

A. Entrance Exam Registration Form

1. Introduction

This assignment is about creating an Entrance Exam Registration Form using HTML and JavaScript.

The form collects student details such as name, date of birth, age, phone number, email, gender, and exam stream.

JavaScript validation is applied to ensure that all fields are properly filled and follow the required rules before submission.

2. Code Snapshot

```
<body>
  <h2>Entrance Exam Registration Form</h2>

  <form id="form_sangam_27">
    <label>Full Name:</label><br />
    <input type="text" id="fullname_sangam_27" name="fullname_sangam_27" />
    <br /><br />

    <label>Date of Birth:</label><br />
    <input type="date" id="dob_sangam_27" name="dob_sangam_27" /><br /><br />

    <!-- <label>Age:</label><br />
    <input type="number" id="age_sangam_27" name="age_sangam_27" />
    <br /><br /> -->

    <label>Phone Number:</label><br />
    <input type="text" id="phone_sangam_27" name="phone_sangam_27" />
    <br /><br />

    <label>Email Address:</label><br />
    <input type="text" id="email_sangam_27" name="email_sangam_27" />
    <br /><br />

    <label>Gender:</label><br />
    <input type="radio" id="male_sangam_27" name="gender_sangam_27" value="Male" />
    Male
    <input type="radio" id="female_sangam_27" name="gender_sangam_27" value="Female" />
    Female
    <br /><br />

    <label>Exam Stream:</label><br />
    <select id="stream_sangam_27" name="stream_sangam_27">
      <option value="">---Select Stream---</option>
      <option value="Science">Science</option>
      <option value="Management">Management</option>
      <option value="Arts">Arts</option>
    </select>
    <br /><br />

    <input type="checkbox" id="agree_sangam_27" name="agree_sangam_27" />
    I confirm all details are correct
    <br /><br />

    <button type="button" onclick="validateForm()">Submit</button>
  </form>

  <p id="message_sangam_27" style="color: green"></p>

  <script src="entranceExam.js"></script>
</body>
```

```

function validateForm() {
    let name = document.getElementById("fullname_sangam_27").value.trim();
    let dob = document.getElementById("dob_sangam_27").value;
    // let age = document.getElementById("age_sangam_27").value;
    let phone = document.getElementById("phone_sangam_27").value.trim();
    let email = document.getElementById("email_sangam_27").value.trim();
    let gender = document.querySelector('input[name="gender_sangam_27"]:checked');
    let stream = document.getElementById("stream_sangam_27").value;
    let agree = document.getElementById("agree_sangam_27").checked;

    let namePattern = /^[A-Za-z\s]+$/;
    let phonePattern = /^(98|97)\d{8}$/;
    let emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;

    if (name === "" || dob === "" || phone === "" || email === "") {
        alert("All fields are required.");
        return;
    }

    if (!namePattern.test(name)) {
        alert("Name must contain only letters.");
        return;
    }

    // if (age < 16 || age > 30) {
    //     alert("Age must be between 16 and 30.");
    //     return;
    // }

    if (!phonePattern.test(phone)) {
        alert("Phone must be 10 digits and start with 98 or 97.");
        return;
    }

    if (!emailPattern.test(email)) {
        alert("Invalid email format.");
        return;
    }

    if (!gender) {
        alert("Please select gender.");
        return;
    }

    if (stream === "") {
        alert("Please select exam stream.");
        return;
    }

    if (!agree) {
        alert("You must confirm the details.");
        return;
    }

    document.getElementById("message_sangam_27").innerText =
        "Registration Successful! Page will refresh in 5 seconds.";

    setTimeout(function () {
        location.reload();
    }, 5000);
}

```


3. Output Snapshot

Entrance Exam Registration Form

Full Name:

sanam meche

Date of Birth:

03/02/2000 

Phone Number:

9734672365


Email Address:

meche2@gmail.com

Gender:

☒ Male ☐ Female

Exam Stream:

Science 

☒ I confirm all details are correct

Submit

Registration Successful! Page will refresh in 5 seconds.

