

EXPERIMENT 9

AIM: Form handling using express and node js.

A. Steps to install nodejs in Windows

1. Download Node.js Installer:

- Go to the official Node.js website.
- Link - <https://nodejs.org/en/download/source-code>
- Download the latest stable version for Windows (use the LTS version if you're unsure).

1. Run the Installer:

- Once the download is complete, run the installer.
- Follow the prompts in the installer (accept the license agreement, choose the installation directory, etc.).
- Make sure to check the box that says "**Automatically install the necessary tools**" (includes npm).

1. Check Installation:

- Open **Command Prompt** or **PowerShell**.

Run the following command to check if Node.js and npm were installed successfully:

bash

Copy code

node -v

npm -v

These commands should display the installed versions of Node.js and npm.

B. Steps to create the project:

Initialize Node.js Project: Run these commands in your terminal:

mkdir form-handling-example

```
cd form-handling-example
```

```
npm init -y
```

Install Express:

```
npm install express
```

Project Structure: Create the following structure:

```
form-handling-example/
```

```
|— public/
```

```
|   └— style.css
```

```
|— views/
```

```
|   └— index.html
```

```
|— app.js
```

```
└— package.json
```

1. app.js (Express Application)

This is your main Node.js application:

```
const express = require('express');

const path = require('path');

const bodyParser = require('body-parser');

const app = express();

const port = 3000;

// Middleware to parse the form data
```

```

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

// Serve static files (for serving CSS)
app.use(express.static(path.join(__dirname, 'public')));

// Route to display the form
app.get('/', (req, res) => {
    res.sendFile(path.join(__dirname, 'views', 'index.html'));
});

// Route to handle form submission
app.post('/submit-form', (req, res) => {
    const { name, email, contact, classname, Branch, Semester,
StudentHallticketNumber, ExamDate} = req.body;

    res.send(`<h1>Form Submitted</h1>

        <p>Name: ${name}</p>

        <p>Email: ${email}</p>

        <p>Contact: ${contact}</p>

        <p>Class: ${classname}</p>

        <p>Branch: ${Branch}</p>

        <p>Semester: ${Semester}</p>

        <p>Student Hallticket Number: ${StudentHallticketNumber}</p>

        <p>Exam Date: ${ExamDate}</p>`);
});

```

```
// Start the server

app.listen(port, () => {

  console.log(`Server running at http://localhost:${port}`);

});
```

2. index.html (Form Template)

This is the form that users will interact with:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Form Handling with Express</title>

  <link rel="stylesheet" href="/style.css">

</head>

<body>

  <div class="form-container">

    <h1>Exam Registration Form</h1>

    <form action="/submit-form" method="POST">

      <label for="name">Student Name:</label>

      <input type="text" id="name" name="name" required>

      <br>

      <label for="email">Email:</label>

      <input type="email" id="email" name="email" required>
```

```

    <br>

    <label for="contact">Contact:</label>

    <input type="text" id="contact" name="contact" required>

    <br>

    <label for="Class">Class:</label>

    <input type="text" id="class" name="classname" required>

    <br>

    <label for="Branch">Branch:</label>

    <input type="text" id="Branch" name="Branch" required>

    <br>

    <label for="Semester">Semester:</label>

    <input type="number" id="Semester" name="Semester" required>

    <br>

    <label for="Student hallticket number">Student Hallticket
Number:</label>

    <input type="text" id="Student Hallticket Number"
name="StudentHallticketNumber" required>

    <br>

    <label for="Exam Date">Exam Date:</label>

    <input type="date" id="Exam Date" name="ExamDate" required>

    <br>

    <button type="submit">Submit</button>

</form>

</div>

</body>

```

```
</html>
```

3. style.css (External Stylesheet)

This is the CSS file to style the form and set the background color:

```
body {  
  
    background-color: #fffc41;  
  
    font-family: Arial, sans-serif;  
  
}  
  
.form-container {  
  
    width: 500px;  
  
    margin: 200px auto;  
  
    padding: 35px;  
  
    background-color: rgb(255, 134, 64);  
  
    box-shadow: 10px 10px lightblue;  
  
}  
  
h1 {  
  
    text-align: center;  
  
}  
  
label {  
  
    display: block;
```

```
margin: 10px 0 5px;

color: rgb(4, 0, 255);
}

input {

width: 100%;

padding: 8px;

margin-bottom: 10px;
}

button {

width: 100%;

padding: 10px;

background-color: #09ff00;

color: rgb(255, 0, 0);

border: none;

cursor: pointer;
}

button:hover {

background-color: #b30095;
}
```

4. Run the Application:

1. Save the files.

Start the server by running:

```
node app.js
```

1. Open your browser and navigate to <http://localhost:3000>. You will see a form with a background color applied from the external CSS.
2. Submit the form, and you should see a confirmation page displaying the form data.

OUTPUT:

Exam Registration Form

Student Name:

Ali Hasan

Email:

ah14hasan@gmail.com

Contact:

8125694823

Class:

J

Branch:

AIML

Semester:

7

Student Hallticket Number:

160121729020

Exam Date:

10/26/2024



Submit

Form Submitted

Name: Ali Hasan

Email: ah14hasan@gmail.com

Contact: 8125694823

Class: J

Branch: AIML

Semester: 7

Student Hallticket Number: 160121729020

Exam Date: 2024-10-26