American International University- Bangladesh

CSC 3215: Web Technologies

CO2 and CO4 Evaluation
Finished Project Report
Fall 2023-24

Project Title: Mental Health Counseling Management System
Section: B
Group Number: 10

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Submitted Date: 2nd January 2024

Mental Health Counseling Management System

Project Description:
The Mental Health Counseling Management System (MHCMS) is a technology-driven, effective platform designed to meet the growing need for mental health services. This initiative overcomes logistical and geographic hurdles to provide timely access to help in light of the global spike in mental health problems. It maximizes the resources of mental health practitioners by automating administrative duties, freeing them up to concentrate on providing high-quality care. Additionally, MHCMS uses data analytics to gain insightful information that supports ongoing development and well-informed decision-making. It promotes a holistic approach to well-being and goes beyond traditional systems, providing individualized resources and self-assessment tools. A future where mental health treatments are easily available, effective, and customized to meet a range of requirements is made possible by privacy and security safeguards that guarantee a reliable environment.

Project Folder Structure:

For Patient Portion:
- css
  - styles.css
  - rate.css
  - upstyles.css
  - login.css
  - home.css
  - dashboardstyles.css

- models
  - cancel_session_model.php
  - change_password_model.php
  - db.php
  - rate_model.php
  - schedule_session_models.php
  - update_model.php
  - UserModel.php

- controllers
  - cancel_session_controller.php
  - change_password_controller.php
  - dashboardcontroller.php
  - home_controller.php
  - logincontroller.php
  - logout.php
  - rate_controllers.php
  - registercontrollers.php
  - schedule_session_controller.php
  - send_message_controller.php
  - update_controller.php
  - UserController.php
  - view_counselors_controller.php
  - view_messages_controller.php
  - view_rating_controller.php
  - view_sessions_controller.php

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- js
  - change_password_validation.js
  - jquery-3.6.4.min.js
  - login_validation.js
  - rate_validation.js
  - schedule_session _validation.js
  - send_message_validation.php
  - update_profile_validation.js
  - validation.js
  - view_rating.js

- views
  - cancel_session.php
  - change_password.php
  - dashboard.php
  - login.php
  - rate_counselor.php
  - register.php
  - schedule_session.php
  - send_message.php
  - update_profile.php
  - view_average_ratings.php
  - view_counselors.php
  - view_messages.php
  - view_sessions.php

- img
  - cc.jpg
  - vs.jpg
  - reg.jpg
  - vrate.jpg
  - login.jpg
  - home.jpg
  - dashboard.jpg
  - others.jpg
  - ss.jpg
  - vss.jpg

- home.php (entry page)

Core Modules of the Project:

views/login.php

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Patient Login</title>
    <link rel="stylesheet" type="text/css" href="../css/login.css">
```

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```
    <script src="../js/jquery-3.6.4.min.js"></script>
    <script src="../js/login_validation.js"></script>
</head>
<body>
    <div id="login-container">
    <div id="header"> <div id="logo">
        </div>
        <center>
            <h1>Patient Login</h1>
            <?php require_once '../controllers/logincontroller.php'; ?>
            <div id="validation-messages" style="color: red;"><?php echo
$loginMessage; ?></div>

            <form id="login-form">
            <fieldset>
                <br>
                <label for="username">Username:</label>
                <input type="text" name="username"><br> <br>

                <label for="password">Password:</label>
                <input type="password" name="password"><br><br>

                <input type="submit" value="Login">
            </fieldset>
            </form>
            <p>Don't have an account? <a href="register.php">Register
here</a>.</p>
        </center>
    </div>

    <script>
        $(document).ready(function () {
            $('#login-form').submit(function (e) {
                e.preventDefault();

                $.ajax({
                    type: 'POST',
                    url: 'login.php',
                    data: $(this).serialize(),
                    dataType: 'json',
                    success: function (response) {
                        if (response.status === 'success') {
                            window.location.href = 'dashboard.php';
                        } else {
                            $('#validation-messages').html(response.message);
                        }
                    },
                    error: function (xhr, status, error) {
                        console.log('Ajax error:', xhr.responseText);
```

```
                console.log('Status:', status);
                console.log('Error:', error);
            }
        });
    });
});
</script>
</body>
</html>
```