4. Conclusion

In this assignment, an entrance exam registration form was successfully created using HTML and JavaScript.

Form validation helped ensure that only correct and complete information is submitted. This task improved understanding of input validation and client-side form handling.

B. Student Mark Sheet Generator

1. Introduction

This assignment is about developing a Student Mark Sheet Generator using HTML and JavaScript.

The form collects student name, roll number, and marks of three subjects.

JavaScript is used to validate the marks, calculate total, percentage, result, and grade automatically.

2. Code Snapshot

```
<body>
  <h2>Student Mark Sheet Generator</h2>

  <form id="form_sangam_27">

    <label>Student Name:</label><br>
    <input type="text" id="studentname_sangam_27" name="studentname_sangam_27"><br><br>

    <label>Roll Number:</label><br>
    <input type="number" id="roll_sangam_27" name="roll_sangam_27"><br><br>

    <label>Marks in English:</label><br>
    <input type="number" id="english_sangam_27" name="english_sangam_27" min="0" max="100"><br><br>

    <label>Marks in Math:</label><br>
    <input type="number" id="math_sangam_27" name="math_sangam_27" min="0" max="100"><br><br>

    <label>Marks in Science:</label><br>
    <input type="number" id="science_sangam_27" name="science_sangam_27" min="0" max="100"><br><br>

    <button type="button" onclick="generateMarksheet()">Generate Marksheet</button>

  </form>

  <h3>Result</h3>
  <p id="output_sangam_27"></p>

</form>
<script src="stuMarkSheet.js"></script>
</body>
```

```

function generateMarksheet() {
    let name = document.getElementById("studentname_sangam_27").value.trim();
    let roll = document.getElementById("roll_sangam_27").value;
    let eng = document.getElementById("english_sangam_27").value;
    let math = document.getElementById("math_sangam_27").value;
    let sci = document.getElementById("science_sangam_27").value;

    if (name === "" || roll === "" || eng === "" || math === "" || sci === "") {
        alert("All fields are required.");
        return;
    }

    eng = Number(eng);
    math = Number(math);
    sci = Number(sci);

    if (eng < 0 || eng > 100 || math < 0 || math > 100 || sci < 0 || sci > 100) {
        alert("Marks must be between 0 and 100.");
        return;
    }

    let total = eng + math + sci;
    let percentage = total / 3;

    let result;
    let grade;

    if (eng >= 40 && math >= 40 && sci >= 40) {
        result = "Pass";

        if (percentage >= 80) {
            grade = "A";
        } else if (percentage >= 60) {
            grade = "B";
        } else {
            grade = "C";
        }
    } else {
        result = "Fail";
        grade = "Fail";
    }

    document.getElementById("output_sangam_27").innerHTML =
        "Student Name: " + name + "<br>" +
        "Roll Number: " + roll + "<br>" +
        "Total Marks: " + total + "<br>" +
        "Percentage: " + percentage.toFixed(2) + "%<br>" +
        "Result: " + result + "<br>" +
        "Grade: " + grade;
}

```

3. Output Snapshot

Student Mark Sheet Generator

Student Name:

Roll Number:

Marks in English:

Marks in Math:

Marks in Science:

Result

Student Name: Ranjit

Roll Number: 34

Total Marks: 264

Percentage: 88.00%

Result: Pass

Grade: A

4. Conclusion

In this assignment, a marksheet generator was created that performs calculations dynamically using JavaScript.

Validation ensures marks are within range and results are generated correctly. This task helped in understanding basic calculations and conditional statements in JavaScript.

C. SIM Card Registration Form

1. Introduction

This assignment focuses on building a SIM Card Registration Form using HTML and JavaScript.

The form collects personal information such as full name, citizenship number, SIM type, date of birth, nationality, and acceptance of terms.

JavaScript validation ensures that the user meets age requirements and enters valid information.

