Exercise 9 - Online Quiz using PHP/MySQL
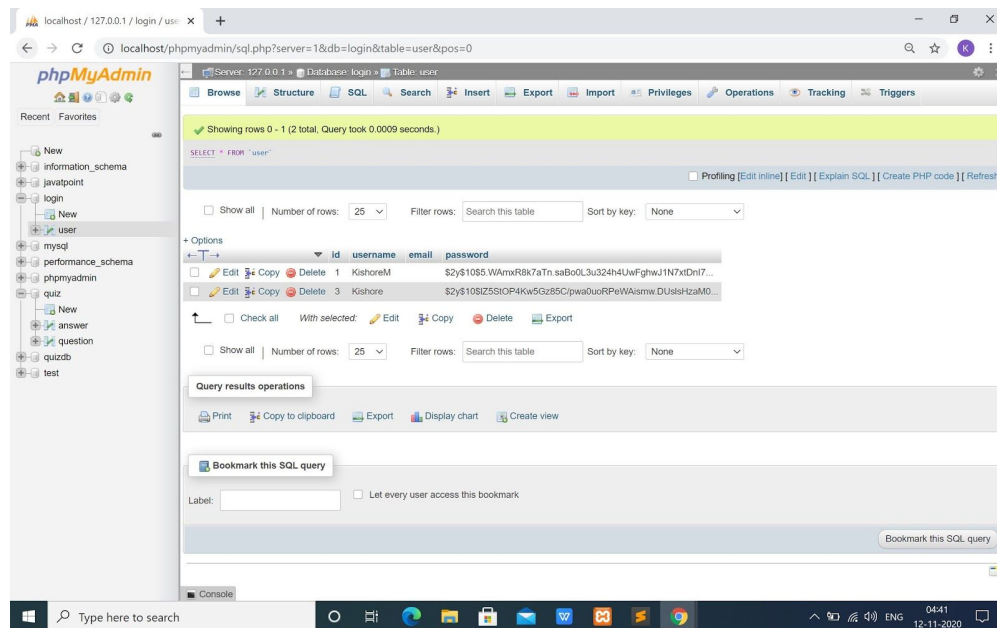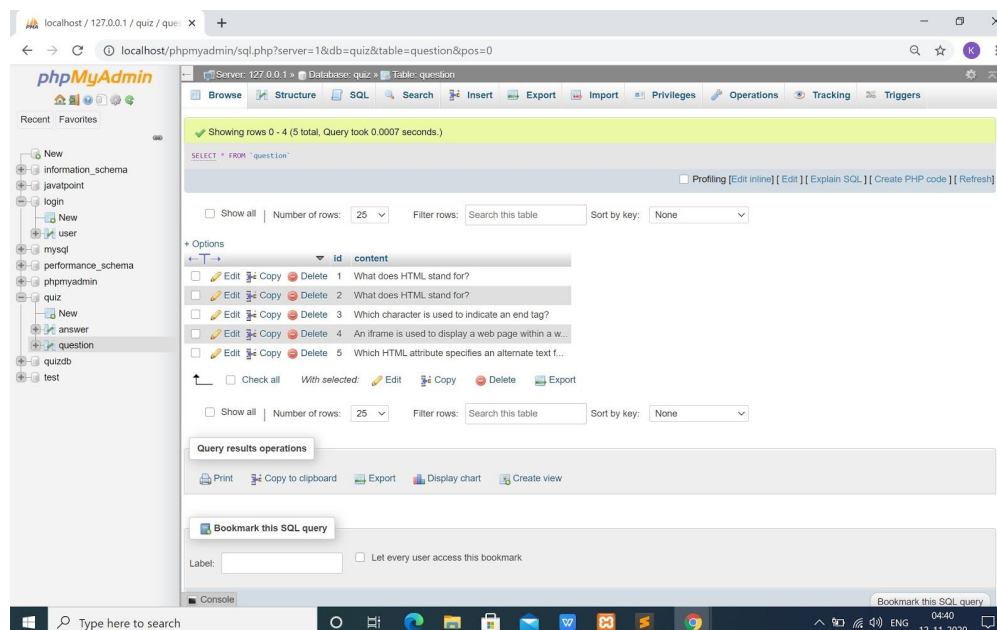
(By : kishore M RA1711003040141)

