

LAB: 1

TITLE: Web Programming Skill (HTML/PHP/ASP...) Web Development Tools.

OBJECTIVE:

To create a basic registration form using HTML.

THEORY:

The Internet is a vast network of connected computers and servers, enabling global communication, information sharing, and access to resources. Web programming focuses on building dynamic, interactive, and user-friendly websites using tools like databases, server-side scripting, and client-side scripting to process data, display content, and interact with users.

Web programming involves writing code that allows websites to function and engage users. Mastery in this field involves understanding various client-side and server-side languages, databases, and frameworks. Client-side programming is focused on the user interface and experience, using languages like HTML, CSS, and JavaScript. Server-side programming manages backend logic, database interactions, and application flow with languages like PHP and Python. Additionally, web programming relies on databases like MySQL, MongoDB, and PostgreSQL to store and retrieve data.

Web development tools help streamline the creation and maintenance of websites, providing essential functions like code editing, debugging, and deployment. These tools improve efficiency, collaboration, and code quality. Code editors and Integrated Development Environments (IDEs) like Visual Studio Code, Sublime Text, and PHPStorm make it easier to write and organize code, offering features like syntax highlighting, code completion, and error detection. Version control systems like Git, along with platforms such as GitHub and GitLab, enable developers to track changes, collaborate, and manage project versions to ensure updated, conflict-free code.

Beyond code editors and version control, web developers use various tools to enhance productivity and website performance. Frameworks like React, Angular, and Laravel simplify front-end and back-end development. Testing tools like Selenium and Postman automate testing to ensure functionality. Database management tools like phpMyAdmin or MongoDB Compass simplify database interaction, while design tools such as Figma and Adobe XD assist in creating user interfaces. Hosting platforms like AWS, Netlify, and Heroku help deploy web applications, making them accessible worldwide. These tools are essential for building secure, high-quality, and scalable web applications.

CODE:

Q. WAP to create a registration form.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Registration Form</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f2f2f2;
      margin: 0;
      padding: 0;
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
    }
    .container {
      background-color: #fff;
      padding: 20px;
      border-radius: 8px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      width: 100%;
      max-width: 400px;
    }
    .container h2 {
      text-align: center;
      margin-bottom: 20px;
    }
    .form-group {
      margin-bottom: 15px;
    }
    .form-group label {
      display: block;
      margin-bottom: 5px;
    }
    .form-group input, .form-group select, .form-group textarea {
      width: 100%;
      padding: 10px;
    }
```

```

        border: 1px solid #ccc;
        border-radius: 5px;
    }

    .form-group button {
        width: 100%;
        padding: 10px;
        background-color: #4CAF50;
        color: white;
        border: none;
        border-radius: 5px;
        cursor: pointer;
    }

    .form-group button:hover {
        background-color: #45a049;
    }
}
</style>
</head>
<body>
    <div class="container">
        <h2>Registration Form</h2>
        <form action="/submit" method="post">
            <div class="form-group">
                <label for="fullName">Full Name</label>
                <input type="text" id="fullName" name="fullName" placeholder="Enter
your full name" required>
            </div>
            <div class="form-group">
                <label for="dob">Date of Birth</label>
                <input type="date" id="dob" name="dob" required>
            </div>
            <div class="form-group">
                <label for="phone">Phone Number</label>
                <select id="country-code" required>
                    <option value="+1">+1 (USA)</option>
                    <option value="+44">+44 (UK)</option>
                    <option value="+91">+91 (India)</option>
                    <option value="+977" selected>+977 (Nepal)</option>
                    <option value="+61">+61 (Australia)</option>
                </select>
                <input type="tel" required pattern="[0-9]{10}" placeholder="Enter your
phone number" required>
            </div>

```

```
<div class="form-group">
    <label for="academicBatch">Academic Batch</label>
    <input type="text" id="academicBatch" name="academicBatch"
placeholder="Enter your academic batch" required>
</div>

<div class="form-group">
    <label for="faculty">Faculty</label>
    <select id="Faculty" required>
        <option value="BCT" selected>BCT</option>
        <option value="BCE">BCE</option>
        <option value="BEI">BEI</option>
        <option value="BEL">BEL</option>
    </select>
</div>

<div class="form-group">
    <label for="about">About Yourself</label>
    <textarea id="about" name="about" rows="4" placeholder="Tell us about
yourself" required></textarea>
</div>

<div class="form-group">
    <label for="email">Email</label>
    <input type="email" id="email" name="email" placeholder="Enter your
email" required>
</div>

<div class="form-group">
    <button type="submit">Register</button>
</div>

<div class="form-group">
    <button type="reset">Cancel</button>
</div>
</form>
</div>
</body>
</html>
```

OUTPUT:

Registration Form

Full Name

Simran Gautam

Date of Birth

11/08/2002

Phone Number

+977 (Nepal)

9863132766

Academic Batch

2077

Faculty

BCT

About Yourself

I'm an engineering student.

Email

smrngtm08@gmail.com

Register

Cancel

DISCUSSION AND CONCLUSION

After completing the lab titled “Web Programming Skill (HTML/PHP/ASP...) Web Development Tools,” we gained a deeper understanding of web development and its essential tools. We learned the importance of HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) in building websites. HTML provides the foundation and structure for web pages, while CSS enhances their visual design and presentation.

During the lab, we developed a login page using HTML, incorporating fields such as Name, Date of Birth, Mobile number, Batch, Faculty, and a self-description box. We added a country code for the mobile number and ensured that all required fields had to be filled before the form could be submitted. This experience helped strengthen our web development skills and opened up new opportunities for a career in web development.