2. Code Snapshot

```
<body>
  <h2>SIM Card Registration Form</h2>

  <form id="form_sangam_27">
    <label>Full Name:</label><br>
    <input type="text" id="fullname_sangam_27" name="fullname_sangam_27">
    <br><br>

    <label>Citizenship Number:</label><br>
    <input type="text" id="citizenship_sangam_27" name="citizenship_sangam_27" maxlength="20"
      | oninput="this.value = this.value.replace(/[^\d-]/g, '')">
    <br><br>

    <label>SIM Type:</label><br>
    <input type="radio" id="prepaid_sangam_27" name="simtype_sangam_27" value="Prepaid"> Prepaid

    <input type="radio" id="postpaid_sangam_27" name="simtype_sangam_27" value="Postpaid"> Postpaid
    <br><br>

    <label>Date of Birth:</label><br>
    <input type="date" id="dob_sangam_27" name="dob_sangam_27" max="">
    <br><br>

    <label>Nationality:</label><br>
    <select id="nationality_sangam_27" name="nationality_sangam_27">
      <option value="">--Select Nationality--</option>
      <option value="Nepali">Nepali</option>
      <option value="Indian">Indian</option>
      <option value="Other">Other</option>
    </select>
    <br><br>

    <input type="checkbox" id="terms_sangam_27" name="terms_sangam_27">
    Accept Terms & Conditions
    <br><br>

    <button type="button" onclick="validateSIM()">Register SIM</button>
  </form>
  <p id="message_sangam_27" style="color: green; font-weight: bold;"></p>
  <script src="simForm.js"></script>
</body>
```

```

function validateSIM() {

    let name = document.getElementById("fullname_sangam_27").value.trim();
    let citizenship = document.getElementById("citizenship_sangam_27").value.trim();
    let simType = document.querySelector('input[name="simtype_sangam_27"]:checked');
    let dob = document.getElementById("dob_sangam_27").value;
    let nationality = document.getElementById("nationality_sangam_27").value;
    let terms = document.getElementById("terms_sangam_27").checked;

    let namePattern = /^[A-Za-z\s]+$/;
    let citizenshipPattern = /^d{10}$/;

    if(name === "" || citizenship === "" || dob === "" || nationality === "") {
        alert("All fields are required.");
        return;
    }

    if(!namePattern.test(name)) {
        alert("Name must contain only letters.");
        return;
    }

    if(!citizenshipPattern.test(citizenship)) {
        alert("Citizenship must contain only digits and be at least 10 numbers.");
        return;
    }

    let birthDate = new Date(dob);
    let todayDate = new Date();
    let age = todayDate.getFullYear() - birthDate.getFullYear();
    let monthDiff = todayDate.getMonth() - birthDate.getMonth();

    if (monthDiff < 0 ||
        (monthDiff === 0 && todayDate.getDate() < birthDate.getDate())) {
        age--;
    }

    if(age < 18) {
        alert("Age must be 18 or above.");
        return;
    }

    if(!simType) {
        alert("Please select SIM type.");
        return;
    }

    if(nationality === "") {
        alert("Please select nationality.");
        return;
    }
}

```


3. Output Snapshot

SIM Card Registration Form

Full Name:

Aman Rai

Citizenship Number:

1238735267

SIM Type:

☒ Prepaid ☐ Postpaid

Date of Birth:

03/03/2001



Nationality:

Nepali



☒ Accept Terms & Conditions

Register SIM

SIM Registration Successful!

4. Conclusion

In this assignment, a SIM registration form was designed with proper validation rules. The use of JavaScript helped prevent incorrect data submission. This task enhanced understanding of form validation and logical conditions.

D. Online Course Enrollment Form

1. Introduction

This assignment is about creating an Online Course Enrollment Form using HTML and JavaScript.

The form collects student details including name, email, course selection, study mode, and experience information.

JavaScript validation ensures that required fields are filled correctly and conditions are properly checked.

