

Task – CRUD operation on MYSQL

Code:

User_index.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    .feed {
      min-height: 80vh;
    }
  </style>
  <title>CRUD Operations</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></s
cript>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script
>
</head>
<body>
  <section id="title-bar">
    <div class="navbar navbar-expand-lg navbar-dark bg-dark">
      <div class="container-fluid px-5 py-1">
        <a class="navbar-brand " href="#">CRUD Operation</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarScroll" aria-expanded="false">
```

```
<span class="navbar-toggler-icon"></span>
</button>

<div class="collapse navbar-collapse" id="navbarScroll">
  <ul class="navbar-nav mx-3 me-auto">
    <li class="nav-item">
      <a href="#" class="nav-link active">Home</a>
    </li>

    <li class="nav-item">
      <a href="#" class="nav-link">University</a>
    </li>

  </ul>
</div>
</div>
</div>
</section>

<div class="container mt-2 feed">
  <a href="/add" class="btn btn-sm btn-primary">Add User</a><br/><br/>
  <table class="table table-dark table-striped">
    <thead>
      <tr>
        <th>Course id</th>
        <th>Course name</th>
        <th>department name</th>
        <th>institute name</th>
        <th>university name</th>
      </tr>
```

```
</thead>
<tbody>
  <% users.forEach(function(university){ %>
    <tr>
      <td><%= university.cid %></td>
      <td><%= university.cname %></td>
      <td><%= university.dname %></td>
      <td><%= university.iname %></td>
      <td><%= university.uname %></td>
      <td>
        <a href="edit/<%= university.id %>" class="btn btn-sm btn-
primary">Edit</a>
        <a href="delete/<%= university.id %>" class="btn btn-sm btn-
danger">Delete</a>
      </td>
    </tr>
  <% }); %>
</tbody>
</table>
</div>

<!-- footer Section -->
<footer class="bg-dark navbar-static-bottom ">
  <div class="contanier-fluid text-center p-4 pb-1">
    <p class="text-white">© Copyright 2021</p>
  </div>
</footer>

</body>
</html>
```

User_edit.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    .feed {
      min-height: 80vh;
    }
  </style>
  <title>CRUD Operations</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></s
cript>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script
>
</head>
<body>
  <section id="title-bar">
    <div class="navbar navbar-expand-lg navbar-dark bg-dark">
      <div class="container-fluid px-5 py-1">
        <a class="navbar-brand " href="#">CRUD Operation</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarScroll" aria-expanded="false">
          <span class="navbar-toggler-icon"></span>
        </button>
```

```
<div class="collapse navbar-collapse" id="navbarScroll">
  <ul class="navbar-nav mx-3 me-auto">
    <li class="nav-item">
      <a href="#" class="nav-link active">Home</a>
    </li>

    <li class="nav-item">
      <a href="#" class="nav-link">University</a>
    </li>

  </ul>
</div>
</div>
</div>
</div>
</section>

<div class="container mt-2 feed">

  <form action="/update" method="post">
    <input type="hidden" value="<%= user.id %>" name="id">
    <div class="form-group">
      <label for="cid">Course ID</label>
      <input type="text" class="form-control" id="cid" placeholder="Enter Course ID"
value="<%= user.cid %>" name="cid" required>
    </div>
    <div class="form-group">
      <label for="cname">Course name:</label>
      <input type="text" class="form-control" id="cname" placeholder="Enter Course id"
value="<%= user.cname %>" name="cname" required>
    </div>
  </form>
</div>
```

```
<div class="form-group">
  <label for="dname">department name:</label>
  <input type="text" class="form-control" id="dname" placeholder="Enter Course
name" value="<%= user.dname %>" name="dname" required>
</div>
<div class="form-group">
  <label for="iname">Institute name:</label>
  <input type="text" class="form-control" id="iname" placeholder="Enter department
name" value="<%= user.iname %>" name="iname" required>
</div>
<div class="form-group">
  <label for="uname">University name:</label>
  <input type="text" class="form-control" id="uname" placeholder="Enter University
name" value="<%= user.uname %>" name="uname" required>
</div>
<button type="submit" class="btn btn-primary">Submit</button>
</form>
</div>

<!-- footer Section -->
<footer class="bg-dark navbar-static-bottom ">
  <div class="contanier-fluid text-center p-4 pb-1">
    <p class="text-white">© Copyright 2021</p>
  </div>
</footer>

</body>
</html>
```

