EXPERIMENTS 2 :

Write JavaScript to validate the following fields of the Registration page. a) First Name (Name should contains alphabets and the length Should not be less than 6 characters). b) Password (Password should not be less than 6 characters length). c) E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com) d) Mobile Number (Phone number should contain 10 digits only). e) Last Name and Address (should not be Empty).

AIM :

The aim of this project is to create a registration form with proper validation for various input fields such as First Name, Password, Email, Mobile Number, Last Name, and Address using JavaScript for client-side validation and HTML/CSS for the structure and styling.

ALGORITHAM :

1. Start
   - Begin by setting up the registration form in HTML with fields for first name, last name, email, password, mobile number, and address.
2. Capture User Input:
   - When the user submits the form, capture the values entered in the form fields (first name, last name, password, email, mobile number, and address).
3. Validate First Name:
   - Check if the first name contains only alphabets using a regular expression `(^[A-Za-z]+$)`.
   - Ensure the length of the first name is at least 6 characters.
   - If the validation fails, display an alert message and stop the form submission.
4. Validate Password:
   - Ensure that the password has a minimum length of 6 characters.
   - If the password is shorter, show an alert and stop the form submission.
5. Validate Email:
   - Check if the email follows the standard pattern (e.g., name@domain.com) using `a regular expression (^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$).`
   - If the email is invalid, display an error message and prevent the form from being submitted.
6. Validate Mobile Number:
   - Ensure the mobile number contains exactly 10 digits using the regular expression (^[0-9]{10}$).
   - If it doesn't match, display an alert and prevent form submission.
7. Validate Last Name:

    o Check if the last name is not empty.
    o If it is empty, show an alert and halt the form submission.

8. Validate Address:
    o Ensure the address field is not empty.
    o If the address is left blank, show an alert and prevent form submission.
9. Submit Form:
    o If all the fields pass validation, display a success message (e.g., "Registration Successful!") and allow the form to be submitted.
10. End

□ End the validation process and, if everything is valid, the form is successfully submitted.

CODE :

```
<!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>

    /* General Styling */

    body {

      font-family: 'Arial', sans-serif;

      background-color: #f4f7fc;

      margin: 0;

      padding: 0;

      color: #333;

    }


    h2 {

      text-align: center;

      color: #4CAF50;

      padding-top: 20px;

    }
```

```
/* Form Container */
.form-container {
width: 50%;
margin: 30px auto;
padding: 20px;
background-color: #fff;
border-radius: 8px;
box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

/* Input Fields */
input[type="text"],
input[type="password"],
input[type="email"],
input[type="submit"],
textarea {
   width: 100%;
   padding: 12px;
   margin: 10px 0;
   border-radius: 4px;
   border: 1px solid #ddd;
   font-size: 16px;
}

/* Textarea Specific Styling */
textarea {
   resize: vertical;
   min-height: 100px;
}
```

```
input[type="submit"] {
    background-color: #4CAF50;
    color: white;
    border: none;
    cursor: pointer;
    font-size: 18px;
    transition: background-color 0.3s ease;
}

input[type="submit"]:hover {
    background-color: #45a049;
}

/* Labels */
label {
    font-weight: bold;
    display: block;
    margin: 10px 0 5px;
}

/* Error and Success Messages */
.error-message {
    color: red;
    font-size: 14px;
}

.success-message {
    color: green;
    font-size: 14px;
```

```
        }

        /* Responsive Design */
        @media screen and (max-width: 768px) {
            .form-container {
                width: 90%;
            }
        }
    </style>
</head>
<body>

    <h2>Registration Form</h2>

    <div class="form-container">
        <form id="registrationForm" onsubmit="return validateForm()">
            <!-- First Name -->
            <label for="firstName">First Name:</label>
            <input type="text" id="firstName" name="firstName" required><br>

            <!-- Last Name -->
            <label for="lastName">Last Name:</label>
            <input type="text" id="lastName" name="lastName" required><br>

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

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

        <!-- Mobile Number -->
        <label for="mobile">Mobile Number:</label>
        <input type="text" id="mobile" name="mobile" required><br>

        <!-- Address -->
        <label for="address">Address:</label>
        <textarea id="address" name="address" required></textarea><br>

        <!-- Submit Button -->
        <input type="submit" value="Register">
      </form>
    </div>

    <script src="validate.js"></script>
</body>
</html>
```

