

Task – NodeJS DB operation

Instructions

Task1: Using Handlebar, create HTML page that contains following information

Subject-Code, Subject-Name (Text-box)

Institute-Name (Text-box)

Department-Name (Text-box)

Semester=>Dropdown menu

Task2: Store above information into MySQL database and display.

Code:

Index.hbs layout file

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <link
    rel="stylesheet"
    href="https://bootswatch.com/5/sketchy/bootstrap.min.css"
  />
  <script
src="https://bootswatch.com/_vendor/bootstrap/dist/js/bootstrap.bundle.min.js"></s
cript>
  <script src="https://bootswatch.com/_vendor/jquery/dist/jquery.min.js"></script>

  <script src="https://kit.fontawesome.com/fd15636b22.js"
crossorigin="anonymous"></script>

  <title>NodeJS with MySQL</title>
```

```
</head>

<style>
  .mainbox {
    margin: 2rem auto;
    text-align: center;
  }
  body{
    padding: 1rem;
  }
  .navbar{
    margin: 0.5rem 0.5rem;
  }
</style>

<body>
  {{> header}}
  {{{body}}}
  {{> footer}}
</body>
</html>
```

Main.hbs file

```
<div class="row justify-content-md-center">
  <div class="col-md-auto">
    <h1>NodeJS</h1>
  </div>
</div>

<div class="row justify-content--center">
```

```

<div class="justify-content-center">
  <div class="col">
    <div class="card border-info mb-3" style="max-width: 30rem;margin: 15rem 10rem;">
      <div class="card-header">Add Subject Info</div>
      <div class="card-body text-center">
        <h4 class="card-text">
          <a class="btn btn-info" href="/subject-form">Add Subject</a>
        </h4>
      </div>
    </div>
  </div>
</div>
</div>

```

Form.hbs file

```

<div class="container mainbox">
  <div class="row justify-content-md-center">
    <div class="col-12">
      <p style="font-weight: 800; font-size:2rem">ADD SUBJECT DETAILS</p>
    </div>

    <div class="col" style="margin: 2rem;padding: 5rem;">
      <form name="subject-form" action="/show-data" method="post" class="row g-2">
        <div class="col-md-4 g-5">
          <label for="subject_code" class="form-label">Subject Code</label>
          <input type="text" class="form-control" name="scode" id="subject_code"
            maxlength="10" required>
        </div>
      </form>
    </div>
  </div>
</div>

```

```
<div class="col-md-4 g-5 ">  
  <label for="subject_name" class="form-label">Subject Name</label>  
  <input type="text" class="form-control" name="sname" id="subject_name"  
required>  
</div>
```

```
<div class="col-md-4 g-5 ">  
  <label for="institute_name" class="form-label">Institute Name</label>  
  <input type="text" class="form-control" name="iname" id="institute_name"  
required>  
</div>
```

```
<div class="col-md-4 g-5 ">  
  <label for="department_name" class="form-label">Department Name</label>  
  <input type="text" class="form-control" name="dname" id="department_name"  
required>  
</div>
```

```
<div class="col-md-4 g-5 ">  
  <label for="sem" class="form-label">Semester</label>  
  <select class="form-select" name="sem" id="sem" aria-describedby="sem"  
required>  
    <option selected disabled value="">Choose</option>  
    <option>1</option>  
    <option>2</option>  
    <option>3</option>  
    <option>4</option>  
    <option>5</option>  
    <option>6</option>  
    <option>7</option>  
    <option>8</option>
```

```

        </select>
    </div>
    <div class="col-12 mt-5">
        <button class="btn btn-primary" type="submit">Submit form</button>
    </div>
</div>
</form>
</div>
</class>

```

Showdata.hbs file

```

<style>
    table, th, td {
        border: 1px solid black;
        margin-top:20%;
    }
</style>

<div class="row justify-content-md-center">
    <h1 style="text-align: center; margin-top:5%">Submitted Subject Data</h1>
</div>
<div class="row justify-content-md-center">
    <div class="col-md-6">
<table class="table" >
    <tr>

        <th scope="col">Subject Code</th>
        <td>{{data.scode}}</td>
    </tr>

```

```
<tr>
  <th scope="col">Subject Name</th>
  <td>{{data.sname}}</td>
</tr>

<tr>
  <th scope="col">Institute Name</th>
  <td>{{data.iname}}</td>
</tr>

<tr>
  <th scope="col">Department Name</th>
  <td>{{data.dname}}</td>
</tr>

<tr>
  <th scope="col">Semester</th>
  <td>{{data.sem}}</td>
</tr>

</table>
</div>
</div>
```

Server.js file

```
const express=require("express");
const PORT=3000;
const app=express();
const handlebars=require("express-handlebars");
```

```
var mysql = require('mysql');  
//connection  
const connection = mysql.createConnection({  
  host: 'localhost',  
  user: 'root',  
  password: '',  
  database: 'Subject'  
});  
  
connection.connect((err)=>{  
  if(err) throw err;  
  console.log("Connected successfully to MySql server")  
});  
  