User_add.ejs

```
<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    .feed {
      min-height: 80vh;
    }
  </style>
  <title>CRUD Operations</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></s
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  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script
>
</head>
<body>
  <section id="title-bar">
    <div class="navbar navbar-expand-lg navbar-dark bg-dark">
      <div class="container-fluid px-5 py-1">
        <a class="navbar-brand " href="#">CRUD Operation</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarScroll" aria-expanded="false">
          <span class="navbar-toggler-icon"></span>
        </button>
```

```
<div class="collapse navbar-collapse" id="navbarScroll">
  <ul class="navbar-nav mx-3 me-auto">
    <li class="nav-item">
      <a href="#" class="nav-link active">Home</a>
    </li>

    <li class="nav-item">
      <a href="#" class="nav-link">University</a>
    </li>

  </ul>
</div>
</div>
</div>
</div>
</section>

<div class="container mt-2 feed">

  <form action="/save" method="post">
    <div class="form-group">
      <label for="cid">Course id:</label>

      <input type="text" class="form-control" id="cid" placeholder="Enter Course id"
name="cid" required>
    </div>

    <div class="form-group">
      <label for="cname">Course name:</label>

      <input type="text" class="form-control" id="cname" placeholder="Enter Course
name" name="cname" required>
    </div>

    <div class="form-group">
```



```
<label for="dname">department name:</label>

<input type="text" class="form-control" id="dname" placeholder="Enter department
name" name="dname" required>

</div>

<div class="form-group">

<label for="iname">Institute name:</label>

<input type="text" class="form-control" id="iname" placeholder="Enter Institute
name" name="iname" required>

</div>

<div class="form-group">

<label for="uname">University name:</label>

<input type="text" class="form-control" id="uname" placeholder="Enter University
name" name="uname" required>

</div>

<button type="submit" class="btn btn-primary">Submit</button>

</form>

</div>

<!-- footer Section -->

<footer class="bg-dark navbar-static-bottom ">

<div class="container-fluid text-center p-4 pb-1">

<p class="text-white">© Copyright 2021</p>

</div>

</footer>

</body>

</html>
```

App.js

```
const path = require('path');
const express = require('express');
const ejs = require('ejs');
const bodyParser = require('body-parser');
const mysql = require('mysql');
const app = express();

const connection=mysql.createConnection({
  host:'localhost',
  user:'root',
  password:"",
  database:'coursedetails'
});

connection.connect(function(error){
  if(!error) console.log(error);
  else console.log('Database Connected!');
});

//set views file
app.set('views',path.join(__dirname,'views'));

//set view engine
app.set('view engine', 'ejs');
app.use(bodyParser.json());
app.use(bodyParser.urlencoded({ extended: false }));
```

```
app.get('/',(req, res) => {  
  // res.send('CRUD Operation using NodeJS / ExpressJS / MySQL');  
  let sql = "SELECT * FROM university";  
  let query = connection.query(sql, (err, rows) => {  
    if(err) throw err;  
    res.render('user_index', {  
      users : rows  
    });  
  });  
});
```

```
app.get('/add',(req, res) => {  
  res.render('user_add', {  
  
  });  
});
```

```
app.post('/save',(req, res) => {  
  let data = {cid: req.body.cid, cname: req.body.cname, dname: req.body.dname, iname:  
req.body.iname, uname: req.body.uname};  
  let sql = "INSERT INTO university SET ?";  
  let query = connection.query(sql, data,(err, results) => {  
    if(err) throw err;  
    res.redirect('/');  
  });  
});
```

```
app.get('/edit/:userId',(req, res) => {  
  const userId = req.params.userId;
```

```
let sql = `Select * from university where id = ${userId}`;
let query = connection.query(sql,(err, result) => {
  if(err) throw err;
  res.render('user_edit', {

    user : result[0]
  });
});
});

app.post('/update',(req, res) => {
  const userId = req.body.id;

  let sql = "update university SET cid='"+req.body.cid+"', cname='"+req.body.cname+"',
  dname='"+req.body.dname+"', iname='"+req.body.iname+"',
  uname='"+req.body.uname+"' where id =" +userId;

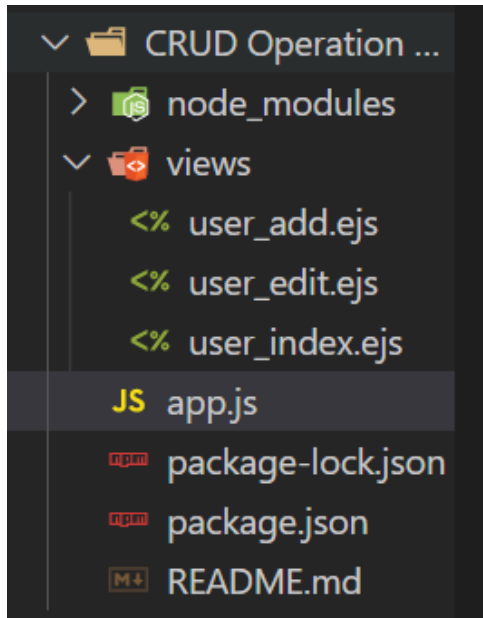
  let query = connection.query(sql,(err, results) => {
    if(err) throw err;
    res.redirect('/');
  });
});

app.get('/delete/:userId',(req, res) => {
  const userId = req.params.userId;

  let sql = `DELETE from university where id = ${userId}`;
  let query = connection.query(sql,(err, result) => {
    if(err) throw err;
    res.redirect('/');
  });
});
```

