1)

**AIM :**

Validate Email using regular expression

var y=/^[a-z]{1,20}\d{2}\@[a-z]{2,10}\.[a-z]{3}$/;

**DESCRIPTION :**

Java script uses two approaches to pattern matching

RegExp

String

Regular expression is a pattern used to match characters in a String.

Syntax

A regular expression could be defined with the RegExp( ) constructor like this:

var pattern = /pattern/modifier;

pattern:- specifies a regular expression

modifier:- specify if a search should be global, case-insensitive, etc.

global- g - searches for the possible matches in a string.

ignore case sensitive - i

multiline search - m   
 match() – matches for string against the regular expression

- returns array of matches

- else return null

search() - matches for a string against the regular expressions

- returns index value of first occurrence

- else return -1

**PROGRAM CODE :**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<script>

function validate(){

var y=/^[a-zA-Z0-9]{1,20}\@[a-z]{2,10}\.[a-z]{3}$/;

var x=document.getElementById('mail').value;

if(x.match(y)){

alert("Successful")

}

else{

alert("Invalid Mail")

}

}

</script>

</head>

<body>

<p>Email : </p>

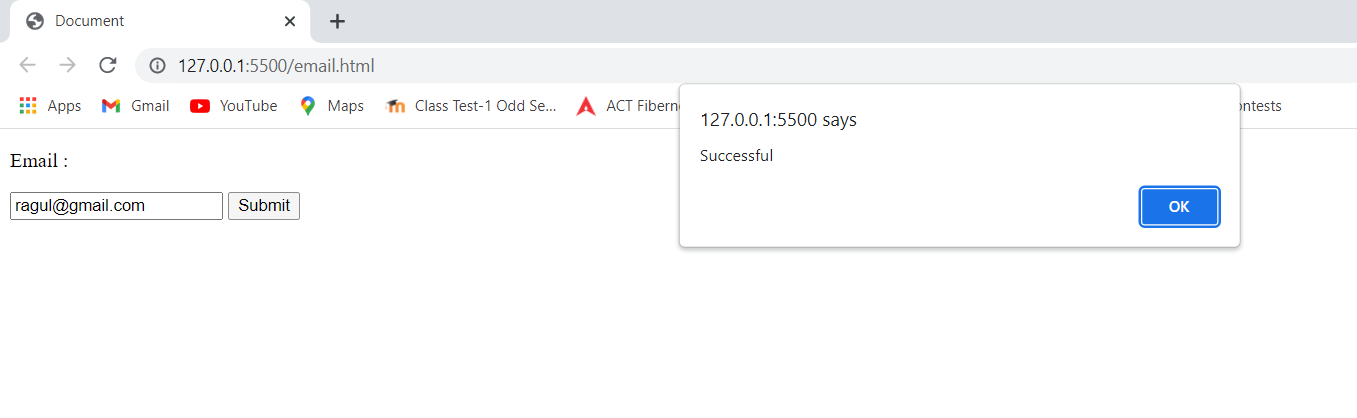
<input type="text" name="" id="mail">

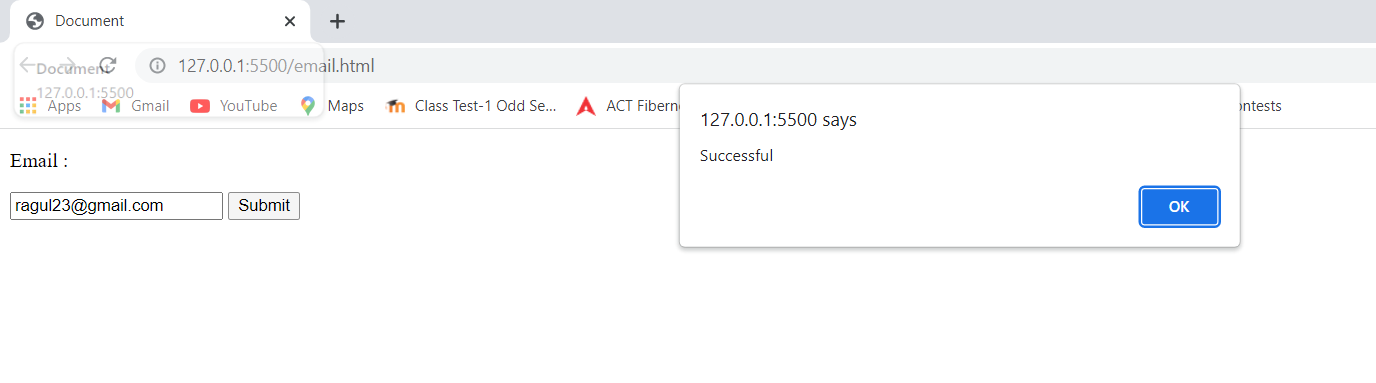
<button onclick="validate()">Submit</button>

</body>

</html>

**OUTPUT :**

****

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**RESULT ANALYSIS :**

Understood the importance of using regular expression to validate regular expression, also the use of methods used in regular expressions such as match() , search(), use of meta characters, quantifiers and brackets.

2)

**AIM :**

Develop javascript code to validate below given form

Name: Name field should not be empty, name may contains minimum 8 characters

Pincode: allows only number and maximum length is 6

DoB: DD/MM/YYYY

**DESCRIPTION :**

A regular expression is a pattern of characters.

The pattern is used to do pattern-matching "search-and-replace" functions on text.

In JavaScript, a RegExp Object is a pattern with Properties and Methods.

Data validation is the process of ensuring that user input is clean, correct, and useful.