//create database  
const dbquery="CREATE DATABASE IF NOT EXISTS Subject";  
  
connection.query(dbquery,(err,result)=>{  
  if(err) throw err;  
  console.log("Database created successfully",result)  
})  
//create table  
const dbtable=`CREATE TABLE IF NOT EXISTS subject(  
  subjectCode varchar(10) NOT NULL,  
  subjectName varchar(50) NOT NULL,  
  instituteName varchar(50) NOT NULL,  
  departmentName varchar(50) NOT NULL,  
  semester varchar(1) NOT NULL,  
  PRIMARY KEY (subjectCode))`
```

```
// SHOW DATABASES => List the available DB from MySQL server

connection.query("USE Subject",(err,result)=>{ // "Select Database"
  if(err) throw err;
  connection.query(dbtable,(err,result)=>{
    if(err) throw err;
    console.log("Table created successfully",result)
  });
});

//middleware
app.use(express.static("public"));
app.use(express.urlencoded({extended:false}));

app.set('view engine', 'hbs');

app.engine("hbs",handlebars({
  layoutsDir:`${__dirname}/views/layouts`,
  extname:"hbs",
  defaultLayout:"index",
  partialsDir:`${__dirname}/views/partials`
}))

app.get("/",(req,res)=>{
  res.render("main");
});
```



```
app.get("/subject-form",(req,res)=>{
    res.render("form");

});

app.post("subject-form",(req,res)=>{

    res.redirect("/show-data")

});

app.post("/show-data",(req,res)=>{
    // console.log(req.body);

    var subjectCode = req.body.scode;
    var subjectName = req.body.sname;
    var instituteName = req.body.iname;
    var departmentName = req.body.dname;
    var semester=req.body.sem;

    var sql = `INSERT INTO subject (subjectCode, subjectName, instituteName,
departmentName, semester) VALUES ("${subjectCode}", "${subjectName}",
"${instituteName}", "${departmentName}","${semester}")`;
    connection.query(sql, function(err, result) {
        if (err) throw err;
        console.log('record inserted');

        res.render("showdata",{data:req.body});
    });

})
```

```
app.get("/stored-data",(req,res)=>{

    const dbInsert=`SELECT * from subject`;

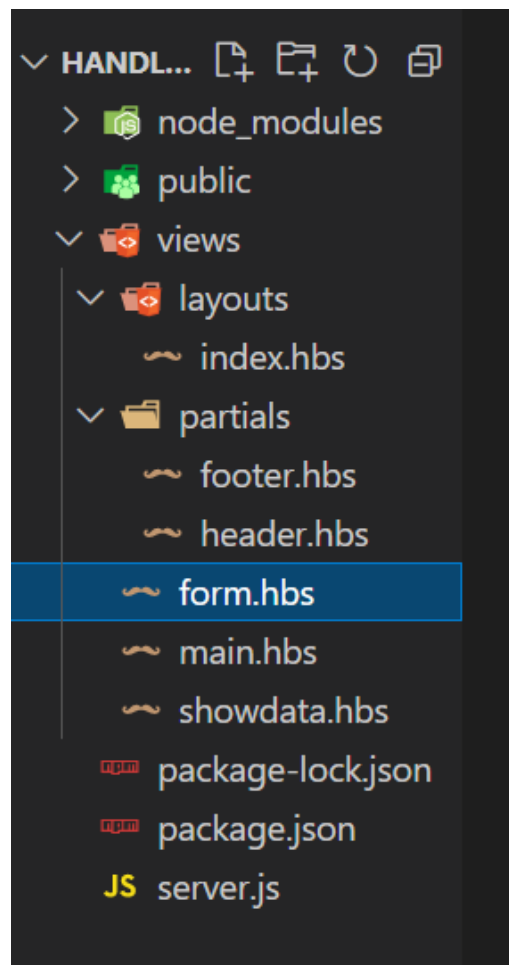
    connection.query("USE Subject",(err,result)=>{
        if(err) throw err;
    connection.query(dbInsert,(err,result)=>{
        if(err) throw err;

        console.log("Inserted Data is");
        console.log(result);
        res.send(result);
    })
    })
    })

    app.use( (req,res,next)=>{
        res.render("404");
    })

    app.listen(PORT,()=>{
        console.log(`Server is listening on port ${PORT}`);
    })
}
```

File structure



OUTPUT

Home page



NodeJS

Add Subject Info

Add Subject

Form page

localhost:3000/subject-form

ADD SUBJECT DETAILS

Subject Code	Subject Name	Institute Name
<input type="text" value="CE111"/>	<input type="text" value="Computer"/>	<input type="text" value="CSPIT"/>
Department Name	Semester	
<input type="text" value="CE"/>	<input type="text" value="5"/>	

Display the data

localhost:3000/show-data

Submitted Subject Data

Subject Code	CE111
Subject Name	Computer
Institute Name	CSPIT
Department Name	CE
Semester	5