

WEB APPLICATION USING THE LAMP STACK TO PERFORM CRUD

ROLL NO : 23CSR153

NAME : OBUPREETHI G

CLASS : III & CSE-C

COURSE CODE : 22CSF01

COURSE NAME : DEVOPS

Database creation:

```
mysql> USE cruddb;
Database changed
mysql> CREATE TABLE students (
->     id INT AUTO_INCREMENT PRIMARY KEY,
->     name VARCHAR(100),
->     email VARCHAR(100)
-> );
Query OK, 0 rows affected (0.08 sec)

mysql> INSERT INTO students (name, email)
-> VALUES ('Arun', 'arun@gmail.com'),
->         ('Kavi', 'kavi@gmail.com');
Query OK, 2 rows affected (0.03 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM students;
+----+-----+-----+
| id | name | email      |
+----+-----+-----+
|  1 | Arun | arun@gmail.com |
|  2 | Kavi | kavi@gmail.com |
+----+-----+
2 rows in set (0.00 sec)

mysql>
```

Test.php & db.php (to verify database connectivity):

```
GNU nano 6.2                                         /var/www/html/crud/test.php
<?php
include 'db.php';
echo "DB Connected Successfully";
?>
```

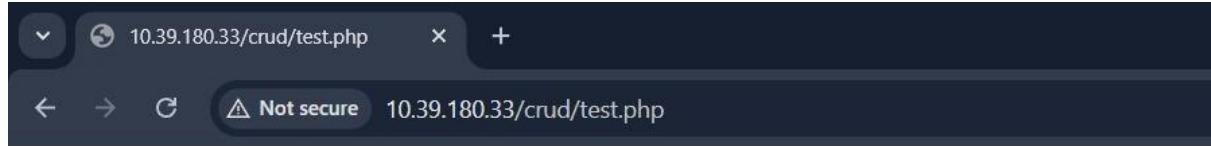
(test.php)

```
GNU nano 6.2                                         /var/www/html/crud/db.php
<?php
$conn = new mysqli("localhost", "user", "user", "cruddb");

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

(db.php)

Database Connected Successfully:



DB Connected Successfully

PHP file creation to perform CRUD operations:

```
user@linux-test-server:~$ nano /var/www/html/crud/index.php
user@linux-test-server:~$ nano /var/www/html/crud/create.php
user@linux-test-server:~$ nano /var/www/html/crud/edit.php
user@linux-test-server:~$ nano /var/www/html/crud/delete.php
```

Index.php (READ OPERATION):

A screenshot of a terminal window. The title bar says "user@linux-test-server: ~". The command "nano /var/www/html/crud/index.php" has been run. The terminal displays the PHP code for the "index.php" file, which includes HTML for a CRUD application and PHP logic for reading data from a database and displaying it in a table.

Create.php (CREATE OPERATION):

```
user@linux-test-server:~ + ~
GNU nano 6.2                               /var/www/html/crud/index.php *
<?php include 'db.php'; ?>
<!DOCTYPE html>
<html>
<head>
    <title>CRUD Application</title>
</head>
<body>

<h2>Student Records</h2>

<a href="create.php">Add New Student</a><br><br>

<table border="1" cellpadding="10">
<tr>
    <th>ID</th>
    <th>Name</th>
    <th>Email</th>
    <th>Actions</th>
</tr>

<?php
$result = $conn->query("SELECT * FROM students");
while ($row = $result->fetch_assoc()) {
?>
<tr>
    <td><?= $row['id']; ?></td>
    <td><?= $row['name']; ?></td>
    <td><?= $row['email']; ?></td>
    <td>
        <a href="edit.php?id=<?= $row['id']; ?>">Edit</a> | 
        <a href="delete.php?id=<?= $row['id']; ?>">Delete</a>
    </td>
</tr>
<?php } ?>
</table>
```

Edit.php (UPDATE OPERATION):

```
user@linux-test-server:~ + ~
GNU nano 6.2                               /var/www/html/crud/edit.php *
<?php
include 'db.php';
$id = $_GET['id'];

if (isset($_POST['update'])) {
    $name = $_POST['name'];
    $email = $_POST['email'];

