
    $sql = "SELECT * FROM users ORDER BY id ASC";  
    $res = mysqli_query($conn, $sql);  
}else{  
    header("Location: index.php");  
}
```

Github Link:

[https://github.com/chundiindu/Login\\_Encryption](https://github.com/chundiindu/Login_Encryption)