1.PHP/My SQL details
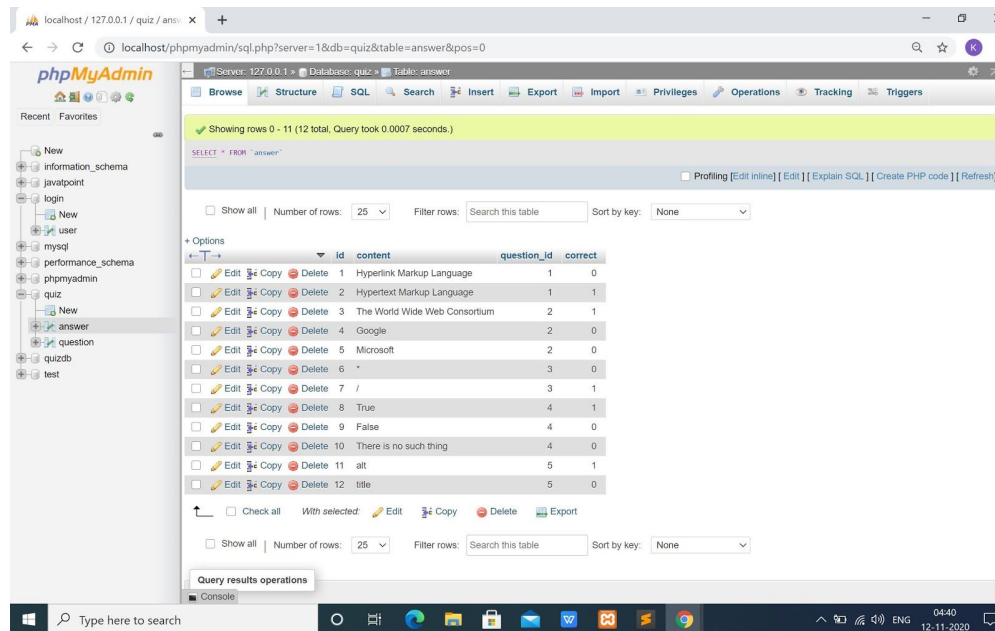
1.1 User registration details :

1.2 Questions :

1.3 Answers

2. PHP Codes

2.1 Registration PHP code:

```php
<?php
// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$username = $password = $confirm_password = "";
$username_err = $password_err = $confirm_password_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){

  // Validate username
  if(empty(trim($_POST["username"]))){
     $username_err = "Please enter a username.";
  } else{
    // Prepare a select statement
    $sql = "SELECT id FROM user WHERE username = :username";

    if($stmt = $pdo->prepare($sql)){
       // Bind variables to the prepared statement as parameters
```

```php
        $stmt->bindParam(":username", $param_username, PDO::PARAM_STR);

        // Set parameters
        $param_username = trim($_POST["username"]);

        // Attempt to execute the prepared statement
        if($stmt->execute()){
            if($stmt->rowCount() == 1){
                $username_err = "This username is already taken.";
            } else{
                $username = trim($_POST["username"]);
            }
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }

        // Close statement
        unset($stmt);
    }
}

// Validate password
if(empty(trim($_POST["password"]))){
    $password_err = "Please enter a password.";
} elseif(strlen(trim($_POST["password"])) < 6){
    $password_err = "Password must have atleast 6 characters.";
} else{
    $password = trim($_POST["password"]);
}

// Validate confirm password
if(empty(trim($_POST["confirm_password"]))){
    $confirm_password_err = "Please confirm password.";
} else{
    $confirm_password = trim($_POST["confirm_password"]);
    if(empty($password_err) && ($password != $confirm_password)){
        $confirm_password_err = "Password did not match.";
    }
}

// Check input errors before inserting in database
if(empty($username_err) && empty($password_err) && empty($confirm_password_err)){

    // Prepare an insert statement
```

```php
        $sql = "INSERT INTO user (username, password) VALUES (:username, :password)";

        if($stmt = $pdo->prepare($sql)){
            // Bind variables to the prepared statement as parameters
            $stmt->bindParam(":username", $param_username, PDO::PARAM_STR);
            $stmt->bindParam(":password", $param_password, PDO::PARAM_STR);
            $param_username = $username;
            $param_password = password_hash($password, PASSWORD_DEFAULT);
            if($stmt->execute()){
                header("location: login.php");
            } else{
                echo "Something went wrong. Please try again later.";
            }
            unset($stmt);
        }
    }
    unset($pdo);
}
?>
 <!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Sign Up</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        body{ font: 14px sans-serif; }
        .wrapper
{margin-right:auto;margin-left:auto;max-width:600px;padding-right:10px;padding-left:10px;
        margin-top:200px;margin-bottom:auto;}
    </style>
</head>
<body>
    <div class="wrapper">
        <h2>Sign Up</h2>
        <p>Please fill this form to create an account.</p>
        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
            <div class="form-group <?php echo (!empty($username_err)) ? 'has-error' : ''; ?>">
                <label>Username</label>
                <input type="text" name="username" class="form-control" value="<?php echo
$username; ?>">
                <span class="help-block"><?php echo $username_err; ?></span>
```

```
        </div>
        <div class="form-group <?php echo (!empty($password_err)) ? 'has-error' : ''; ?>">
            <label>Password</label>
            <input type="password" name="password" class="form-control" value="<?php echo
$password; ?>">
            <span class="help-block"><?php echo $password_err; ?></span>
        </div>
        <div class="form-group <?php echo (!empty($confirm_password_err)) ? 'has-error' : '';
?>">
            <label>Confirm Password</label>
            <input type="password" name="confirm_password" class="form-control"
value="<?php echo $confirm_password; ?>">
            <span class="help-block"><?php echo $confirm_password_err; ?></span>
        </div>
        <div class="form-group">
            <input type="submit" class="btn btn-primary" value="Submit">
            <input type="reset" class="btn btn-default" value="Reset">
        </div>
        <p>Already have an account? <a href="login.php">Login here</a>.</p>
    </form>
  </div>
</body>
</html>
```
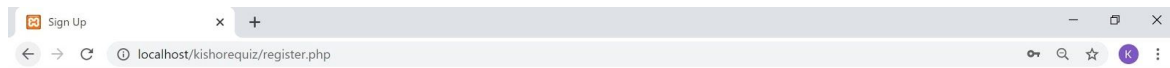

