

Assignment 3

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BSD

1. Create a database named KCA in Mysql, create a table called students, fields in the table should include, Reg_no, surname, Middle name and first name, course , age ,guardian, Telno etc.
2. Connect the database to your website using php so that a student can input those details online
3. Create a query to display all the registered students

index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Assignment 3 2003944</title>
</head>
<body>
  <h1>Student Registration</h1>
  <form action="process_registration.php" method="post">
    <label for="reg_no">Registration Number:</label>
    <input type="number" id="reg_no" name="reg_no" required><br><br>
    <label for="surname">Surname:</label>
    <input type="text" id="surname" name="surname" required><br><br>
    <label for="middle_name">Middle Name:</label>
    <input type="text" id="middle_name" name="middle_name"><br><br>
    <label for="first_name">First Name:</label>
    <input type="text" id="first_name" name="first_name" required><br><br>
    <label for="course">Course:</label>
    <input type="text" id="course" name="course" required><br><br>
    <label for="age">Age:</label>
    <input type="number" id="age" name="age" required><br><br>
    <label for="guardian">Guardian Name:</label>
    <input type="text" id="guardian" name="guardian" required><br><br>
    <label for="telno">Telephone Number:</label>
    <input type="tel" id="telno" name="telno" pattern="[0-9]{13}" required><br><br>
    <button type="submit">Register</button>
  </form>

  <h1>Display Students</h1>
  <p>Click the button below to display all students</p>
  <form action="display_students.php" method="post">
    <button type="submit">Get Details</button>
  </form>
</body>
```

</html>

KCAdb.sql:

sql file to create the database, KCA

code:

```
CREATE DATABASE IF NOT EXISTS KCA;
```

```
USE KCA;
```

```
CREATE TABLE students (  
    Reg_no INT PRIMARY KEY,  
    surname VARCHAR(255),  
    Middle_name VARCHAR(255),  
    first_name VARCHAR(255),  
    course VARCHAR(255),  
    age INT,  
    guardian VARCHAR(255),  
    Telno VARCHAR(255)  
);
```

process_registration.php :

php file to collect data from index.html and insert to the database.

Code:

```
<?php  
include 'connect.php'; // Include the connection file  
  
// Get form data  
$reg_no = intval($_POST['reg_no']); // Ensure reg_no is an integer  
  
$surname = mysqli_real_escape_string($conn, $_POST['surname']); // prevent SQL injection  
  
$middle_name = mysqli_real_escape_string($conn, $_POST['middle_name']); // Sanitize  
  
$first_name = mysqli_real_escape_string($conn, $_POST['first_name']); // Sanitize  
  
$course = mysqli_real_escape_string($conn, $_POST['course']); // Sanitize  
  
$age = intval($_POST['age']); // Ensure age is an integer  
  
$guardian = mysqli_real_escape_string($conn, $_POST['guardian']); // Sanitize  
  
$telno = mysqli_real_escape_string($conn, $_POST['telno']); // Sanitize  
  
// check if any required field is empty
```

```

if (empty($reg_no) || empty($surname) || empty($first_name) || empty($course) || empty($age) ||
empty($guardian) || empty($telno)) {
    echo "Please fill out all required fields.";
} else {

    // Insert data into the database
    $sql = "INSERT INTO students (Reg_no, surname, middle_name, first_name, course, age, guardian,
Telno)
        VALUES (?, ?, ?, ?, ?, ?, ?, ?)";

    $statement = mysqli_prepare($conn, $sql); // Prepare statement

    if ($statement) {
        mysqli_stmt_bind_param($statement, "sssssss", $reg_no, $surname, $middle_name, $first_name,
$course, $age, $guardian, $telno);
        if (mysqli_stmt_execute($statement)) {
            echo "Student registered successful!";
        } else {
            echo "Registration failed (" . mysqli_error($conn) . ").";
        }
        mysqli_stmt_close($statement); // Close prepared statement
    } else {
        echo "Error: Statement preparation failed (" . mysqli_error($conn) . ").";
    }
}

mysqli_close($conn); // Close connection
?>

```

connect.php:

php file to connect to the database.

Code:

```

<?php
$servername = "localhost";
$username = "root";
$password = "sintrix";
$dbname = "KCA";

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

// Check connection is successful
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

```

```
else{
    echo "Connected successfully";
}
?>
```

display_students.php:

php file to display items in the database.

Code:

```
<?php
include 'connect.php';

$sql = "SELECT id, firstname, lastname FROM Students";
$result = $conn->query($sql);

if ($result->num_rows > 0) {
    // output data of each row
    echo "<table><tr><th>ID</th><th>Name</th></tr>";
    while($row = $result->fetch_assoc()) {
        echo "<tr><td>".$row["id"]."</td><td>".$row["firstname"]." ".$row["lastname"]."</td></tr>";
    }
    echo "</table>";
} else {
    echo "0 results";
}
$conn->close();
?>
```