

Regular Expressions in Javascript

1. Write the Regular Expression for Indian Mobile Number

a. 9988112233

- i. First Digit from 6-9 and rest of the digits will be 0-9
- ii. Total number of digits will be 10

Regular Expression

JavaScript 

`/^[6-9][0-9]{9}$/g`

1 match

Test String

9988112233

b. 09988776611

- i. First digit will be 0
- ii. Second digit will be anything from 6 to 9
- iii. From third till last digit it will be 0 to 9
- iv. Total count of the digits will be 11

Regular Expression

JavaScript 

`/^[0][6-9][0-9]{9}$/g`

1 match

Test String

09988112233

c. +91-9988112233

- i. Total count will be 14
- ii. First digit or characters will be + sign
- iii. Second digit will be 9
- iv. Third digit will be 1

- v. Fourth character will be -(hyphen)
- vi. Fifth digit will be anything from 6 - 9
- vii. From sixth till the last character will be 0 - 9

The screenshot shows a web-based Regular Expression testing interface. At the top, it says 'Regular Expression' with a dropdown menu set to 'Javascript' and a 'flags' icon. The input field contains the regex `/^[+][9][1][-][6-9][0-9]{9}$/g`. To the right of the input field, it says '1 match'. Below the input field is a 'Test String' section. The test string is `+91-9988112233`, which is highlighted in blue, indicating it matches the regex.

2. Email Validation

a. Username@DomainName.extension

- i. Username -
- ii. DomainName - Gmail,hotmail,live,dhyanahita
- iii. Extension - in,org,com

I. Define Parameters to Username

- I. It is combination of Lower,Uppper and Digits
- II. It also consists of some of the special characters like .(dot),_(Underscore) and -(hyphen)
- III. It should contains minimum of 6 characters and maximum of 12 characters

II. Define Parameters of Domain name

- I. It contains only lowercase characters
- II. Len of characters will be from 3 to 15 characters
- III. No spls characters are allowed here

III. Define parameters of extension

- I. It contains only lowercase characters
- II. Len of characters will be from 2 to 6
- III. No characters are allowed

Regular Expression JavaScript flags

`/^[a-zA-Z0-9]{6,12}@[a-z]{3,15}[a-z]{2,6}$/g` 1 match

Test String

`anil.122@dhayanhita.org`

3. Validate Your Roll numbers

a. 221710309024

i. You need to validate from 001 to 399

`^[2][2][1][7][1][0][3][0-9]{2}[0-9]{3}$`

`^[2][2][1][7][1][0][3][0][9][0-3][0-9][1-9]$`

`^[2][2][1][7][1][0][3][0][9][0-9]{001,399}$`

b. 198W1A0491

i. Last three digits from 401 to 499

`^[1][9][8][W][1][A][0][4][0-9]{2}$`

Validate the Mobile Number using Javascript Event:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Validate Mobile Number</title>
    <script>
      function validateMobile(){
        var val = document.getElementById("txtMobile").value;
        if(/^[6-9][0-9]{9}$/.test(val)){
          window.alert('Valid Number');
        }
        else{
          window.alert('Invalid Number');
          document.getElementById("txtMobile").focus();
        }
      }
    </script>
  </head>
  <body>
    <input type="text" id="txtMobile" /> <br />
    <button type="button" onclick="validateMobile()">Validate</button>
  </body>
</html>
```

Validate the EmailID using Javascript Event

```

<!DOCTYPE html>
<html>
  <head>
    <title>EmailID validation</title>
    <script>
      function validateEmailID(){
        var val = document.getElementById('txtEmailID').value;
        if(/[a-zA-Z0-9._-]{6,12}@[a-z]{3,15}[.][a-z]{2,6}/.test(val))
        {
          window.alert('Valid EmailID');
        }
        else{
          window.alert('Invalid EmailID');
        }
      }
    </script>
  </head>
  <body>
    <input type="email" id="txtEmailID"/> <br />
    <button type="button" onclick="validateEmailID()">Validate</button>
  </body>
</html>

```

validation.html / <html> / <head> / <script> / validateEmailID

```

<!DOCTYPE html>
<html>
  <head>
    <title>EmailID validation</title>
    <script>
      function validateEmailID(){
        var val = document.getElementById('txtEmailID').value;
        if(/^([a-zA-Z0-9._-]{6,12}@[a-z]{3,15}[.][a-z]{2,6})$/i.test(val))
        {
          window.alert('Valid EmailID');
        }
        else{
          window.alert('Invalid EmailID');
        }
      }
    </script>
  </head>
  <body>
    <input type="email" id="txtEmailID"/> <br />
    <button type="button" onclick="validateEmailID()">Validate</button>
  </body>
</html>

```

Validate Your Roll numbers using Javascript Event

```
<!DOCTYPE html>
<html>
  <head>
    <title>Validate Roll Number</title>
    <script>
      function validateRollNumber(){
        var val = document.getElementById('txtRollNumber').value;
        if(/^[2][2][1][7][1][0][3][0-9]{2}[0-9]{3}$/.test(val)){
          window.alert('Valid Roll Number');
        }
        else{
          window.alert('Invalid Roll Number');
        }
      }
    </script>
  </head>
  <body>
    <input type="text" id="txtRollNumber" /> <br />
    <button type="button" onclick="validateRollNumber()">Validate</button>
  </body>
</html>
```

Task

UN	<input type="text"/>
Mobile	<input type="text"/>
EmailID	<input type="text"/>
Roll	<input type="text"/>
<input type="button" value="Validate"/>	

You need to external Javascript which contains different function to validate the Username,EmailID , Mobile Number and Roll Number

```

<!DOCTYPE html>
<html>
  <head>
    <title>Form Validations</title>
    <script src="validateDemo.js"></script>
  </head>
  <body>
    <input type="text" id="txtUsername" /> <br />
    <input type="text" id="txtMobile" /> <br />
    <input type="email" id="txtEmail" /> <br />
    <input type="text" id="txtRollNumber" /> <br />
    <button type="button" onclick="return validate()">Validate</button>
  </body>
</html>

```

```

function validate(){
  var mob=document.getElementById("txtMobile").value;
  var user=document.getElementById("txtUsername").value;
  var email=document.getElementById("txtEmail").value;
  var roll=document.getElementById("txtRollNumber").value;
  var m=/^[6-9][0-9]{9}$|^0[6-9][0-9]{9}$|^[+][9][1][6-9][0-9]{9}$/;
  var e=/^[a-zA-Z0-9._-]{6,12}@[a-z]{3,15}[.][a-z]{2,6}$/;
  var r=/^[2][2][1][7][1][0][3][0-9]{2}[0-9]{3}$/;
  if(mob==' ' || user==' ' || email==' ' || roll == ' '){
    window.alert('Please enter all the fields');
    return false;
  }
  else{
    if(m.test(mob)&&e.test(email)&&r.test(roll)){
      window.alert("Valid");
      return true;
    }
    else{
      window.alert("Invalid");
      return false;
    }
  }
}

```

