ASSIGNMENT

**PART A – FRONTEND**

**Q1.**

****

**register.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>STUDENT REGISTRATION PAGE</title>

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

</head>

<body>

<div class="form-box">

<h1>STUDENT REGISTRATION</h1>

<form>

<div class="form-group">

<label>Full Name</label>

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

</div>

<div class="form-group">

<label>Email</label>

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

</div>

<div class="form-group">

<label>Password</label>

<input type="password" name="password" required>

</div>

<div class="form-group">

<label>Confirm</label>

<input type="password" name="confirm" required>

</div>

<div class="form-group">

<label>Gender</label>

<div class="options">

<input type="radio" name="gender" value="Male"> Male

<input type="radio" name="gender" value="Female"> Female

<input type="radio" name="gender" value="Other"> Other

</div>

</div>

<div class="form-group">

<label>Course</label>

<select name="course">

<option>--Select--</option>

<option>MCA</option>

<option>MSc</option>

<option>BCA</option>

<option>Other</option>

</select>

</div>

<div class="form-group">

<label>Year</label>

<select name="year">

<option>--Select--</option>

<option>First</option>

<option>Second</option>

<option>Third</option>

</select>

</div>

<div class="form-group">

<label>Skills</label><br>

<div class="options">

<input type="checkbox" name="skills" value="Java"> Java

<input type="checkbox" name="skills" value="Python"> Python

<input type="checkbox" name="skills" value="HTML/CSS"> HTML/CSS

<input type="checkbox" name="skills" value="JavaScript"> JavaScript

<input type="checkbox" name="skills" value="Node.js"> Node.js

<input type="checkbox" name="skills" value="C"> C

</div>

</div>

<div class="form-group">

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

</div>

</form>

</div>

</body>

</html>

**style.css**

body {

background:url("https://img.freepik.com/premium-vector/mountain-range-rises-background-with-solitary-tree-prominently-positioned-foreground-flat-vector-illustration\_674398-10552.jpg") no-repeat center center fixed;

background-color: black;

background-size: cover;

}

.form-box {

width: 400px;

margin: 60px auto;

padding: 20px;

background: rgba(255, 255, 255, 0.592);

border-radius: 8px;

}

h1 {

text-align: center;

font-size: 22px;

margin-bottom: 20px;

}

.form-group {

display: flex;

align-items: center;

margin-bottom: 12px;

}

.form-group label {

width: 120px;

font-weight: bold;

}

.form-group input,

.form-group select {

flex: 1;

padding: 5px;

background: rgba(255, 255, 255, 0.592);

border-radius: 5px;

}

button {

width: 100%;

padding: 8px;

background: #256794;

color: white;

border: none;

cursor: pointer;

border-radius: 5px;

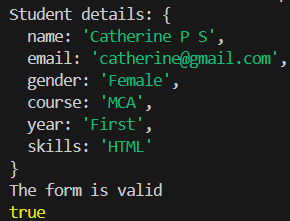
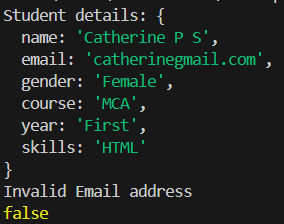
}

button:hover {

background: #457fa0;

}

**Q2.**

** **

**script.js**  
  
var msge = "The form is valid";

var studname = "Catherine P S";

var studemail = "catherine@gmail.com";

var studgender = "Female";

var studcourse = "MCA";

var studyear = "First";

var studskills = "HTML";

var student = {

name: studname,

email: studemail,

gender: studgender,

course: studcourse,

year: studyear,

skills: studskills

};

function validateForm(student) {

let c = true;

if (!student.email || !student.email.includes("@gmail.com")) {

console.log("Invalid Email address");

c = false;

}

if (!student.gender) {

console.log("Gender is required");

c = false;

}

if (c) {

console.log(msge);

}

return c;

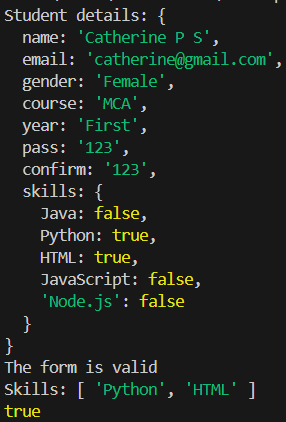
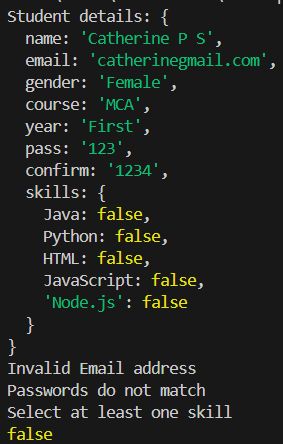
}

console.log("Student details:", student);

var a = validateForm(student);

console.log(a);