controllers/logincontroller.php

```php
<?php
include_once '../controllers/UserController.php';

require_once "../models/db.php";

$userController = new UserController($conn);

session_start();

$loginMessage = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $userData = $_POST;
    $loginResult = $userController->loginUser($userData);

    if ($loginResult['status'] == 'fail') {
        echo json_encode(array('status' => 'fail', 'message' =>
$loginResult['message']));
        exit();
    } else {
        echo json_encode(array('status' => 'success'));
        exit();
    }
}

$conn->close();
?>
```

controllers/UserController.php

```php
<?php
include_once '../models/UserModel.php';

class UserController
{
    private $userModel;
```

```php
    private $conn;

    public function __construct($conn)
    {
        $this->userModel = new UserModel($conn);
        $this->conn = $conn;
    }

    public function registerUser($userData)
    {
        return $this->userModel->registerUser(
            $userData["username"],
            $userData["password"],
            $userData["name"],
            $userData["email"],
            $userData["phone"]
        );
    }

    public function loginUser($userData)
    {
        return $this->userModel->loginUser(
            $userData["username"],
            $userData["password"]
        );
    }
}
?>
```

js/Login_validation.php

```javascript
function validateForm() {
    var username = document.forms["login-form"]["username"].value.trim();
    var password = document.forms["login-form"]["password"].value.trim();

    if (username === "" && password === "") {
        alert("Username and password must be filled out");
        return false;
    }
    else if(username === "") {
        alert("Username must be filled out");
        return false;
    }
    else if(password === "") {
        alert("Password must be filled out");
        return false;
    }

    return true;
}
```

Mental Health Counseling Management System

```javascript
$(document).ready(function () {
    $('#login-form').submit(function (e) {
        e.preventDefault();

        if (validateForm()) {
            $.ajax({
                type: 'POST',
                url: 'login.php',
                data: $(this).serialize(),
                dataType: 'json',
                success: function (response) {
                    if (response.status === 'success') {
                        window.location.href = 'dashboard.php';
                    } else {
                        alert("Invalid username and password");
                    }
                },
                error: function (xhr, status, error) {
                    console.log('Ajax error:', xhr.responseText);
                    console.log('Status:', status);
                    console.log('Error:', error);
                }
            });
        }
    });
});
```

models/db.php

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

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

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
?>
```

models/UserModel.php

```php
<?php
class UserModel
{
    private $conn;
```

```php
    public function __construct($conn){
        $this->conn = $conn;
    }

    public function registerUser($username, $password, $name, $email, $phone)
    {
        $errors = array();

        if (empty($username)) {
            $errors[] = "Username is needed.";
        }

        if (empty($password)) {
            $errors[] = "Password is needed.";
        }

        if (empty($name)) {
            $errors[] = "Full Name is needed.";
        }

        if (empty($email)) {
            $errors[] = "Email is needed.";
        } elseif (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
            $errors[] = "Invalid email format.";
        }

        if (empty($phone)) {
            $errors[] = "Phone is needed.";
        }


        if (!empty($errors)) {
            return array('status' => 'fail', 'message' => implode("<br>",
$errors));
        }


        $passwordHash = password_hash($password, PASSWORD_DEFAULT);

        $sql = "INSERT INTO patients (username, password, name, email, phone)
                VALUES ('$username', '$passwordHash', '$name', '$email',
'$phone')";

        if ($this->conn->query($sql) === TRUE) {
            return array('status' => 'success');
        } else {
            return array('status' => 'fail', 'message' => "Error: " . $sql .
"<br>" . $this->conn->error);
        }
```

