**SIMPLE LOGIN REGISTRATION SYSTEM IN PHP PDO**

**1. Database Setup**

Run the following SQL code to create a database and the necessary table with user roles:

CREATE TABLE users (

id INT(11) AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(50) NOT NULL,

email VARCHAR(100) NOT NULL,

password VARCHAR(255) NOT NULL,

role ENUM('user', 'admin') DEFAULT 'user',

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**2. Database Connection (db.php)**

USE OLD DATABASE CONNECTION

**3. Registration (register.php)**

<?php

require 'db.php';

// REQUEST METHOD NEEDS TO BE DONE AND CALLED FROM THE FUNCTIONS.PHP FILE //

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

$username = $\_POST['username'];

$email = $\_POST['email'];

$password = password\_hash($\_POST['password'], PASSWORD\_DEFAULT); // Hash the password

$role = $\_POST['role'] ?? 'user'; // Default role is 'user'

// Check if email already exists

$stmt = $pdo->prepare("SELECT \* FROM users WHERE email = ?");

$stmt->execute([$email]);

if ($stmt->rowCount() > 0) {

echo "Email already exists!";

} else {

// Insert new user

$stmt = $pdo->prepare("INSERT INTO users (username, email, password, role) VALUES (?, ?, ?, ?)");

// Create another execution Technique //

if ($stmt->execute([$username, $email, $password, $role])) {

echo "Registration successful!";

} else {

echo "Error in registration!";

}

}

}

?>

//HTML FORM FOR THE INPUT VALUES TO BE EXECUTED AND INSERTED IN THE DATABASE //

<form method="POST" action="">

<input type="text" name="username" placeholder="Username" required><br>

<input type="email" name="email" placeholder="Email" required><br>

<input type="password" name="password" placeholder="Password" required><br>

<label>Select Role:</label>

<select name="role">

<option value="user">User</option>

<option value="admin">Admin</option>

</select><br>

<button type="submit">Register</button>

</form>

**4. Login (login.php)**

<?php

require 'db.php';

session\_start();

// CREATE A NEW POST METHOD TO BE CALLED FROM THE FUNCTIONS.PHP FILE //

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

$email = $\_POST['email']; // INPUT VALUE

$password = $\_POST['password']; // INPUT VALUE

// Check if email exists

$stmt = $pdo->prepare("SELECT \* FROM users WHERE email = ?");

$stmt->execute([$email]);

$user = $stmt->fetch(PDO::FETCH\_ASSOC);

if ($user && password\_verify($password, $user['password'])) {

// Set session

$\_SESSION['user\_id'] = $user['id'];

$\_SESSION['username'] = $user['username'];

$\_SESSION['role'] = $user['role'];

echo "Login successful!";

// Redirect to dashboard

header("Location: dashboard.php");

} else {

echo "Invalid email or password!";

}

}

?>

<form method="POST" action="">

<input type="email" name="email" placeholder="Email" required><br>

<input type="password" name="password" placeholder="Password" required><br>

<button type="submit">Login</button>

</form>

**5. Dashboard (dashboard.php)**

<?php

session\_start();

if (!isset($\_SESSION['user\_id'])) {

header("Location: login.php");

exit();

}

echo "Welcome, " . $\_SESSION['username'] . "!<br>";

echo "Your role is: " . $\_SESSION['role'] . "<br>";

if ($\_SESSION['role'] == 'admin') {

echo "<a href='admin.php'>Go to Admin Panel</a>";

} else {

echo "You are a regular user.";

}

echo "<br><a href='logout.php'>Logout</a>";

?>

**6. Admin Panel (admin.php)**

<?php

session\_start();

if (!isset($\_SESSION['user\_id']) || $\_SESSION['role'] != 'admin') {

header("Location: login.php");

exit();

}

echo "Welcome to the Admin Panel, " . $\_SESSION['username'] . "!";

echo "<br><a href='dashboard.php'>Back to Dashboard</a>";

?>

**7. Logout (logout.php)**

<?php

session\_start();

session\_destroy();

header("Location: login.php");

exit();

?>

**Explanation:**

* **User Roles:** During registration, users can choose between the user or admin role. The role is stored in the database.
* **Password Security:** Passwords are securely hashed using password\_hash().
* **Session Handling:** Upon successful login, a session is started to track the user’s login status and their role.
* **Admin Panel:** Only users with the admin role can access the admin.php page. Regular users will not be able to access it.