Sign Up

Please fill this form to create an account.

Username

Kishore

Password

••••••

Confirm Password

••••••

Submit   Reset

Already have an account? Login here.

2.2 Login PHP code :

```php
<?php
// Initialize the session
session_start();

// Check if the user is already logged in, if yes then redirect him to welcome page
if(isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] === true){
    header("location: welcome.php");
    exit;
}

// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$username = $password = "";
$username_err = $password_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){

    // Check if username is empty
    if(empty(trim($_POST["username"]))){
        $username_err = "Please enter username.";
    } else{
        $username = trim($_POST["username"]);
    }

    // Check if password is empty
    if(empty(trim($_POST["password"]))){
        $password_err = "Please enter your password.";
    } else{
        $password = trim($_POST["password"]);
    }

    // Validate credentials
    if(empty($username_err) && empty($password_err)){
        // Prepare a select statement
        $sql = "SELECT id, username, password FROM user WHERE username = :username";

        if($stmt = $pdo->prepare($sql)){
            // Bind variables to the prepared statement as parameters
            $stmt->bindParam(":username", $param_username, PDO::PARAM_STR);
```

```php
        // Set parameters
        $param_username = trim($_POST["username"]);

        // Attempt to execute the prepared statement
        if($stmt->execute()){
            // Check if username exists, if yes then verify password
            if($stmt->rowCount() == 1){
                if($row = $stmt->fetch()){
                    $id = $row["id"];
                    $username = $row["username"];
                    $hashed_password = $row["password"];
                    if(password_verify($password, $hashed_password)){
                        // Password is correct, so start a new session
                        session_start();

                        // Store data in session variables
                        $_SESSION["loggedin"] = true;
                        $_SESSION["id"] = $id;
                        $_SESSION["username"] = $username;

                        // Redirect user to welcome page
                        header("location: welcome.php");
                    } else{
                        // Display an error message if password is not valid
                        $password_err = "The password you entered was not valid.";
                    }
                }
            } else{
                // Display an error message if username doesn't exist
                $username_err = "No account found with that username.";
            }
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }

        // Close statement
        unset($stmt);
    }
}

    // Close connection
    unset($pdo);
}
?>
```
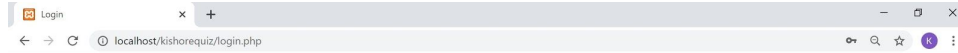
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        body{ font: 14px sans-serif; }
        .wrapper
{margin-right:auto;margin-left:auto;max-width:600px;padding-right:10px;padding-left:10px;
        margin-top:200px;margin-bottom:auto;}
    </style>
</head>
<body>
    <div class="wrapper">
        <h1>Welcome to HTML kishore's quiz<h1>
        <h2>Login</h2>
        <p>Please fill in your credentials to login.</p>
        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
            <div class="form-group <?php echo (!empty($username_err)) ? 'has-error' : ''; ?>">
                <label>Username</label>
                <input type="text" name="username" class="form-control" value="<?php echo
$username; ?>">
                <span class="help-block"><?php echo $username_err; ?></span>
            </div>
            <div class="form-group <?php echo (!empty($password_err)) ? 'has-error' : ''; ?>">
                <label>Password</label>
                <input type="password" name="password" class="form-control">
                <span class="help-block"><?php echo $password_err; ?></span>
            </div>
            <div class="form-group">
                <input type="submit" class="btn btn-primary" value="Login">
            </div>
            <p>Don't have an account? <a href="register.php">Sign up now</a>.</p>
        </form>
    </div>
</body>
</html>
```

2.3 Welcome PHP code:

