**Ex No :5 Form Validation Using Javascript**

**Date :**

**AIM:**

To Perform the Form validation using javascript programm.

**ALGORITHM**:

1. Start
2. Define a function named validateForm to validate the form.
3. Inside the validateForm function:
4. Get the form elements for first name, last name, email, mobile number, password, and confirm password.
5. Clear all error messages by selecting all elements with the class "error" and setting their innerHTML to an empty string.
6. Validate the first name:

If the first name contains any digits, display an error message below the first name input box indicating that the first name cannot contain numbers.

1. Validate the last name:

If the last name contains any digits, display an error message below the last name input box indicating that the last name cannot contain numbers.

1. Validate the email:

If the email does not contain the "@" symbol, display an error message below the email input box indicating that the email address must contain the "@" symbol.

1. Validate the mobile number:

If the mobile number does not have exactly 10 digits, display an error message below the mobile number input box indicating that the mobile number must have 10 digits.

1. Validate the password:

If the password does not contain at least one uppercase letter, one lowercase letter, and one number, display an error message below the password input box indicating the password requirements.

1. Validate the confirm password:

* If the confirm password does not match the password, display an error message below the confirm password input box indicating that the passwords do not match.
* If there are any errors prevent the form from being submitted by returning false.

1. End

**PROGRAM:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Validate Form Using JavaScript</title>

<style>

.container {

display: flex;

flex-direction: column;

align-items: center;

padding: 20px;

}

.label {

margin-bottom: 5px;

font-weight: bold;

}

.input {

padding: 10px;

border: 1px solid #ccc;

border-radius: 4px;

width: 300px;

margin-bottom: 10px;

}

.error {

color: red;

font-size: 12px;

margin-bottom: 5px;

}

.button {

padding: 10px 20px;

background-color: #4CAF50;

color: white;

border: none;

border-radius: 4px;

cursor: pointer;

}

</style>

</head>

<body>

<div class="container">

<h1>Validate Form Using JavaScript</h1>

<form onsubmit="return validateForm()">

<div class="label">First Name:</div>

<input type="text" id="firstName" class="input" required>

<div class="error" id="firstNameError"></div>

<div class="label">Last Name:</div>

<input type="text" id="lastName" class="input" required>

<div class="error" id="lastNameError"></div>

<div class="label">Email Address:</div>

<input type="text" id="email" class="input" required>

<div class="error" id="emailError"></div>

<div class="label">Mobile Number:</div>

<input type="tel" id="mobileNumber" class="input" required>

<div class="error" id="mobileNumberError"></div>

<div class="label">Password:</div>

<input type="password" id="password" class="input" required>

<div class="error" id="passwordError"></div>

<div class="label">Confirm Password:</div>

<input type="password" id="confirmPassword" class="input" required>

<div class="error" id="confirmPasswordError"></div>

<button type="submit" class="button">Submit</button>

</form>

</div>

<script>

function validateForm() {

// Get the form elements

var firstName = document.getElementById("firstName");

var lastName = document.getElementById("lastName");

var email = document.getElementById("email");

var mobileNumber = document.getElementById("mobileNumber");

var password = document.getElementById("password");

var confirmPassword = document.getElementById("confirmPassword");

// Clear all error messages

var errorMessages = document.getElementsByClassName("error");

for (var i = 0; i < errorMessages.length; i++) {

errorMessages[i].innerHTML = "";

}

// Validate first name

if (/\d/.test(firstName.value)) {

document.getElementById("firstNameError").innerHTML = "First name cannot contain numbers.";

}

// Validate last name

if (/\d/.test(lastName.value)) {

document.getElementById("lastNameError").innerHTML = "Last name cannot contain numbers.";

}

// Validate email

if (!email.value.includes("@")) {

document.getElementById("emailError").innerHTML = "Email address must contain @ symbol.";

}

// Validate mobile number

if (!/^\d{10}$/.test(mobileNumber.value)) {

document.getElementById("mobileNumberError").innerHTML = "Mobile number must have 10 digits.";

}

// Validate password

if (!/[a-z]/.test(password.value) || !/[A-Z]/.test(password.value) || !/\d/.test(password.value)) {

document.getElementById("passwordError").innerHTML = "Password must contain at least one uppercase letter, one lowercase letter, and one number.";