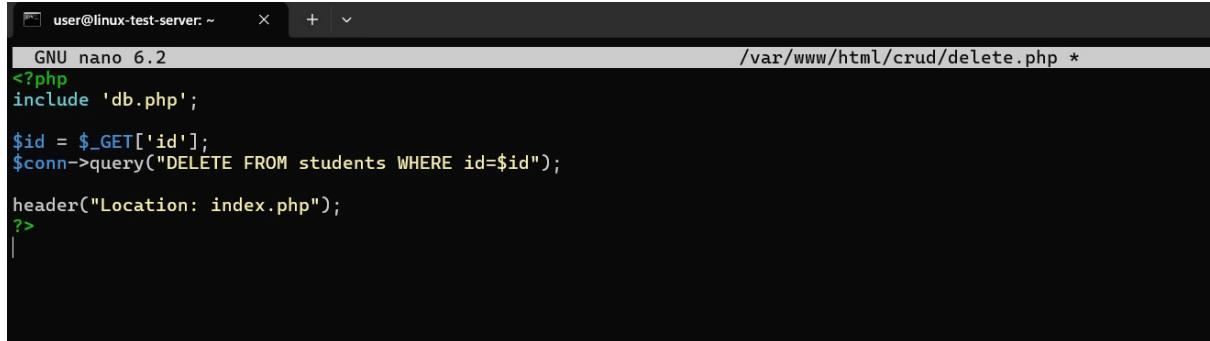
    $conn->query("UPDATE students SET name='$name', email='$email' WHERE id=$id");
    header("Location: index.php");
}

$result = $conn->query("SELECT * FROM students WHERE id=$id");
$row = $result->fetch_assoc();
?>

<h2>Edit Student</h2>

<form method="post">
    Name: <input type="text" name="name" value="<?= $row['name']; ?>"><br><br>
    Email: <input type="email" name="email" value="<?= $row['email']; ?>"><br><br>
    <input type="submit" name="update" value="Update">
</form>
|
```

Delete.php (DELETE OPERATION):



The screenshot shows a terminal window titled "user@linux-test-server: ~". The file being edited is "/var/www/html/crud/delete.php". The code is a PHP script for performing a DELETE operation on a database table named "students". It includes a connection to a database, retrieves an ID from the URL, performs the delete query, and then redirects the user back to the index page.

```
GNU nano 6.2 /var/www/html/crud/delete.php *
<?php
include 'db.php';

$id = $_GET['id'];
$conn->query("DELETE FROM students WHERE id=$id");

header("Location: index.php");
?>
|
```

OUTPUT:

1) READ:

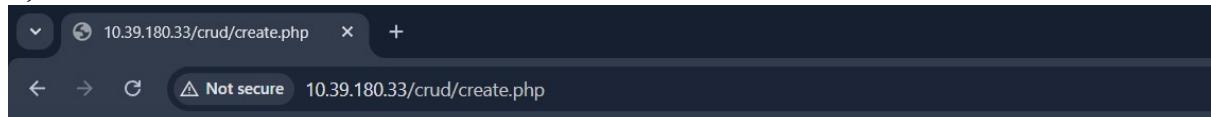


Student Records

[Add New Student](#)

ID	Name	Email	Actions
1	Arun	arun@gmail.com	Edit Delete
4	Kavi	kavi@gmail.com	Edit Delete

2) CREATE:

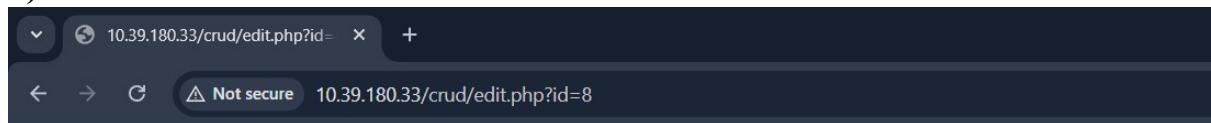


Add Student

Name:

Email:

3) UPDATE:



Edit Student

Name:

Email:

4) READ & DELETE:



Student Records

[Add New Student](#)

ID	Name	Email	Actions
1	Arun	arun@gmail.com	Edit Delete
4	Kavi	kavi@gmail.com	Edit Delete
9	user123	user@gmail.com	Edit Delete



Student Records

[Add New Student](#)

ID	Name	Email	Actions
1	Arun	arun@gmail.com	Edit Delete
4	Kavi	kavi@gmail.com	Edit Delete