2. Code Snapshot

```
<body>
  <h2>Online Course Enrollment Form</h2>

  <form id="form_sangam_27">
    <label>Student Name:</label><br>
    <input type="text" id="studentname_sangam_27" name="studentname_sangam_27"><br><br>

    <label>Email:</label><br>
    <input type="text" id="email_sangam_27" name="email_sangam_27"><br><br>

    <label>Course Name:</label><br>
    <select id="course_sangam_27" name="course_sangam_27">
      <option value="">--Select Course--</option>
      <option value="Web Development">Web Development</option>
      <option value="Graphic Design">Graphic Design</option>
      <option value="Data Science">Data Science</option>
    </select>
    <br><br>

    <label>Mode of Study:</label><br>
    <input type="radio" id="online_sangam_27" name="mode_sangam_27" value="Online"> Online
    <input type="radio" id="offline_sangam_27" name="mode_sangam_27" value="Offline"> Offline
    <br><br>

    <label>Previous Experience:</label><br>
    <input type="radio" id="experience_yes_sangam_27" name="experience_sangam_27" value="Yes"> Yes
    <input type="radio" id="experience_no_sangam_27" name="experience_sangam_27" value="No"> No
    <br><br>

    <label id="experienceLabel_sangam_27">Experience Details:</label><br>
    <textarea id="experienceDetails_sangam_27" name="experienceDetails_sangam_27" rows="4" cols="50"></textarea>
    <br><br>

    <button type="button" onclick="validateEnrollment()">Enroll</button>
  </form>
  <script src="onlineCourse.js"></script>
</body>
```

```

function showExperience() {
    let yes = document.getElementById("experience_yes_sangam_27").checked;
    let details = document.getElementById("experienceDetails_sangam_27");
    if (yes) {
        details.style.display = "block";
    } else {
        details.style.display = "none";
        details.value = "";
    }
}

document.getElementById("experience_yes_sangam_27").onclick = showExperience;
document.getElementById("experience_no_sangam_27").onclick = showExperience;

function validateEnrollment() {
    let name = document.getElementById("studentname_sangam_27").value.trim();
    console.log(name);
    let email = document.getElementById("email_sangam_27").value.trim();
    console.log(email);
    let course = document.getElementById("course_sangam_27").value;

    let modeOnline = document.getElementById("online_sangam_27").checked;
    let modeOffline = document.getElementById("offline_sangam_27").checked;

    let experienceYes = document.getElementById("experience_yes_sangam_27").checked;
    let experienceNo = document.getElementById("experience_no_sangam_27").checked;
    let experienceDetails = document.getElementById("experienceDetails_sangam_27").value.trim();

    let namePattern = /^[A-Za-z\s]+$/;
    let emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;

    if (name === "" || email === "") {
        alert("Name and email are required.");
        return;
    }

    if (!namePattern.test(name)) {
        console.log("Name validation failed");
        alert("Name must contain only letters.");
        return;
    }

    if (!emailPattern.test(email)) {
        console.log("Email validation failed");
        alert("Please enter a valid email.");
        return;
    }

    if (course === "") {
        console.log("Course validation failed");
        alert("Please select a course.");
        return;
    }

    if (!modeOnline && !modeOffline) {
        console.log("Mode validation failed");
        alert("Please select mode of study.");
        return;
    }

    if (!experienceYes && !experienceNo) {
        console.log("Experience validation failed");
        alert("Please select if you have previous experience.");
        return;
    }

    if (experienceYes && experienceDetails === "") {
        console.log("Experience details validation failed");
        alert("Please provide your experience details.");
        return;
    }

    console.log("All validations passed");
    console.log("Enrollment Successful for : ", name, "Email: ", email);
    alert("Enrollment Successful!");
}

```

3. Output Snapshot

Online Course Enrollment Form

Student Name:

Ranjit Singh

Email:

singh2@gmail.com

Course Name:

Web Development ▾

Mode of Study:

☒ Online ☐ Offline

Previous Experience:

☒ Yes ☐ No

Experience Details:

basic level. only know html and css.

Enroll

This page says

Enrollment Successful!

OK

4. Conclusion

In this assignment, a course enrollment form was developed with conditional validation.

The task helped in understanding how to handle dropdowns, radio buttons, text areas, and validation using JavaScript.