**Q3.**

**script.js**

var msge = "The form is valid";

var studname = "Catherine P S";

var studemail = "catherinegmail.com";

var studgender = "Female";

var studcourse = "MCA";

var studyear = "First";

var studpass = "123";

var studconfirm = "1234";

var studskills = {

Java: false,

Python: false,

HTML: false,

JavaScript: false,

"Node.js": false

};

var student = {

name: studname,

email: studemail,

gender: studgender,

course: studcourse,

year: studyear,

pass: studpass,

confirm: studconfirm,

skills: studskills

};

function validateForm(student) {

let c = true;

if (!student.email) {

console.log("The Email is empty");

c = false;

} else if (!student.email.includes("@gmail.com")) {

console.log("Invalid Email address");

c = false;

}

if (student.pass !== student.confirm) {

console.log("Passwords do not match");

c = false;

}

let selectedSkills = [];

for (let i in student.skills) {

if (student.skills[i]) {

selectedSkills.push(i);

}

}

if (selectedSkills.length === 0) {

console.log("Select at least one skill");

c = false;

}

if (c) {

console.log(msge);

console.log("Skills:", selectedSkills);

}

return c;

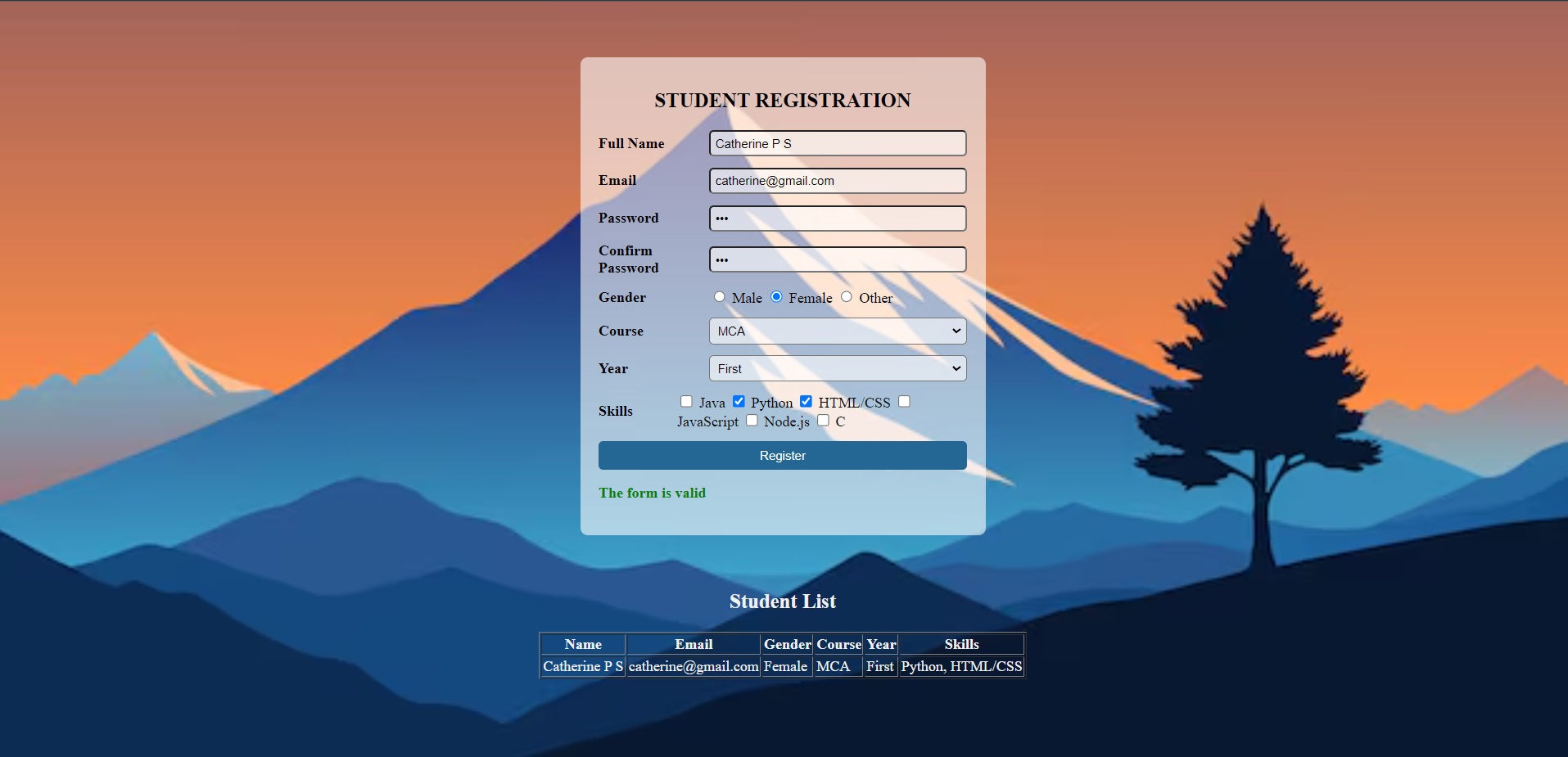
}

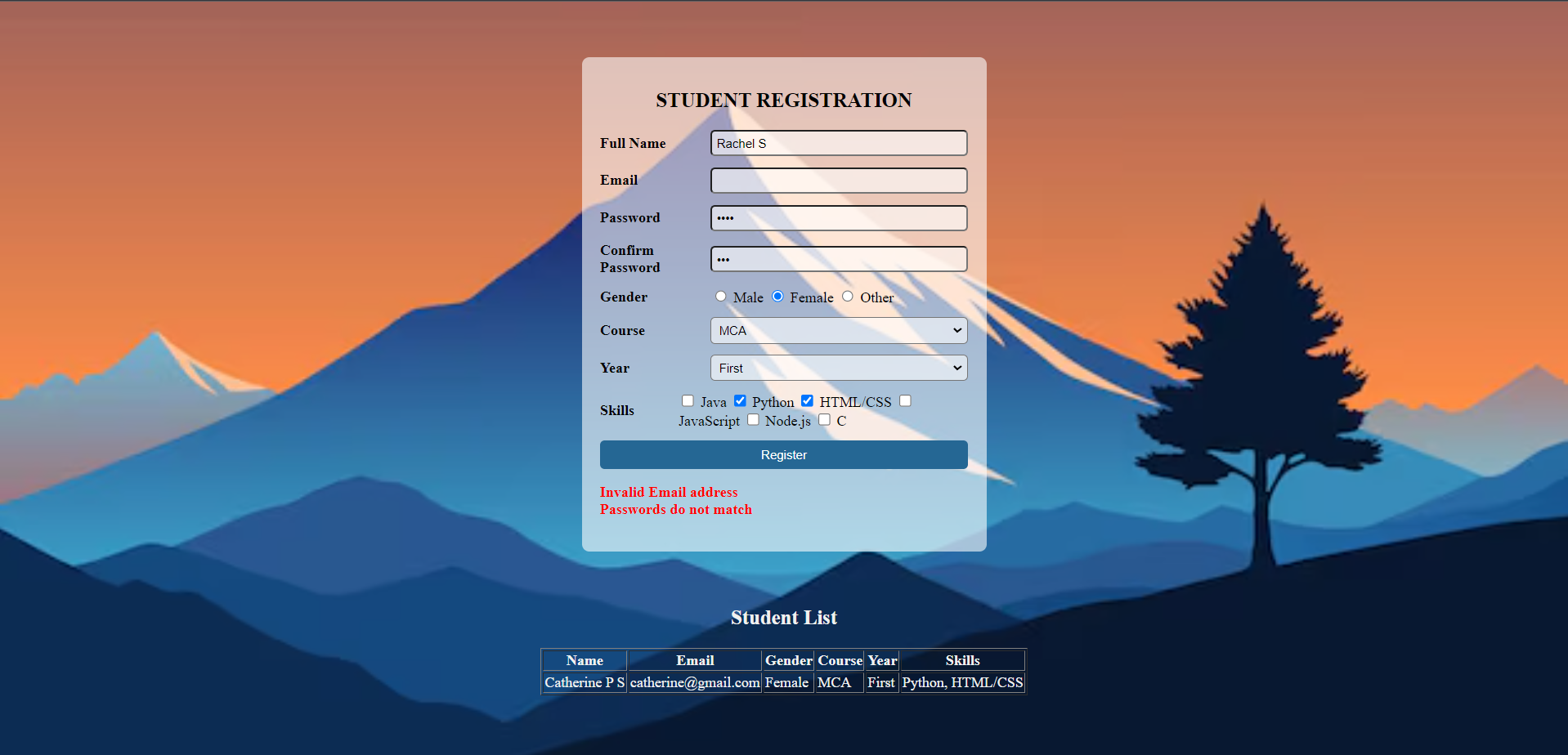
console.log("Student details:", student);

var a = validateForm(student);

console.log(a);