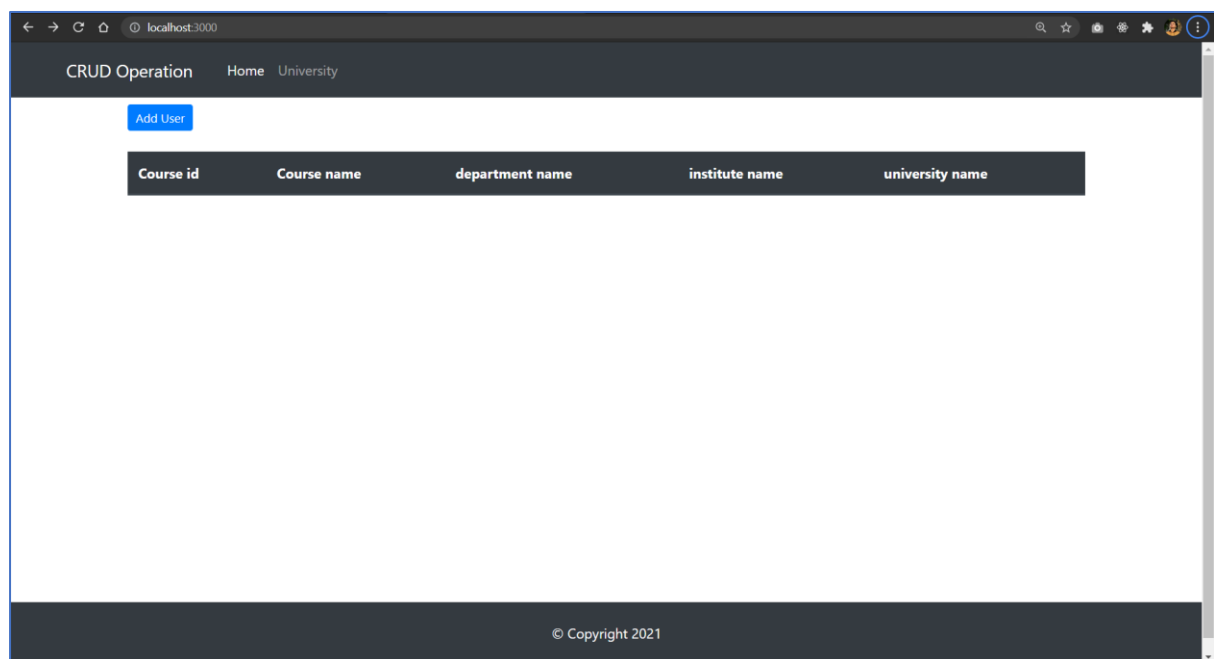
```
// Server Listening
app.listen(3000, () => {
  console.log('Server is running at port 3000');
});
```

Folder structure



Output:

Home page



/add route

A screenshot of a web browser showing a form for adding a new course. The browser's address bar displays 'localhost:3000/add'. The page has a dark header with 'CRUD Operation' and navigation links 'Home' and 'University'. The form contains five input fields: 'Course id:', 'Course name:', 'department name:', 'Institute name:', and 'University name:'. Each field has a placeholder text 'Enter [field name]'. Below the fields is a blue 'Submit' button. The footer shows '© Copyright 2021'.