```php
<?php
// Initialize the session
session_start();

// Check if the user is logged in, if not then redirect him to login page
if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
    header("location: login.php");
    exit;
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Welcome</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        body{ font: 14px sans-serif; text-align: center; }
    </style>
</head>
<body>
    <div class="page-header">
        <h1>Hi, <b><?php echo htmlspecialchars($_SESSION["username"]); ?></b>. Welcome to
HTML Quiz.</h1>
    </div>
```

```html
<p>
    <a href="index.php" class="btn btn-success">Take quiz</a>
    <a href="reset-password.php" class="btn btn-warning">Reset Your Password</a>
    <a href="logout.php" class="btn btn-danger">Sign Out of Your Account</a>
</p>
</body>
</html>
```
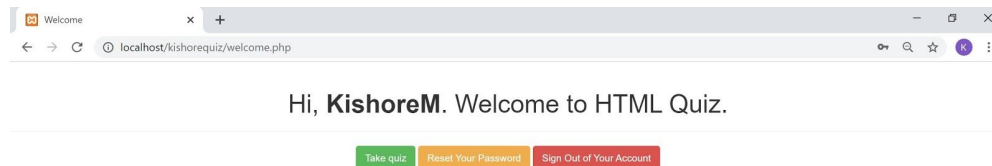

2.4 Quiz :

```php
<?php
require_once 'database.php';
$stm = $con->prepare("select * from question");
$stm->execute();
?>
<h3>Quiz</h3>
<form method="post" action="result.php">
<ol type="1">
        <?php while($question=$stm->fetch(PDO::FETCH_OBJ)){ ?>
            <li>
                <?php echo $question->content; ?>
                <input type="hidden" name="questionID[]" value="<?php echo $question->id; ?>">
                <ol type="a">
                    <?php
                        $stm2 = $con->prepare("select * from answer where question_id = :question_id");
                        $stm2->bindValue("question_id", $question->id);
                        $stm2->execute();
                    ?>
```

```php
                                    <?php while($answer=$stm2->fetch(PDO::FETCH_OBJ)){ ?>
                                <li>
                                        <input type="radio" name="question_<?php echo
$question->id; ?>" value="<?php echo $answer->id; ?>">
                                            <?php echo $answer->content; ?>
                                </li>
                            <?php } ?>
                        </ol>
                </li>
        <?php } ?>
</ol>
<br>
<input type="submit" value="Submit">
</form>
```



2.5 Result PHP code :

```php
<?php
require_once 'database.php';
$score = 0;
foreach((array)$_POST['questionID'] as $questionID) {
        $stm = $con ->prepare("select * from answer where correct = 1 and question_id =
".$questionID);
        $stm ->execute();
        $answer = $stm ->fetch(PDO::FETCH_OBJ);
```