```php
    }

    public function loginUser($username, $password)
    {
        $sql = "SELECT * FROM patients WHERE username='$username'";
        $result = $this->conn->query($sql);

        if (empty($username) && empty($password)) {
            return array('status' => 'fail', 'message' => "Username and
Password are empty.");
        } elseif (empty($username)) {
            return array('status' => 'fail', 'message' => "Username is
empty.");
        } elseif (empty($password)) {
            return array('status' => 'fail', 'message' => "Password is
empty.");
        } elseif ($result->num_rows == 1) {
            $row = $result->fetch_assoc();
            if (password_verify($password, $row["password"])) {
                $_SESSION["patient_id"] = $row["id"];
                return array('status' => 'success');
            } else {
                return array('status' => 'fail', 'message' => "Invalid username
and password.");
            }
        } else {
            return array('status' => 'fail', 'message' => "Invalid username and
password.");
        }
    }
}
?>
```

css/login.css

```css
body {
    font-family: 'Arial', sans-serif;
    margin: 0;
    padding: 0;
    background-color: #f4f4f4;
}

#login-container {
    width: 60%;
    margin: 50px auto;
    background-color: rgba(255, 255, 255, 0.8);
    padding: 20px;
    border-radius: 10px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
```

```css
}

#header {
    text-align: center;
}

body {
    background-image: url('../img/medicine-blue-background-flat-lay.jpg');
    background-size: cover;
    background-position: center center;
    background-repeat: no-repeat;
    background-attachment: fixed;
    height: 100vh;
}

h1 {
    color: #333333;
}

fieldset {
    border: 2px solid #333333;
    border-radius: 10px;
    padding: 20px;
}

label {
    font-weight: bold;
    color: #333333;
}

input[type="text"],
input[type="password"],
input[type="email"],
input[type="tel"] {
    width: 100%;
    padding: 8px;
    margin: 6px 0;
    display: inline-block;
    border: 1px solid #ccc;
    box-sizing: border-box;
    border-radius: 5px;
}

input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 20px;
    margin-top: 10px;
    border: none;
```

```css
    border-radius: 5px;
    cursor: pointer;
}

input[type="submit"]:hover {
    background-color: #45a049;
}

a {
    color: #0000FF;
    text-decoration: none;
}

a:hover {
    text-decoration: underline;
}

#validation-messages {
    margin-top: 10px;
}

center {
    text-align: center;
}
```

views/schedule_session.php

```php
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Schedule a Counseling Session</title>
    <link rel="stylesheet" type="text/css" href="../css/rate.css">
    <script src="../js/schedule_session_validation.js"></script>
</head>
<body>
    <div style="background-image: url('../img/ss.jpg');background-size: 100%
1100px; width: 100%; height: 1100px">
        <?php require_once "../controllers/schedule_session_controller.php"; ?>
        <div id="header">
            <div id="logo"></div>
            <center>
                <br>
                <h1>Schedule a Counseling Session</h1>
                <?php if (isset($successMessage)): ?>
                    <p class='success-message'><?php echo "<p style='color:
green;'>$successMessage</p>"; ?></p>
                    <?php echo "<script>alert('$successMessage');</script>"; ?>
                <?php endif; ?>
```

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```
<?php if (isset($errorMessage)): ?>
    <p class='error-message'><?php echo "<p style='color:
red;'>$errorMessage</p>"; ?></p>
    <?php echo "<script>alert('$errorMessage');</script>"; ?>
<?php endif; ?>
<fieldset>

    <form name="sessionForm" method="post" action="<?php echo
$_SERVER['PHP_SELF']; ?>" onsubmit="return validateForm();">
        <label for="counselor">Counselor:</label>
        <select name="counselor">
            <?php foreach ($counselors as $counselor): ?>
                <option value="<?php echo $counselor['id'];
?>"><?php echo $counselor['name']; ?></option>
            <?php endforeach; ?>
        </select><br><br>

        <label for="session_date">Session Date:</label>
        <input type="date" name="session_date"><br><br>

        <label for="session_notes">Session Notes:</label>
        <textarea name="session_notes"
rows="4"></textarea><br><br>

        <input type="submit" value="Schedule Session"><br>
    </form>
</fieldset>
<br><a href="dashboard.php">Back to Dashboard</a>
</center>
</div>
</div>
</body>
</html>
```