**Q4.**





**student.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>STUDENT REGISTRATION PAGE</title>

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

</head>

<body>

<div class="form-box">

<h1>STUDENT REGISTRATION</h1>

<form id="regForm">

<div class="form-group">

<label>Full Name</label>

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

</div>

<div class="form-group">

<label>Email</label>

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

</div>

<div class="form-group">

<label>Password</label>

<input type="password" name="password" id="studpassword" required>

</div>

<div class="form-group">

<label>Confirm Password</label>

<input type="password" name="confirm" id="studconfirm" required>

</div>

<div class="form-group">

<label>Gender</label>

<div class="options">

<input type="radio" name="gender" value="Male"> Male

<input type="radio" name="gender" value="Female"> Female

<input type="radio" name="gender" value="Other"> Other

</div>

</div>

<div class="form-group">

<label>Course</label>

<select name="course" id="studcourse">

<option>--Select--</option>

<option>MCA</option>

<option>MSc</option>

<option>BCA</option>

<option>Other</option>

</select>

</div>

<div class="form-group">

<label>Year</label>

<select name="year" id="studyear">

<option>--Select--</option>

<option>First</option>

<option>Second</option>

<option>Third</option>

</select>

</div>

<div class="form-group">

<label>Skills</label><br>

<div class="options">

<input type="checkbox" class="skill" value="Java"> Java

<input type="checkbox" class="skill" value="Python"> Python

<input type="checkbox" class="skill" value="HTML/CSS"> HTML/CSS

<input type="checkbox" class="skill" value="JavaScript"> JavaScript

<input type="checkbox" class="skill" value="Node.js"> Node.js

<input type="checkbox" class="skill" value="C"> C

</div>

</div>

<div class="form-group">

<button type="button" id="registerBtn">Register</button>

</div>

<p id="msg" style="color:green;font-weight:bold;"></p>

</form>

</div>

<center>

<h1 style="color:rgb(240, 241, 240);">Student List</h1>

<table border="1" id="studentTable" style="color:rgb(240, 241, 240);">

<thead>

<tr>

<th>Name</th>

<th>Email</th>

<th>Gender</th>

<th>Course</th>

<th>Year</th>

<th>Skills</th>

</tr>

</thead>

<tbody>

</tbody>

</table>

<br><br>

</center>

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

</body>

</html>

**style.css**

body {

background:url("https://img.freepik.com/premium-vector/mountain-range-rises-background-with-solitary-tree-prominently-positioned-foreground-flat-vector-illustration\_674398-10552.jpg") no-repeat center center fixed;

background-color: black;

background-size: cover;

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.form-box {

width: 400px;

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padding: 20px;

background: rgba(255, 255, 255, 0.592);

border-radius: 8px;

}

h1 {

text-align: center;

font-size: 22px;

margin-bottom: 20px;

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}

.form-group input,

.form-group select {

flex: 1;

padding: 5px;

background: rgba(255, 255, 255, 0.592);

border-radius: 5px;

}

button {

width: 100%;

padding: 8px;

background: #256794;

color: white;

border: none;

cursor: pointer;

border-radius: 5px;

}

button:hover {

background: #457fa0;

}

**script.js**

var msge = "The form is valid";

function validateForm(student) {

let c = true;

let error = "";

if (!student.email || !student.email.includes("@gmail")) {

error += "Invalid Email address<br>";

c = false;

}

if (student.password !== student.confirm) {

error += "Passwords do not match<br>";

c = false;

}

if (student.skills.length === 0) {

error += "Select at least one skill<br>";

c = false;

}

if (c) {

document.getElementById("msg").style.color = "green";

document.getElementById("msg").innerHTML = msge;

} else {

document.getElementById("msg").style.color = "red";

document.getElementById("msg").innerHTML = error;

}

return c;

}

document.getElementById("registerBtn").addEventListener("click", function() {

var student = {

name: document.getElementById("studname").value,

email: document.getElementById("studemail").value,

gender: document.querySelector('input[name="gender"]:checked') ?

document.querySelector('input[name="gender"]:checked').value : "",

course: document.getElementById("studcourse").value,

year: document.getElementById("studyear").value,

password: document.getElementById("studpassword").value,

confirm: document.getElementById("studconfirm").value,

skills: []

};

var skillBoxes = document.querySelectorAll(".skill");

for (let i = 0; i < skillBoxes.length; i++) {

if (skillBoxes[i].checked) {

student.skills.push(skillBoxes[i].value);

}

}

if (validateForm(student)) {

var table = document.getElementById("studentTable").getElementsByTagName("tbody")[0];

var row = document.createElement("tr");

let values = [student.name, student.email, student.gender, student.course, student.year, student.skills.join(", ")];

for (let val of values) {

let cell = document.createElement("td");

cell.textContent = val;

row.appendChild(cell);

}

table.appendChild(row);

}

});

**Q5.**