E. Hospital Appointment Booking Form

1. Introduction

This assignment is about designing a Hospital Appointment Booking Form using HTML and JavaScript.

The form collects patient information such as name, age, phone number, department, appointment date, and time slot. JavaScript validation ensures valid input and prevents booking with incorrect or incomplete details.

2. Code Snapshot

```
<body>
  <h2>Hospital Appointment Booking Form</h2>

  <form id="form_sangam_27">

    <label>Patient Name:</label><br>
    <input type="text" id="patientname_sangam_27" name="patientname_sangam_27"><br><br>

    <label>Age:</label><br>
    <input type="number" id="age_sangam_27" name="age_sangam_27"><br><br>

    <label>Phone Number:</label><br>
    <input type="text" id="phone_sangam_27" name="phone_sangam_27" maxlength="10"
      oninput="this.value=this.value.replace(/[^0-9]/g,'')"><br><br>

    <label>Department:</label><br>
    <select id="department_sangam_27" name="department_sangam_27">
      <option value="">---Select Department---</option>
      <option value="Cardiology">Cardiology</option>
      <option value="Neurology">Neurology</option>
      <option value="Orthopedics">Orthopedics</option>
      <option value="Pediatrics">Pediatrics</option>
    </select>
    <br><br>

    <label>Appointment Date:</label><br>
    <input type="date" id="appointment_sangam_27" name="appointment_sangam_27"><br><br>

    <label>Time Slot:</label><br>
    <select id="timeslot_sangam_27" name="timeslot_sangam_27">
      <option value="">---Select Time Slot---</option>
      <option value="9:00 AM - 10:00 AM">9:00 AM - 10:00 AM</option>
      <option value="10:00 AM - 11:00 AM">10:00 AM - 11:00 AM</option>
      <option value="11:00 AM - 12:00 PM">11:00 AM - 12:00 PM</option>
      <option value="1:00 PM - 2:00 PM">1:00 PM - 2:00 PM</option>
    </select>
    <br><br>

    <button type="button" onclick="bookAppointment()">Book Appointment</button>

  </form>

  <script src="hospitalForm.js"></script>
</body>
```

```

function bookAppointment() {
    let name = document.getElementById("patientname_sangam_27").value.trim();
    let age = document.getElementById("age_sangam_27").value.trim();
    let phone = document.getElementById("phone_sangam_27").value.trim();
    let department = document.getElementById("department_sangam_27").value;
    let appointmentDate = document.getElementById("appointment_sangam_27").value;
    let timeslot = document.getElementById("timeslot_sangam_27").value;

    let namePattern = /^[A-Za-z\s]+$/;
    let phonePattern = /^(98|97)\d{8}$/;

    let today = new Date();
    today.setHours(0,0,0,0);
    let selectedDate = new Date(appointmentDate);

    if (name === "" || !namePattern.test(name)) {
        alert("Please enter a valid name (letters only).");
        return;
    }

    if (age === "" || Number(age) <= 0) {
        alert("Please enter a valid age greater than 0.");
        return;
    }

    if (!phonePattern.test(phone)) {
        alert("Phone number must be 10 digits and start with 98 or 97.");
        return;
    }

    if (department === "") {
        alert("Please select a department.");
        return;
    }

    if (appointmentDate === "" || selectedDate < today) {
        alert("Appointment date cannot be in the past.");
        return;
    }

    if (timeslot === "") {
        alert("Please select a time slot.");
        return;
    }

    alert("Appointment booked successfully for " + name + "!");
}

```

3. Output Snapshot

Hospital Appointment Booking Form

Patient Name:

Shradha Khapra

Age:

27

Phone Number:

9836476244

Department:

Cardiology

Appointment Date:

03/07/2026



Time Slot:

11:00 AM - 12:00 PM



Book Appointment

This page says

Appointment booked successfully for Shradha Khapra!

OK

4. Conclusion

In this assignment, a hospital appointment form was successfully created with proper validation rules.

This task improved understanding of form handling, date validation, and user confirmation messages using JavaScript.