**CRUD Operation using NodeJS / MySQL**

**Aim: Create html form using bootstrap, Nodejs and MySQL**

**Code:**

**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 db = mysql.createConnection({

    host: "localhost",

    user: "root",

    password: "",

    database: "node\_crud"

});

db.connect((err) => {

    if(err){

        throw RegExp;

    }

    console.log('Mysql connected...');

});

app.set('views',path.join(\_\_dirname,'views'));

app.set('view engine', 'ejs');

app.use(bodyParser.json());

app.use(bodyParser.urlencoded({ extended: false }));

app.get('/', (req,res) => {

    let sql = "SELECT \* FROM student";

    db.query(sql, (err, rows, fields) => {

        if(err) throw err;

    res.render('user\_index', {

        title: 'CRUD Operation using NodeJS / MySQL',

        user : rows

    });

    });

});

app.get('/add', (req,res) => {

    res.render('user\_add', {

        title: 'CRUD Operation using NodeJS / MySQL'

    });

});

app.post('/save', (req, res) => {

    let data = {course\_id: req.body.course\_id, course\_name: req.body.course\_name, department: req.body.department, institute: req.body.institute, university: req.body.university};

    let sql = "INSERT INTO student SET ?";

    let query = db.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 student WHERE id=${UserId}`;

    db.query(sql, (err,rows,fields)=>{

        if(err) throw err;

        res.render('user\_edit', {

            title: 'CRUD Operation using NodeJS / MySQL',

            user : rows[0]

        });

    });

});

app.post('/update', (req, res) => {

    const id = req.body.id;

    let sql = "UPDATE student SET course\_id='"+req.body.course\_id+"', course\_name='"+req.body.course\_name+"', department='"+req.body.department+"', institute='"+req.body.institute+"', university='"+req.body.university+"' WHERE id ="+id;

    let query = db.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 student WHERE id=${UserId}`;

    db.query(sql, (err,result)=>{

        if(err) throw err;

        res.redirect('/');

    });

});

app.listen(3000, () => {

    console.log('server is running on port number 3000');

});

**User\_index.ejs**

<html>

    <head>

        <title><%= title %></title>

        <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

        <meta charset="UTF-8">

        <meta name="viewport" content="width=device-width, initial-scale=1">

        <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"></script>

        <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>

      </head>

    <body>

    <div class="container">

        <h2><%= title %></h2><br>

        <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</th>

                    <th>Institute</th>

                    <th>University</th>

                    <th>Action</th>

                </tr>

            </thead>

        <tbody>

            <% user.forEach(function(rows){ %>

                <tr>

                    <td><%= rows.course\_id %></td>

                    <td><%= rows.course\_name %></td>

                    <td><%= rows.department %></td>

                    <td><%= rows.institute %></td>

                    <td><%= rows.university %></td>

                    <td>

                        <a href="edit/<%= rows.id %>" class="btn btn-sm btn-primary">Edit</a>

                        <a href="delete/<%= rows.id %>" class="btn btn-sm btn-danger">Delete</a>

                    </td>

                </tr>

            <% }); %>

        </tbody>

        </table>

    </div>

    </body>

</html>

**User\_add.ejs**

<html>

    <head>

        <title><%= title %></title>

        <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

        <meta charset="UTF-8">

        <meta name="viewport" content="width=device-width, initial-scale=1">

        <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"></script>

        <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>

      </head>

    <body>

    <div class="container">

        <h2><%= title %></h2><br>

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

           <div class="form-group">

               <label for="c\_id">Course\_id:</label>

               <input type="text" class="form-control" id="course\_id" placeholder="Enter course\_id" name="course\_id" required>

           </div>

           <div class="form-group">

            <label for="c\_name">Course Name:</label>

            <input type="text" class="form-control" id="course\_name" placeholder="Enter course name" name="course\_name" required>

        </div>

        <div class="form-group">

            <label for="dept\_name">Department Name:</label>

            <input type="text" class="form-control"  id="course\_name" placeholder="" name="department" required>

        </div>

        <div class="form-group">

            <label for="ins\_name">Institute Name:</label>

            <input type="text" class="form-control" id="course\_name" placeholder="" name="institute" required>

        </div>

        <div class="form-group">

            <label for="uns\_name">University Name:</label>

            <input type="text" class="form-control" id="course\_name" placeholder="" name="university" required>

        </div>

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

    </form>

    </div>

    </body>

</html>

**User\_edit.ejs**

<html>

    <head>

        <title><%= title %></title>

        <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

        <meta charset="UTF-8">

        <meta name="viewport" content="width=device-width, initial-scale=1">

        <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"></script>

        <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>

      </head>

    <body>

    <div class="container">

        <h2><%= title %></h2><br>

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

           <input type="hidden" value="<%= user.id %>" name="id">

           <div class="form-group">

               <label for="c\_id">Course\_id:</label>

               <input type="text" class="form-control" id="course\_id" value="<%= user.course\_id %>"  name="course\_id" >

           </div>

           <div class="form-group">

            <label for="c\_name">Course Name:</label>

            <input type="text" class="form-control" id="course\_name" value="<%= user.course\_name %>" name="course\_name" >

        </div>

        <div class="form-group">

            <label for="dept\_name">Department Name:</label>

            <input type="text" class="form-control"  id="course\_name" value="<%= user.department %>" name="department" >

        </div>

        <div class="form-group">

            <label for="ins\_name">Institute Name:</label>

            <input type="text" class="form-control" id="course\_name" placeholder="" value="<%= user.institute %>" name="institute" >

        </div>

        <div class="form-group">

            <label for="uns\_name">University Name:</label>

            <input type="text" class="form-control" id="course\_name" placeholder="" value="<%= user.department %>" name="university" >

        </div>

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

    </form>

    </div>

    </body>

</html>

**OUTPUT:**











