Academic Year: 2023 - 2024 SAP ID: 60003220131

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE CODE: DJS22ITL307 DATE: 3/11/23

COURSE NAME: Web Programming Laboratory CLASS: SY BTech

NAME: Ayush Vinod Upadhyay

ROLL NO: 1025

SAP ID: 60003220131

BRANCH: Information Technology

BATCH: 1

EXPERIMENT NO. 5

CO/LO: Develop web applications.

AIM / OBJECTIVE: Java Script: Form Validation using JavaScript.

DESCRIPTION OF EXPERIMENT:

Explain all the validations used in the experiment.

- 1. Full Name Validation:
 - Checks if the full name field is not empty.
- 2. Username Validation:
 - Ensures that the username field is not empty.
- 3. Email Validation:
 - Verifies if the email address is in a valid format using a regular expression.
- 4. Phone Number Validation:
 - Validates that the phone number consists of 10 digits using a regular expression.
- 5. Date of Birth Validation:
 - Requires the user to enter a date of birth.
- 6. Password Validation:
 - Ensures that the password field is not empty.

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7. Confirm Password Validation:

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- Checks if the confirm password field is not empty and matches the password field.
- 8. Gender Validation:
 - Requires the user to select a gender.
- 9. City Validation:
 - Ensures that a city is selected from the dropdown.
- 10. Nationality Validation:
 - Requires the user to select a nationality from the dropdown.
- 11. Address Validation:
 - Validates that the address field is not empty.
- 12. Father's Name Validation:
 - Ensures that the father's name field is not empty.
- 13. Mother's Name Validation:
 - Validates that the mother's name field is not empty.

SOURCE CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    link
href="https://cdn.jsdelivr.net/npm/tailwindcss@2.2.19/dist/tailwind.min.css"
rel="stylesheet">
    <title>Styled Form with Tailwind CSS</title>
</head>
<body class="bg-gray-200 flex items-center justify-center h-screen">
    <div class="max-w-md w-full bg-white p-6 rounded-md shadow-md">
        <form id="myForm" class="space-y-4">
            <h2 class="text-2xl font-semibold mb-4">User Registration</h2>
            <!-- Basic Information -->
            <div class="grid grid-cols-1 md:grid-cols-2 gap-4">
```



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```
<div>
                     <label for="fullName" class="block text-sm font-medium text-</pre>
gray-600">Full Name:</label>
                     <input type="text" id="fullName" name="fullName"</pre>
class="form-input mt-1">
                 </div>
                 <div>
                     <label for="username" class="block text-sm font-medium text-</pre>
gray-600">Username:</label>
                     <input type="text" id="username" name="username"</pre>
class="form-input mt-1">
                 </div>
             </div>
             <div>
                 <label for="email" class="block text-sm font-medium text-gray-</pre>
600">Email:</label>
                 <input type="email" id="email" name="email" class="form-input</pre>
mt-1">
            </div>
             <div>
                 <label for="phone" class="block text-sm font-medium text-gray-</pre>
600">Phone No:</label>
                 <input type="tel" id="phone" name="phone" class="form-input mt-</pre>
            </div>
            <div>
                 <label for="dob" class="block text-sm font-medium text-gray-</pre>
600">Date of Birth:</label>
                 <input type="date" id="dob" name="dob" class="form-input mt-1">
             </div>
             <div>
                 <label for="password" class="block text-sm font-medium text-</pre>
gray-600">Password:</label>
                 <input type="password" id="password" name="password"</pre>
class="form-input mt-1">
            </div>
```



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```
<div>
                 <label for="confirmPassword" class="block text-sm font-medium"</pre>
text-gray-600">Confirm Password:</label>
                <input type="password" id="confirmPassword"</pre>
name="confirmPassword" class="form-input mt-1">
            </div>
            <div>
                 <label class="block text-sm font-medium text-gray-</pre>
600">Gender:</label>
                 <div class="mt-1">
                     <input type="radio" id="male" name="gender" value="male"</pre>
class="form-radio">
                     <label for="male" class="ml-2">Male</label>
                     <input type="radio" id="female" name="gender" value="female"</pre>
class="form-radio ml-4">
                     <label for="female">Female</label>
                </div>
            </div>
            <button type="button" onclick="showNextSection()" class="bg-blue-500"</pre>
text-white px-4 py-2 rounded-md mt-4">Next</button>
            <div id="additionalInfo" class="hidden mt-4">
                 <div>
                     <label for="city" class="block text-sm font-medium text-</pre>
gray-600">City:</label>
                     <select id="city" name="city" class="form-select mt-1">
                         <option value="" disabled selected>Select City</option>
                         <option value="city1">City 1</option>
                         <option value="city2">City 2</option>
                         <option value="city3">City 3</option>
                     </select>
                </div>
                <div>
                     <label for="nationality" class="block text-sm font-medium"</pre>
text-gray-600">Nationality:</label>
                    <select id="nationality" name="nationality" class="form-</pre>
select mt-1">
```



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```
<option value="" disabled selected>Select
Nationality</option>
                         <option value="nationality1">Nationality 1</option>
                         <option value="nationality2">Nationality 2</option>
                         <option value="nationality3">Nationality 3</option>
                     </select>
                 </div>
                 <div>
                     <label for="address" class="block text-sm font-medium text-</pre>
gray-600">Address:</label>
                     <textarea id="address" name="address" class="form-textarea</pre>
mt-1"></textarea>
                </div>
                 <div class="grid grid-cols-1 md:grid-cols-2 gap-4">
                     <div>
                         <label for="fatherName" class="block text-sm font-medium</pre>
text-gray-600">Father's Name:</label>
                         <input type="text" id="fatherName" name="fatherName"</pre>
class="form-input mt-1">
                     </div>
                     <div>
                         <label for="motherName" class="block text-sm font-medium"</pre>
text-gray-600">Mother's Name:</label>
                         <input type="text" id="motherName" name="motherName"</pre>
class="form-input mt-1">
                     </div>
                </div>
                 <div class="flex justify-between mt-4">
                     <button type="button" onclick="showPreviousSection()"</pre>
class="bg-gray-400 text-white px-4 py-2 rounded-md">Back</button>
                     <button type="submit" class="bg-green-500 text-white px-4</pre>
py-2 rounded-md">Submit</button>
                </div>
            </div>
        </form>
        <script src="script.js"></script>
```