```php
            if($answer->id == $_POST['question_'.$questionID]){
                    $score++;
            }
    }
 ?>
```
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Welcome</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        body{ font: 14px sans-serif; text-align: center; }
    </style>
</head>
<body>
    <div class="page-header">
        <h1>Thankyou for taking the quiz</h1>
         <h2>Result Score: <?php echo $score; ?> </h2>
    </div>
    <p>
            <a href="index.php" class="btn btn-success">Take quiz again</a>
        <a href="reset-password.php" class="btn btn-warning">Reset Your Password</a>
        <a href="logout.php" class="btn btn-danger">Sign Out of Your Account</a>
    </p>
</body>
</html>
```
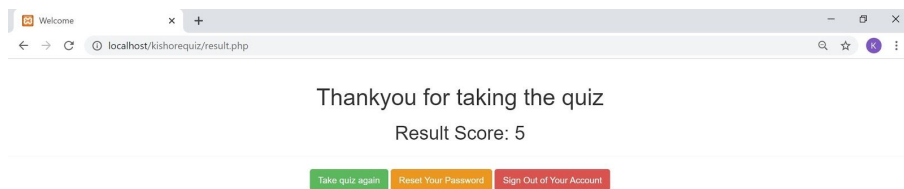
2.6 Reset Password PHP code :

```php
<?php
// Initialize the session
session_start();

// Check if the user is logged in, if not then redirect to login page
if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
    header("location: login.php");
    exit;
}

// Include config file
require_once "config.php";

// Define variables and initialize with empty values
$new_password = $confirm_password = "";
$new_password_err = $confirm_password_err = "";

// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"] == "POST"){

    // Validate new password
    if(empty(trim($_POST["new_password"]))){
        $new_password_err = "Please enter the new password.";
    } elseif(strlen(trim($_POST["new_password"])) < 6){
        $new_password_err = "Password must have atleast 6 characters.";
    } else{
        $new_password = trim($_POST["new_password"]);
    }

    // Validate confirm password
    if(empty(trim($_POST["confirm_password"]))){
        $confirm_password_err = "Please confirm the password.";
    } else{
        $confirm_password = trim($_POST["confirm_password"]);
        if(empty($new_password_err) && ($new_password != $confirm_password)){
            $confirm_password_err = "Password did not match.";
        }
    }

    // Check input errors before updating the database
    if(empty($new_password_err) && empty($confirm_password_err)){
        // Prepare an update statement
        $sql = "UPDATE user SET password = :password WHERE id = :id";
```

```php
        if($stmt = $pdo->prepare($sql)){
            // Bind variables to the prepared statement as parameters
            $stmt->bindParam(":password", $param_password, PDO::PARAM_STR);
            $stmt->bindParam(":id", $param_id, PDO::PARAM_INT);

            // Set parameters
            $param_password = password_hash($new_password, PASSWORD_DEFAULT);
            $param_id = $_SESSION["id"];

            // Attempt to execute the prepared statement
            if($stmt->execute()){
                // Password updated successfully. Destroy the session, and redirect to login page
                session_destroy();
                header("location: login.php");
                exit();
            } else{
                echo "Oops! Something went wrong. Please try again later.";
            }

            // Close statement
            unset($stmt);
        }
    }

    // Close connection
    unset($pdo);
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Reset Password</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        body{ font: 14px sans-serif; }
        .wrapper
{margin-right:auto;margin-left:auto;max-width:600px;padding-right:10px;padding-left:10px;
            margin-top:200px;margin-bottom:auto;}
    </style>
</head>
```
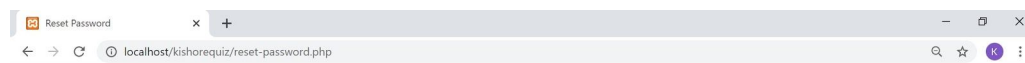
```
<body>
    <div class="wrapper">
        <h2>Reset Password</h2>
        <p>Please fill out this form to reset your password.</p>
        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>"
method="post">
            <div class="form-group <?php echo (!empty($new_password_err)) ? 'has-error' : ''; ?>">
                <label>New Password</label>
                <input type="password" name="new_password" class="form-control" value="<?php
echo $new_password; ?>">
                <span class="help-block"><?php echo $new_password_err; ?></span>
            </div>
            <div class="form-group <?php echo (!empty($confirm_password_err)) ? 'has-error' : '';
?>">
                <label>Confirm Password</label>
                <input type="password" name="confirm_password" class="form-control">
                <span class="help-block"><?php echo $confirm_password_err; ?></span>
            </div>
            <div class="form-group">
                <input type="submit" class="btn btn-primary" value="Submit">
                <a class="btn btn-link" href="welcome.php">Cancel</a>
            </div>
        </form>
    </div>
</body>
</html>
```
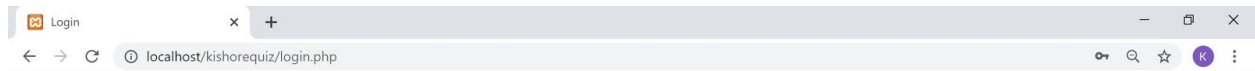

Reset Password

Please fill out this form to reset your password.

New Password

Confirm Password

Submit   Cancel

2.7 Logout PHP code:
```php
<?php
// Initialize the session
session_start();

// Unset all of the session variables
$_SESSION = array();

// Destroy the session.
session_destroy();

// Redirect to login page
header("location: login.php");
exit;
?>
```


Welcome to HTML kishore's quiz

Login

Please fill in your credentials to login.

Username

KishoreM

Password

••••••••••••

Login

Don't have an account? Sign up now.