controllers/schedule_session_controller.php

```php
<?php
session_start();

if (!isset($_SESSION["patient_id"])) {
    header("Location: login.php");
    exit();
}

require_once "../models/db.php";
require_once "../models/schedule_session_models.php";
?>
```

Mental Health Counseling Management System

models/schedule_session_models.php

```php
<?php
$sql = "SELECT * FROM counselors";
$result = $conn->query($sql);

$counselors = array();
while ($row = $result->fetch_assoc()) {
    $counselors[] = $row;
}

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $counselorId = $_POST["counselor"];
    $sessionDate = $_POST["session_date"];
    $sessionNotes = $_POST["session_notes"];
    $patientId = $_SESSION["patient_id"];

    $sql = "INSERT INTO sessions (counselor_id, client_id, session_date,
session_notes)
            VALUES ($counselorId, $patientId, '$sessionDate',
'$sessionNotes')";

    if ($conn->query($sql) === TRUE) {
        $successMessage = "Session scheduled successfully.";
    } else {
        $errorMessage = "Error: " . $sql . "<br>" . $conn->error;
    }
}

$conn->close();
?>
```

js/schedule_session_validation.js

```javascript
function validateForm() {
    var counselor = document.forms["sessionForm"]["counselor"].value;
    var sessionDate = document.forms["sessionForm"]["session_date"].value;
    var sessionNotes = document.forms["sessionForm"]["session_notes"].value;

    if (sessionDate === "") {
        alert("Please select a session date");
        return false;
    }

    if (sessionNotes === "") {
        alert("Please enter session details");
        return false;
    }
```

```
    return true;
}
```

```css
body {
    font-family: 'Arial', sans-serif;
    margin: 0;
}

#header {
    background-color: #ffffff;
    padding: 20px;
    border-radius: 10px;
    width: 60%;
    margin: 0 auto;
}


h1 {
    color: #333;
}

fieldset {
    border: 2px solid #333;
    padding: 20px;
    border-radius: 10px;
}

label {
    display: block;
    margin-bottom: 10px;
}

select,input[type="number"], textarea {
    width: 100%;
    padding: 8px;
    margin-bottom: 10px;
    box-sizing: border-box;
}

input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 15px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
```

```css
}

select, input[type="date"], textarea {
    width: 100%;
    padding: 10px;
    margin-bottom: 15px;
    border: 1px solid #ccc;
    border-radius: 4px;
    box-sizing: border-box;
}

input[type="submit"]:hover {
    background-color: #45a049;
}

a {
    text-decoration: none;
    color: #4285f4;
    display: inline-block;
    padding: 10px 20px;
    background-color: #333;
    color: #fff;
    border-radius: 5px;
    transition: background-color 0.3s;
}

a:hover {
    background-color: #555;
}
```