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```
</div>
</body>
</html>
```

```
Script.js
function showNextSection() {
    document.getElementById('additionalInfo').classList.remove('hidden');
function showPreviousSection() {
    document.getElementById('additionalInfo').classList.add('hidden');
document.getElementById('myForm').addEventListener('submit', function (event) {
    var isValid = validateForm();
    if (!isValid) {
        event.preventDefault();
});
function validateForm() {
    var fullName = document.getElementById('fullName').value;
    var username = document.getElementById('username').value;
    var email = document.getElementById('email').value;
    var phone = document.getElementById('phone').value;
    var dob = document.getElementById('dob').value;
    var password = document.getElementById('password').value;
    var confirmPassword = document.getElementById('confirmPassword').value;
    var gender = document.querySelector('input[name="gender"]:checked');
    var city = document.getElementById('city').value;
    var nationality = document.getElementById('nationality').value;
    var address = document.getElementById('address').value;
    var fatherName = document.getElementById('fatherName').value;
    var motherName = document.getElementById('motherName').value;
    if (fullName === '') {
        alert('Please enter your full name.');
        return false;
```



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```
if (username === '') {
   alert('Please enter a username.');
    return false;
var emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
if (!emailRegex.test(email)) {
   alert('Please enter a valid email address.');
   return false;
var phoneRegex = /^{d{10}};
if (!phoneRegex.test(phone)) {
    alert('Please enter a valid 10-digit phone number.');
   return false;
if (dob === '') {
    alert('Please enter your date of birth.');
   return false;
if (password === '') {
   alert('Please enter a password.');
   return false;
if (confirmPassword === '' || confirmPassword !== password) {
    alert('Passwords do not match.');
   return false;
if (!gender) {
   alert('Please select your gender.');
   return false;
if (city === '') {
    alert('Please select your city.');
   return false;
if (nationality === '') {
    alert('Please select your nationality.');
   return false;
if (address === '') {
   alert('Please enter your address.');
   return false;
```



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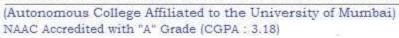
```
if (fatherName === '') {
    alert('Please enter your father\'s name.');
    return false;
}
if (motherName === '') {
    alert('Please enter your mother\'s name.');
    return false;
}
return true;
}
```

OUTPUT:

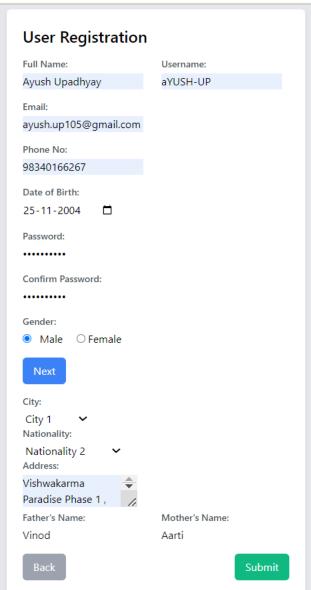
Full Name:	Username:
Ayush Upadhyay	aYUSH-UP
Email:	
ayush.up105@gmail.com	
Phone No:	
98340166267	
Date of Birth:	
25-11-2004	
Password:	
•••••	
Confirm Password:	
•••••	
Gender:	
Male O Female	

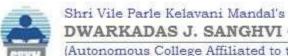


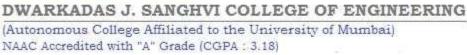
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CONCLUSIONS: In this assignment, I learned the essential aspects of form validation using JavaScript. I gained hands-on experience implementing validations for various input fields such as text, email, phone number, and password. Understanding the importance of both client-side and server-side validation became evident, and I realized the significance of providing clear and user-friendly error messages. Moreover, the assignment highlighted the need for a systematic and organized approach to validating different types of user inputs, ensuring data integrity and enhancing the overall user experience on web forms.

REFERENCE: MDN, W3Schools, Stack Overflow, Tailwind docs