**📄 Student Registration Form - Full Project Documentation**

**1. Project Overview**

This project demonstrates:

1. A student registration form built with **HTML**.
2. **CSS styling** for a clean UI (embedded in HTML).
3. **JavaScript for client-side validation** (validate.js).
4. A **Node.js Express server** for handling form submissions (server.js).

**2. Steps to Run**

1. Save files as index.html, validate.js, and server.js.
2. Install dependencies using:
3. npm init -y
4. npm install express body-parser multer
5. Start the server:
6. node server.js
7. Open index.html in the browser, fill out the form, and submit.
8. Submitted data will be printed in the server console.

**3. Source Code**

**📌 index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Student Registration Form</title>

<style>

body {

font-family: Arial, sans-serif;

background: #f4f6f9;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

form {

background: #fff;

padding: 25px;

border-radius: 12px;

box-shadow: 0 4px 10px rgba(0,0,0,0.1);

width: 400px;

}

h2 {

text-align: center;

margin-bottom: 20px;

}

label {

display: block;

margin: 10px 0 5px;

font-weight: bold;

}

input, select, textarea, button {

width: 100%;

padding: 10px;

margin-bottom: 15px;

border-radius: 8px;

border: 1px solid #ccc;

font-size: 14px;

}

button {

background: #007BFF;

color: white;

cursor: pointer;

border: none;

}

button:hover {

background: #0056b3;

}

.error {

color: red;

font-size: 12px;

margin-top: -10px;

margin-bottom: 10px;

display: none;

}

</style>

</head>

<body>

<form id="registrationForm" method="POST" action="http://localhost:3000/submit">

<h2>Student Registration</h2>

<label for="name">Full Name</label>

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

<div class="error" id="nameError">Please enter your name</div>

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

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

<div class="error" id="emailError">Please enter a valid email</div>

<label for="password">Password</label>

<input type="password" id="password" name="password" required minlength="6">

<div class="error" id="passwordError">Password must be at least 6 characters</div>

<label for="dob">Date of Birth</label>

<input type="date" id="dob" name="dob" required>

<label for="gender">Gender</label>

<select id="gender" name="gender" required>

<option value="">--Select--</option>

<option>Male</option>

<option>Female</option>

<option>Other</option>

</select>

<label for="phone">Phone</label>

<input type="tel" id="phone" name="phone" pattern="[0-9]{10}" placeholder="10-digit number">

<div class="error" id="phoneError">Enter a valid 10-digit phone number</div>

<label for="course">Course Interested</label>

<input list="courses" id="course" name="course">

<datalist id="courses">

<option value="Computer Science">

<option value="Electrical Engineering">

<option value="Mechanical Engineering">

<option value="Civil Engineering">

<option value="Biotechnology">

</datalist>

<label for="resume">Upload Resume</label>

<input type="file" id="resume" name="resume" accept=".pdf,.doc,.docx">

<label for="color">Favorite Color</label>

<input type="color" id="color" name="color">

<label for="range">Study Hours per Day</label>

<input type="range" id="range" name="range" min="0" max="12">

<label>

<input type="checkbox" id="agree" name="agree" required> I agree to the terms & conditions

</label>

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

</form>

<script src="validate.js"></script>

</body>

</html>

**📌 validate.js**

document.getElementById("registrationForm").addEventListener("submit", function(event) {

let valid = true;

// Name validation

const name = document.getElementById("name");

if (name.value.trim() === "") {

document.getElementById("nameError").style.display = "block";

valid = false;

} else {

document.getElementById("nameError").style.display = "none";

}

// Email validation

const email = document.getElementById("email");

const emailPattern = /^[^ ]+@[^ ]+\.[a-z]{2,3}$/;

if (!email.value.match(emailPattern)) {

document.getElementById("emailError").style.display = "block";

valid = false;

} else {

document.getElementById("emailError").style.display = "none";

}

// Password validation

const password = document.getElementById("password");

if (password.value.length < 6) {

document.getElementById("passwordError").style.display = "block";

valid = false;

} else {

document.getElementById("passwordError").style.display = "none";

}

// Phone validation

const phone = document.getElementById("phone");

if (!phone.value.match(/^\d{10}$/)) {

document.getElementById("phoneError").style.display = "block";

valid = false;

} else {

document.getElementById("phoneError").style.display = "none";

}

if (!valid) {

event.preventDefault();

}

});

**📌 server.js**

const express = require("express");

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

const multer = require("multer"); // for file uploads

const upload = multer();

const app = express();

const PORT = 3000;

// Middleware

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

// Route to handle form submission

app.post("/submit", upload.single("resume"), (req, res) => {

console.log("Form Data Received:");

console.log(req.body);

if (req.file) {

console.log("File Uploaded:", req.file.originalname);

}

res.send("Form submitted successfully!");

});

app.listen(PORT, () => {

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

});