Course id:
Enter Course id

Course name:
Enter Course name

department name:
Enter department name

Institute name:
Enter Institute name

University name:
Enter University name

Submit

© Copyright 2021

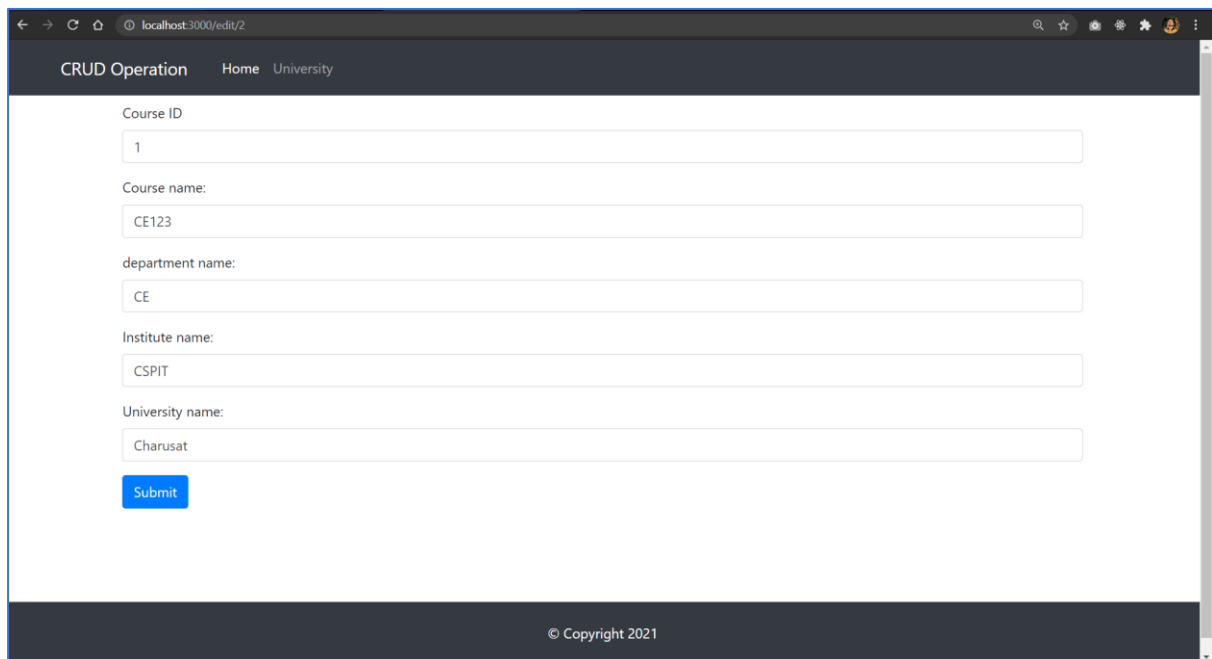
Display the data

A screenshot of a web browser showing a table of course data. The browser's address bar displays 'localhost:3000'. The page has a dark header with 'CRUD Operation' and navigation links 'Home' and 'University'. There is a blue 'Add User' button. The table has five columns: 'Course id', 'Course name', 'department name', 'institute name', and 'university name'. It contains two rows of data. Each row has 'Edit' and 'Delete' buttons. The footer shows '© Copyright 2021'.

Course id	Course name	department name	institute name	university name		
1	CE123	CE	CSPIT	Charusat	Edit	Delete
2	IT456	IT	Depstar	Charusat	Edit	Delete

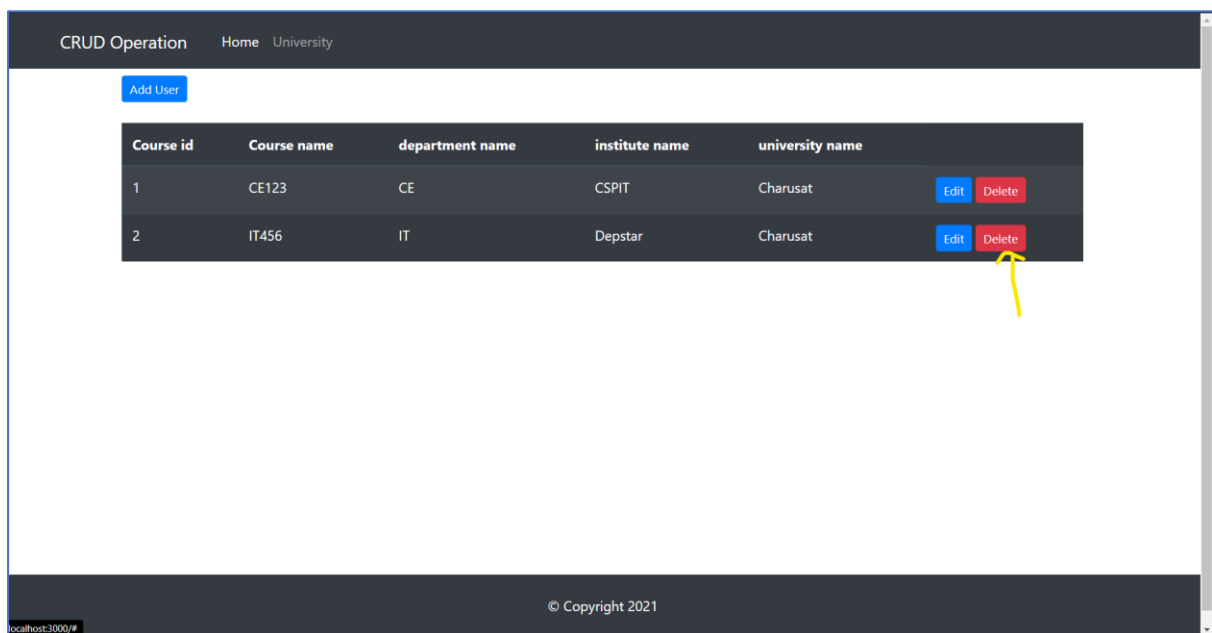
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/edit route



