



CET-223

Web Technologies

Experiment # 03

Experiment Title

HTML Forms and Validation Techniques

Assessment of CLO(s): 03

Performed on _____

Student Name:			
Roll No.		Group	
Semester		Session	

Total (Max)	Performance (03)	Viva (03)	File (04)	Total (10)
Marks Obtained				
Remarks (if any)				

Experiment evaluated by

Instructor's Name	Engr. Bilal Iqbal		
Date		Signature	

Objective:

- Learn how to create a form using HTML.
- Explore various form elements such as text fields, radio buttons, checkboxes, and dropdowns.
- Understand how to apply client-side validation using HTML5 attributes.
- Get familiar with different types of form input validation methods.

Creating a Simple HTML Form

1. Create an HTML document called simple_form.html.
2. Add a form with the following elements:
 - Name (text field)
 - Email (email field)
 - Password (password field)
 - Submit button

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Simple Form</title>
</head>
<body>
  <h1>Simple HTML Form</h1>
  <form>
    <label for="name">Name:</label>
    <input type="text" id="name" name="name" required><br><br>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email" required><br><br>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required><br><br>

    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

Using Radio Buttons, Checkboxes, and Dropdowns

1. Extend your simple_form.html by adding:
 - Gender (radio buttons for Male and Female)
 - Interests (checkboxes for various hobbies)
 - Country (a dropdown menu with at least 3 options)

```
<form>
  <label>Gender:</label><br>
  <input type="radio" id="male" name="gender" value="male" required>
  <label for="male">Male</label><br>
  <input type="radio" id="female" name="gender" value="female" required>
  <label for="female">Female</label><br><br>

  <label>Interests:</label><br>
  <input type="checkbox" id="coding" name="interests" value="coding">
  <label for="coding">Coding</label><br>
  <input type="checkbox" id="reading" name="interests" value="reading">
  <label for="reading">Reading</label><br><br>

  <label for="country">Country:</label>
  <select id="country" name="country" required>
    <option value="">Select your country</option>
    <option value="usa">USA</option>
    <option value="uk">UK</option>
    <option value="pakistan">Pakistan</option>
  </select><br><br>

  <input type="submit" value="Submit">
</form>
```

HTML5 Form Validation Attributes

1. Modify your form to include the following validation rules:

- Name: At least 3 characters long.
- Email: Must follow the email format.
- Password: Must be at least 8 characters.
- Add a field for phone number that only accepts digits.

```
<form>

  <label for="name">Name (at least 3 characters):</label>
  <input type="text" id="name" name="name" minlength="3" required><br><br>

  <label for="email">Email:</label>
  <input type="email" id="email" name="email" required><br><br>

  <label for="password">Password (at least 8 characters):</label>
  <input type="password" id="password" name="password" minlength="8"
required><br><br>

  <label for="phone">Phone (digits only):</label>
  <input type="tel" id="phone" name="phone" pattern="[0-9]{10}"
required><br><br>
```

```
<input type="submit" value="Submit">
</form>
```

Custom Validation Messages

1. Add custom error messages using the *oninvalid* and *setCustomValidity* methods.

```
<form>
  <label for="name">Name (at least 3 characters):</label>
  <input type="text" id="name" name="name" minlength="3" required
    oninvalid="this.setCustomValidity('Name must be at least 3
characters long')"
    oninput="this.setCustomValidity('')"><br><br>

  <label for="email">Email:</label>
  <input type="email" id="email" name="email" required
    oninvalid="this.setCustomValidity('Please enter a valid email
address')"
    oninput="this.setCustomValidity('')"><br><br>

  <label for="password">Password (at least 8 characters):</label>
  <input type="password" id="password" name="password" minlength="8" required
    oninvalid="this.setCustomValidity('Password must be at least 8
characters long')"
    oninput="this.setCustomValidity('')"><br><br>

  <input type="submit" value="Submit">
</form>
```

Validating Number and Date Fields

1. Add fields for age (number) and birthdate (date).
2. Ensure age is between 18 and 100, and the birthdate must be a past date.

```
<form>
  <label for="age">Age (18-100):</label>
  <input type="number" id="age" name="age" min="18" max="100"
required><br><br>

  <label for="birthdate">Birthdate:</label>
  <input type="date" id="birthdate" name="birthdate" max="2023-12-31"
required><br><br>

  <input type="submit" value="Submit">
</form>
```

Lab Task:

1.Create the HTML form given below. Attach the Output and code.

Name:

Gender: ☐ Male ☐ Female

Country:

Message:

☐ Subscribe?

2.Create the student registration form given below. Attach the Output and code.

STUDENT REGISTRATION FORM

FIRST NAME	<input type="text"/>	(max 30 characters a-z and A-Z)																									
LAST NAME	<input type="text"/>	(max 30 characters a-z and A-Z)																									
DATE OF BIRTH	Day: <input type="text"/> Month: <input type="text"/> Year: <input type="text"/>																										
EMAIL ID	<input type="text"/>																										
MOBILE NUMBER	<input type="text"/>	(10 digit number)																									
GENDER	Male <input type="radio"/> Female <input type="radio"/>																										
ADDRESS	<input type="text"/>																										
CITY	<input type="text"/>	(max 30 characters a-z and A-Z)																									
PIN CODE	<input type="text"/>	(6 digit number)																									
STATE	<input type="text"/>	(max 30 characters a-z and A-Z)																									
COUNTRY	<input type="text" value="India"/>																										
HOBBIES	Drawing <input type="checkbox"/> Singing <input type="checkbox"/> Dancing <input type="checkbox"/> Sketching <input type="checkbox"/> Others <input type="checkbox"/> <input type="text"/>																										
QUALIFICATION	<table><thead><tr><th>Sl.No.</th><th>Examination</th><th>Board</th><th>Percentage</th><th>Year of Passing</th></tr></thead><tbody><tr><td>1</td><td>Class X</td><td><input type="text"/></td><td><input type="text"/></td><td><input type="text"/></td></tr><tr><td>2</td><td>Class XII</td><td><input type="text"/></td><td><input type="text"/></td><td><input type="text"/></td></tr><tr><td>3</td><td>Graduation</td><td><input type="text"/></td><td><input type="text"/></td><td><input type="text"/></td></tr><tr><td>4</td><td>Masters</td><td><input type="text"/></td><td><input type="text"/></td><td><input type="text"/></td></tr></tbody></table>	Sl.No.	Examination	Board	Percentage	Year of Passing	1	Class X	<input type="text"/>	<input type="text"/>	<input type="text"/>	2	Class XII	<input type="text"/>	<input type="text"/>	<input type="text"/>	3	Graduation	<input type="text"/>	<input type="text"/>	<input type="text"/>	4	Masters	<input type="text"/>	<input type="text"/>	<input type="text"/>	(10 char max) (upto 2 decimal)
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4	Masters	<input type="text"/>	<input type="text"/>	<input type="text"/>																							
COURSES APPLIED FOR	BCA <input type="radio"/> B.Com <input type="radio"/> B.Sc <input type="radio"/> B.A <input type="radio"/>																										
<input type="button" value="Submit"/> <input type="button" value="Reset"/>																											