

EXPERIMENT-1

AIM

To design and implement a basic student registration form using HTML5 that collects user information such as name, email, and age, with built-in validation for each field.

OBJECTIVE

- To understand and apply basic HTML5 form elements.
- To use HTML5 input attributes for form validation (e.g., required, type, min, pattern).
- To build a responsive, user-friendly registration form.

THEORY

HTML5 provides new input types and attributes that simplify form validation and improve user experience. For instance:

- type="email" ensures a proper email format.
- type="number" with min and max restricts age input.
- required ensures that the field cannot be left empty.

These validations are performed client-side, reducing unnecessary server requests and improving performance.

CODE

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Student Registration Form</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background: #f4f4f4;
      padding: 20px;
    }
    .container {
      background: #fff;
      max-width: 400px;
      margin: auto;
      padding: 30px;
      border-radius: 10px;
      box-shadow: 0 0 10px rgba(0,0,0,0.1);
    }
  </style>
</head>
<body>
  <div class="container">
    <h2>Student Registration Form</h2>
    <form>
      <input type="text" value="Name" required />
      <input type="email" value="Email" required />
      <input type="number" value="Age" min="18" max="60" required />
      <input type="submit" value="Register" />
    </form>
  </div>
</body>
</html>
```

```

}
h2 {
  text-align: center;
  margin-bottom: 20px;
}
label {
  display: block;
  margin: 15px 0 5px;
}
input[type="text"],
input[type="email"],
input[type="number"] {
  width: 100%;
  padding: 8px;
  box-sizing: border-box;
}
input[type="submit"] {
  margin-top: 20px;
  width: 100%;
  background-color: #28a745;
  color: white;
  padding: 10px;
  border: none;
  border-radius: 5px;
  font-size: 16px;
  cursor: pointer;
}
input[type="submit"]:hover {
  background-color: #218838;
}
</style>
</head>
<body>

<div class="container">
  <h2>Student Registration</h2>
  <form action="#" method="post">
    <label for="name">Full Name:</label>
    <input type="text" id="name" name="name" required pattern="[A-Za-z ]{2,}"
title="Please enter a valid name.">

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

    <label for="age">Age:</label>
    <input type="number" id="age" name="age" required min="16" max="100">

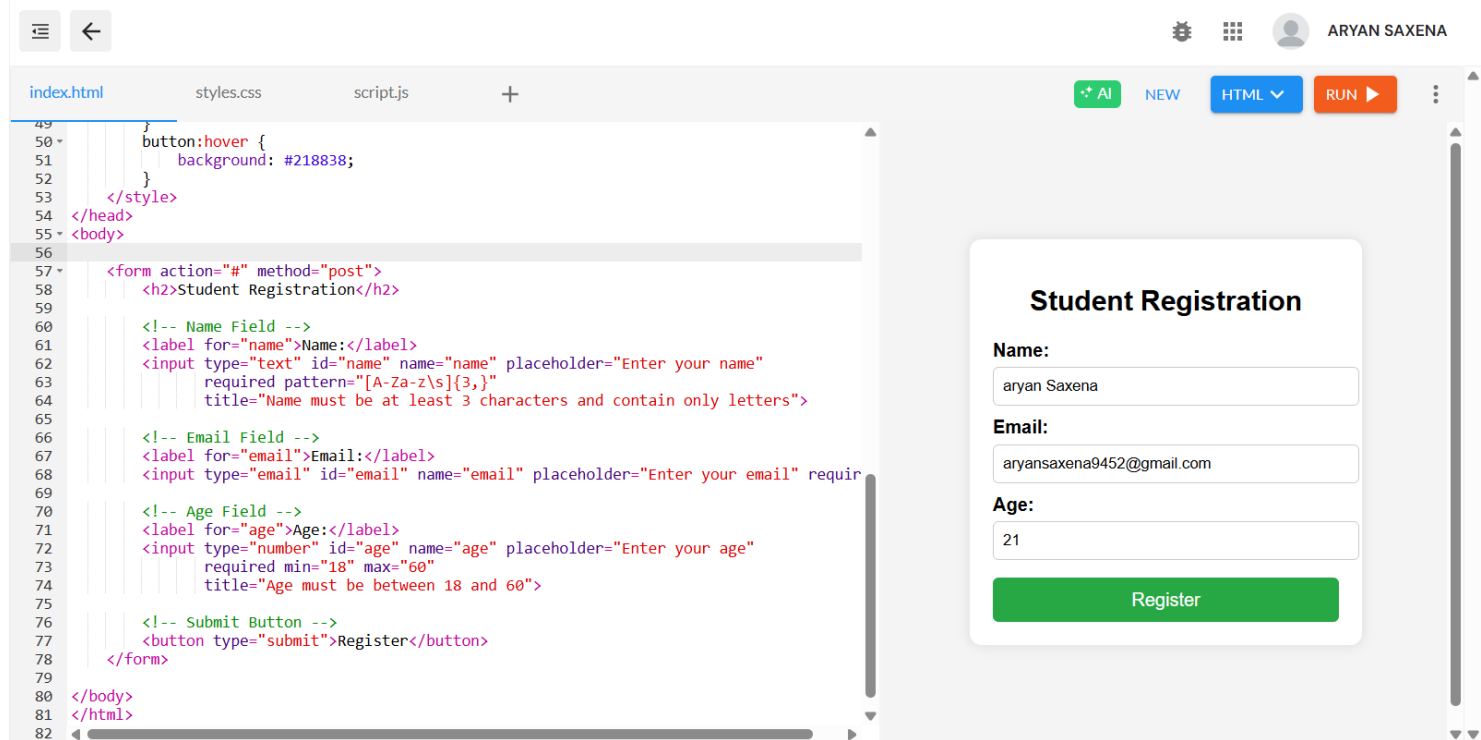
    <input type="submit" value="Register">
  </form>
</div>

</body>

```

```
</html>
```

OUTPUT



LEARNING OUTCOMES

- Create HTML forms with proper structure and styling.
- Implement HTML5 form validation without using JavaScript.
- Understand form submission and input data constraints.
- Enhance user experience through clean, validated forms.