A screenshot of a web browser showing the "/edit/2" route. The browser's address bar shows "localhost:3000/edit/2". The page has a dark header with "CRUD Operation", "Home", and "University" links. The main content area contains a form with the following fields: "Course ID" (value: 1), "Course name:" (value: CE123), "department name:" (value: CE), "Institute name:" (value: CSPIT), and "University name:" (value: Charusat). A blue "Submit" button is at the bottom of the form. The footer shows "© Copyright 2021".

Delete button

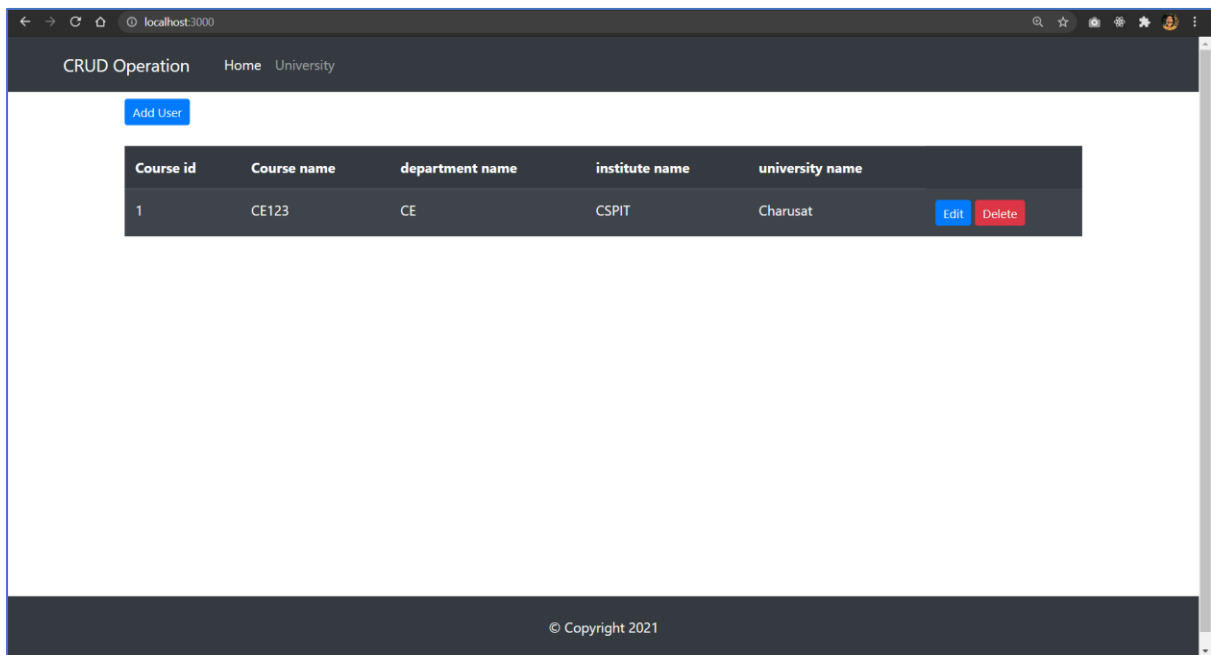


A screenshot of the application showing a table of courses. The table has columns: "Course id", "Course name", "department name", "institute name", "university name", "Edit", and "Delete". There are two rows of data. A yellow arrow points to the "Delete" button in the second row.

Course id	Course name	department name	institute name	university name	Edit	Delete
1	CE123	CE	CSPIT	Charusat	Edit	Delete
2	IT456	IT	Depstar	Charusat	Edit	Delete

The footer shows "© Copyright 2021".

After delete id 2



Table

