

Experiment 1: Student Registration Form with HTML5 Validation

Aim:

To create a student registration form using HTML5 with built-in form validation for name, email, and age fields.

Objectives:

- Design a student registration form using HTML5.
- Apply input validation using HTML5 attributes like required, pattern, and type.
- Enhance user experience with real-time validation feedback.
- Use CSS to style the form and make it visually appealing.
- Implement basic form submission behavior using JavaScript.

Software Requirements:

- Visual Studio Code / Sublime Text
- Any modern browser (Chrome/Firefox/Edge)
- Live Server Extension (for local preview)

Code Implementation:

HTML + CSS + JavaScript:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Student Registration Form</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background: #f0f0f0;
    }
    .form-container {
      max-width: 400px;
      margin: 2rem auto;
      padding: 2rem;
      background: white;
      border-radius: 8px;
      box-shadow: 0 2px 10px rgba(0,0,0,0.1);
    }
    .form-container h2 {
      text-align: center;
      margin-bottom: 1.5rem;
    }
    label {
      display: block;
      margin-top: 1rem;
    }
  </style>
</head>
<body>
  <div class="form-container">
    <h2>Student Registration Form</h2>
    <div>
      <div>
        <label>Name</label>
        <input type="text" required/>
      </div>
      <div>
        <label>Email</label>
        <input type="email" required/>
      </div>
      <div>
        <label>Age</label>
        <input type="text" pattern="[0-9]{1,3}" required/>
      </div>
      <div>
        <input type="submit" value="Register" />
      </div>
    </div>
  </div>
</body>
</html>
```

```

input[type="text"],
input[type="email"],
input[type="number"] {
  width: 100%;
  padding: 0.5rem;
  margin-top: 0.3rem;
  border: 1px solid #ccc;
  border-radius: 5px;
}
button {
  margin-top: 1.5rem;
  width: 100%;
  padding: 0.7rem;
  background-color: #3498db;
  color: white;
  border: none;
  border-radius: 5px;
  cursor: pointer;
}
button:hover {
  background-color: #2980b9;
}
</style>
</head>
<body>

<div class="form-container">
  <h2>Student Registration</h2>
  <form onsubmit="return validateForm()" novalidate>
    <label for="name">Full Name:</label>
    <input type="text" id="name" name="name" pattern="[A-Za-z\s]+" required title="Name should contain only
letters and spaces">

    <label for="email">Email Address:</label>
    <input type="email" id="email" name="email" required title="Enter a valid email address">

    <label for="age">Age:</label>
    <input type="number" id="age" name="age" min="10" max="100" required title="Age must be between 10 and
100">

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

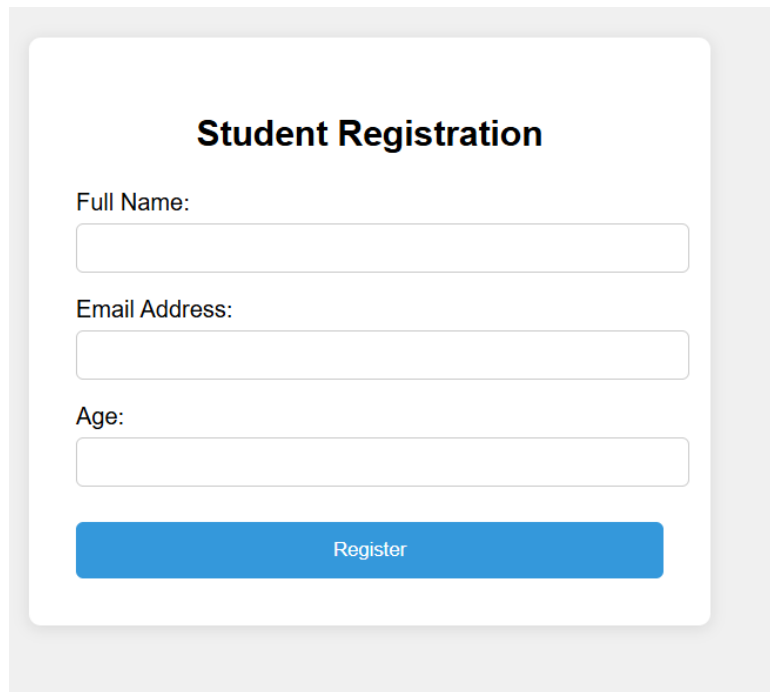
<script>
function validateForm() {
  const form = document.querySelector('form');
  if (!form.checkValidity()) {

```

```
        form.reportValidity();
        return false;
    }
    alert("Registration successful!");
    return true;
}
</script>

</body>
</html>
```

Expected Output:



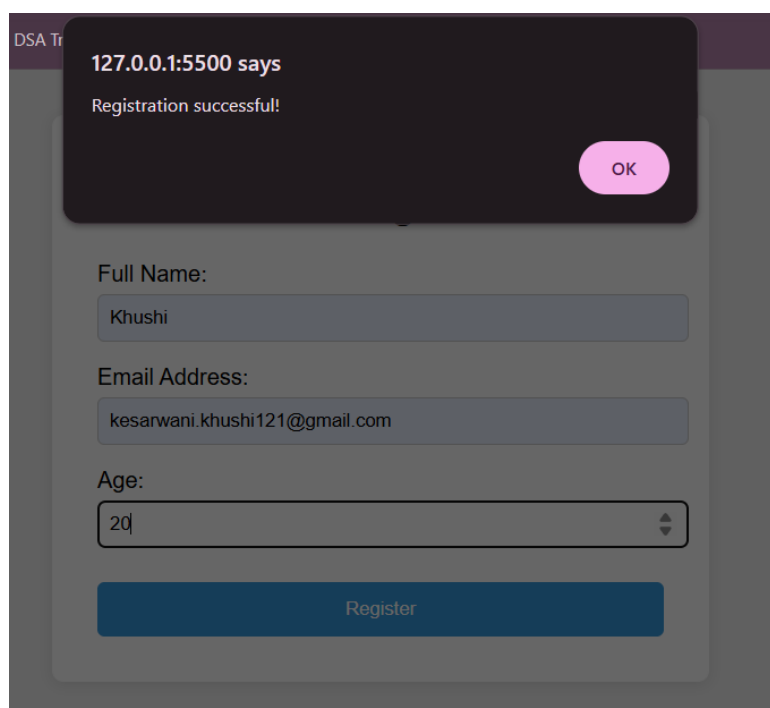
Student Registration

Full Name:

Email Address:

Age:

Register



DSA Tr

127.0.0.1:5500 says
Registration successful!

OK

Full Name:

Email Address:

Age:

Register