}

// Validate confirm password

if (confirmPassword.value !== password.value) {

document.getElementById("confirmPasswordError").innerHTML = "Passwords do not match.";

}

// Prevent form submission if there are errors

if (document.querySelectorAll('.error').length > 0) {

return false;

}

return true;

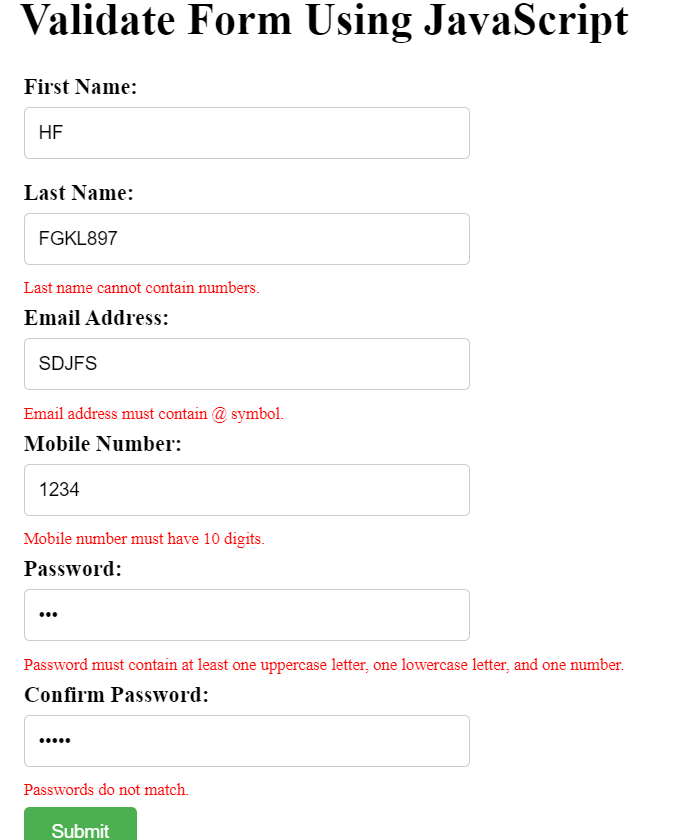
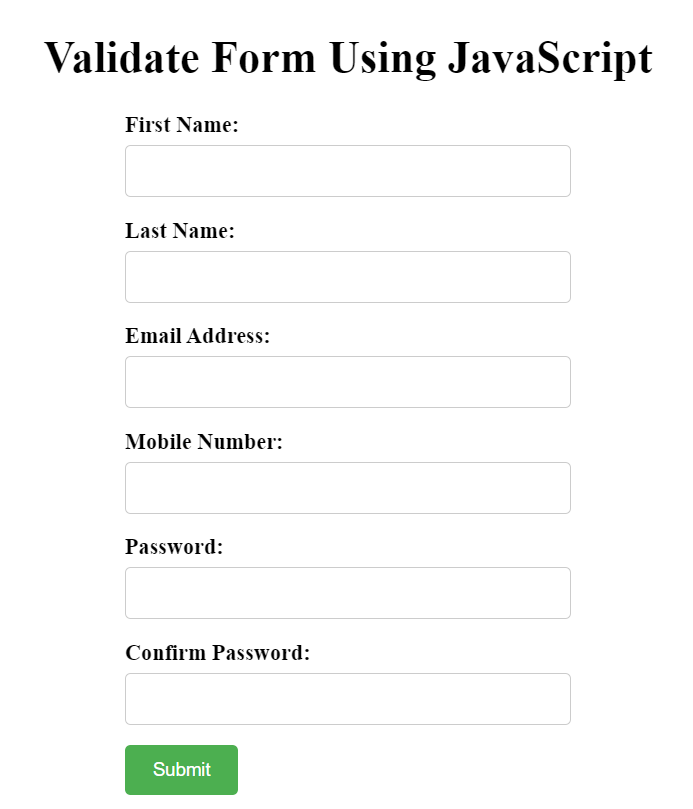
}

</script>

</body>

</html>

**OUTPUT:**

****

|  |  |
| --- | --- |
| **Code & Output(20)** |  |
| **Quiz(5)** |  |
| **Timely Submission(5)** |  |
| **Total(30)** |  |
| **Initial** |  |

**RESULT:**

Hence the output of the program is verified.