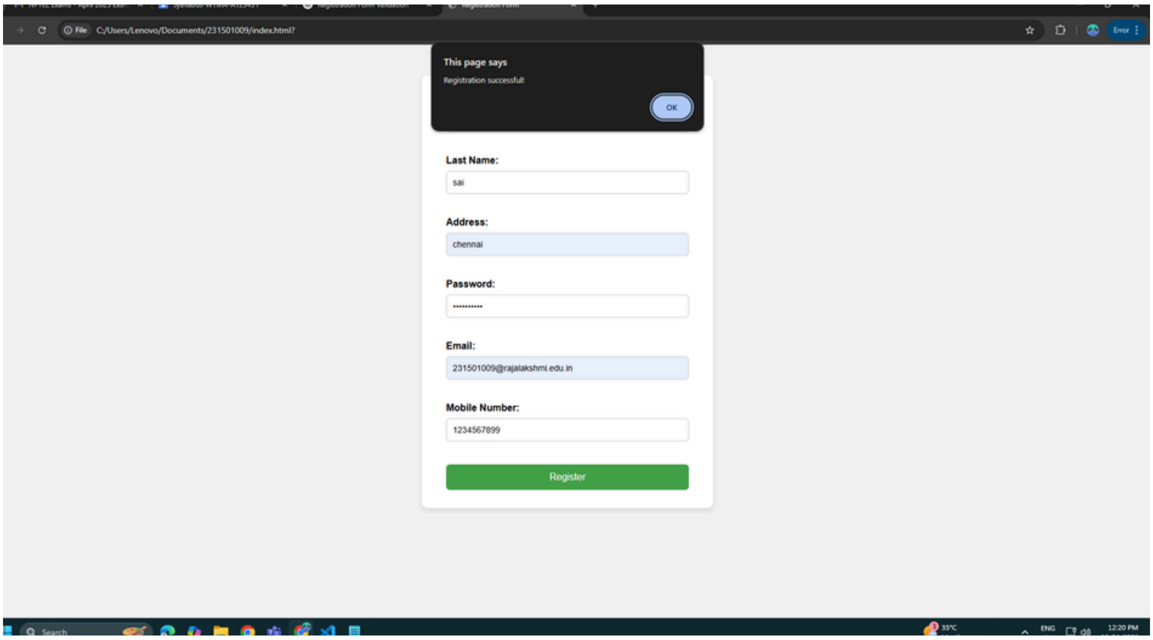
JAVASCRIPT :

```
function validateForm() {
    // Get values from form fields const firstName =
    document.getElementById("firstName").value; const
    lastName = document.getElementById("lastName").value;
    const password =
    document.getElementById("password").value; const email =
    document.getElementById("email").value; const mobile =
    document.getElementById("mobile").value; const address =
    document.getElementById("address").value;

    // First Name Validation: Must contain only alphabets and length >= 6
    const namePattern = /^[A-Za-z]+$/;
```

```
if (!namePattern.test(firstName) || firstName.length < 6) {
      alert("First Name must contain only alphabets and be at least 6 characters long.");
      return false;
  }

  // Password Validation: Must be at least 6 characters long
  if (password.length < 6) {
      alert("Password must be at least 6 characters long.");
      return false;
  }

  // Email Validation: Must follow standard email format
  const emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;
  if (!emailPattern.test(email)) {
      alert("Please enter a valid email address.");
      return false;
  }

  // Mobile Number Validation: Must contain exactly 10 digits
  const mobilePattern = /^[0-9]{10}$/;
  if (!mobilePattern.test(mobile)) {
      alert("Mobile number must be exactly 10 digits long.");
      return false;
  }

  // Last Name Validation: Must not be empty
  if (lastName.trim() === "") {
      alert("Last Name cannot be empty.");
      return false;
  }
```

```
    // Address Validation: Must not be empty
    if (address.trim() === "") {
        alert("Address cannot be empty.");
        return false;
    }

    // If all validations pass
    alert("Registration Successful!");
    return true;
}
```

OUTPUT :



C:/Users/Lenovo/Documents/231501009/index.html?

This page says

Registration successful!

Last Name: sai

Address: chennai

Password: ••••••••••

Email: 231501009@rajalakshmi.edu.in

Mobile Number: 1234567899

RESULT :

Thus the give task is executed successfully.