_views/rate_counselor.php_

```php
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Rate Counselor</title>
    <link rel="stylesheet" type="text/css" href="../css/rate.css">
    <script src="../js/rate_validation.js"></script>
</head>
<body>
    <div style="background-image: url('../img/rate.jpg');background-size: 100%
1100px; width: 100%; height: 1100px">
        <?php require_once "../controllers/rate_controllers.php"; ?>
        <div id="header">
            <div id="logo"></div>
            <center>
                <br>
```

```
<h1>Rate Your Counselor</h1>
<fieldset>
    <?php
    if (!empty($successMessage)) {
        echo '<p style="color: green;">' . $successMessage .
'</p>';
        echo "<script>alert('$successMessage');</script>";
    }

    if (!empty($errorMessage)) {
        echo '<p style="color: red;">' . $errorMessage .
'</p>';
        echo "<script>alert('$errorMessage');</script>";
    }
    ?>

    <form method="post" action="<?php echo
$_SERVER['PHP_SELF']; ?>" name="ratingForm" onsubmit="return validateForm()">
        <label for="counselor_id">Select Counselor:</label>
        <select name="counselor_id">
            <?php foreach ($counselors as $counselor): ?>
                <option value="<?php echo $counselor['id'];
?>"><?php echo $counselor['name']; ?></option>
            <?php endforeach; ?>
        </select><br><br>

        <label for="rating">Rating (1-5):</label>
        <input type="number" name="rating" min="1"
max="5"><br><br>

        <label for="feedback">Feedback:</label>
        <textarea name="feedback" rows="4"></textarea><br><br>

        <input type="submit" value="Submit Rating"><br>
    </form>
</fieldset>
<br><a href="dashboard.php">Back to Dashboard</a>
            </center>
        </div>
    </div>
</body>
</html>
```

controllers/rate_controllers.php

```php
<?php
session_start();

if (!isset($_SESSION["patient_id"])) {
    header("Location: login.php");
```

```php
    exit();
}

require_once "../models/db.php";

$patientId = $_SESSION["patient_id"];

$successMessage = "";
$errorMessage = "";

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $counselorId = $_POST["counselor_id"];
    $rating = $_POST["rating"];
    $feedback = $_POST["feedback"];

    if ($rating >= 1 && $rating <= 5) {
        $sql = "INSERT INTO counselor_ratings (counselor_id, client_id, rating, feedback)
                VALUES ($counselorId, $patientId, $rating, '$feedback')";

        if ($conn->query($sql) === TRUE) {
            $successMessage = "Rating submitted successfully.";
        } else {
            $errorMessage = "Error: " . $sql . "<br>" . $conn->error;
        }
    } else {
        $errorMessage = "Invalid rating. Please provide a rating between 1 and 5.";
    }
}

require_once "../models/rate_model.php";
?>
```

models/rate_model.php

```php
<?php
$sql = "SELECT * FROM counselors";
$result = $conn->query($sql);

$counselors = array();

while ($row = $result->fetch_assoc()) {
    $counselors[] = $row;
}

$conn->close();
?>
```

Mental Health Counseling Management System

Impact of this Project:

Given the rising need for mental health services in contemporary culture, the Mental Health Counseling Management System (MHCMS) is becoming more and more significant. MHCMS becomes an essential option in an era of increasing pressures, global events, and lifestyle changes since it provides easily accessible, effective, and individualized care. Geographical flexibility, prompt access to therapy, and better resource distribution for mental health providers are advantages for the general public. The project's data-driven methodology improves treatment results and promotes a wholistic approach to wellbeing, enabling people to take an active role in their mental health. Significantly, MHCMS supports current initiatives to adopt eco-friendly healthcare practices by decreasing the need for physical travel to counseling facilities, so indirectly supporting environmental sustainability. When it comes to providing mental health care, MHCMS is essentially at the forefront of addressing changing societal and environmental requirements.

Limitations and Possible Future Improvements:

MHCMS could have trouble contacting those who don't have much access to the internet, which could keep some groups from participating. Limitations arise from concerns over user adoption preferences and data privacy, necessitating continuous attempts to strike a balance between data collecting and privacy requirements, while also taking user preferences and cultural sensitivity into account. Subsequent versions could include gamification components to increase user involvement and AI for individualized counseling advice. There are several ways to make improvements, like adding more healthcare disciplines to the assistance, developing teletherapy capabilities, creating online support groups, and putting in place a constant feedback system. With these improvements, MHCMS should be more user-friendly, inclusive, and sensitive to the requirements and preferences of a wide range of users.

CO2 and CO4 Evaluation: Project Report Evaluation					
Completeness (5)	Validation (5)	Feature Implementation (5)	Concept Understanding (5)	Promptness (5)	Total (25)

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