Typical validation tasks are:

has the user filled in all required fields?

has the user entered a valid date?

has the user entered text in a numeric field?

Most often, the purpose of data validation is to ensure correct user input.

Validation can be defined by many different methods, and deployed in many different ways.

Server side validation is performed by a web server, after input has been sent to the server.

Client side validation is performed by a web browser, before input is sent to a web server.

**PROGRAM CODE :**

**student.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

<script type="text/JavaScript" src="script.js"></script>

<link rel="preconnect" href="https://fonts.googleapis.com">

<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>

<link href="https://fonts.googleapis.com/css2?family=Tajawal:wght@200&display=swap" rel="stylesheet">

<style>

input {

display: inline-block;

}

table {

width: 100%;

margin: auto;

}

td {

font-size: 25px;

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

font-weight: bold;

}

input[type="submit"],

input[type="reset"] {

font-size: 25px;

}

input[type="button"]{

border-width: 100px;

}

</style>

</head>

<body>

<form action="success.html" onsubmit="return validate()">

<table cellpadding=20 cellspacing=2 border=2>

<tr>

<td colspan="2" align="center">Student Registration Form</td>

</tr>

<tr>

<td>Name</td>

<td>

<input type="text" id="n">

<span id="name"> </span>

</td>

</tr>

<tr>

<td>Father Name</td>

<td>

<input type="text" name="" id="fn">

<span id="fname"></span>

</td>

</tr>

<tr>

<td>Postal Address</td>

<td>

<input type="text" name="" id="pa">

<span id="padd"></span>

</td>

</tr>

<tr>

<td>Personal Address</td>

<td>

<input type="text" name="" id="pera">

<span id="peradd"></span>

</td>

</tr>

<tr>

<td>Gender</td>

<td>

<input type="radio" name="gender" id="" value=1>Male

<input type="radio" name="gender" id="" value=2>Female

<span id="gen"></span>

</td>

</tr>

<tr>

<td>City</td>

<td>

<select id="city">

<option value="">City</option>

<option value="1">Hyderabad</option>

<option value="2">Chennai</option>

<option value="3">Delhi</option>

</select>

<span id="cities"></span>

</td>

</tr>

<tr>

<td>Course</td>

<td>

<select id="course">

<option value="">Course</option>

<option value="1">C</option>

<option value="2">C++</option>

<option value="3">Python</option>

<option value="4">Java</option>

</select>

<span id="courses"></span>

</td>

</tr>

<tr>

<td>District</td>

<td>

<select id="district">

<option value="">District</option>

<option value="1">A</option>

<option value="2">B</option>

<option value="3">C</option>

</select>

<span id="districts"></span>

</td>

</tr>

<tr>

<td>

State

</td>

<td>

<select id="state">

<option value="">State</option>

<option value="1">Telangana</option>

<option value="2">Tamil Nadu</option>

<option value="3">Kerala</option>

</select>

<span id="states"></span>

</td>

</tr>

<tr>

<td>

PinCode

</td>

<td>

<input type="text" name="" id="pcode">

<span id="pincodes"></span>

</td>

</tr>

<tr>

<td>EmailId</td>

<td>

<input type="text" name="" id="eid">

<span id="emailds"></span>

</td>

</tr>

<tr>

<td>DOB</td>

<td><input type="text" name="" id="dob"><span id="dateofbirth"></span></td>

</tr>

<tr>

<td>MobileNo</td>

<td><input type="text" name="" id="mobile"><span id="mno"></span></td>

</tr>

<tr>

<td>Enter Password</td>

<td><input type="password" name="" id="pass"><span id="p"></span></td>

</tr>

<tr>

<td>

Confirm Password

</td>

<td>

<input type="password" name="" id="cpass">

<span id="cp"></span>

</td>

</tr>

<tr>

<td><input type="reset" value="Reset"></td>

<td><input type="submit" value="Submit"></td>

</tr>

</table>

</form>

</body>

</html>

**script.js**

function validate(){

var name=document.getElementById('n').value;

if(name==''||name==null){

document.getElementById('name').innerHTML="!!Enter your name"

return false

}

else{

document.getElementById('name').innerHTML=""

}

var fname=document.getElementById('fn').value

if(fname==''||fname==null){

document.getElementById('fname').innerHTML="!!Enter Fathers Name"

return false

}

else{

document.getElementById('fname').innerHTML=""

}

var postal\_address=document.getElementById('pa').value

if(postal\_address==''||postal\_address==null){

document.getElementById('padd').innerHTML="!!Enter Postal Address"

return false

}

else{

document.getElementById('padd').innerHTML=""

}

var personal\_address=document.getElementById('pera').value

if(personal\_address==''||personal\_address==null){

document.getElementById('peradd').innerHTML="!!Enter personal address"

return false

}

else{

document.getElementById('peradd').innerHTML=""

}

var gender=document.getElementsByName('gender')

var flag=0

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

if(gender[i].checked){

flag+=1

}

}

if(flag==0){

document.getElementById('gen').innerHTML="!!Fill gender"

return false

}

else{

document.getElementById('gen').innerHTML=""

}

var city=document.querySelector('#city').value

if(city==""){

document.getElementById('cities').innerHTML="!!Fill City"

return false

}

else{

document.getElementById('cities').innerHTML=""

}

var course=document.querySelector('#course').value

if(course==""){

document.getElementById('courses').innerHTML="!!Fill courses"

return false

}

else{

document.getElementById('courses').innerHTML=""

}

var district=document.querySelector('#district').value

if(district==""){

document.getElementById('districts').innerHTML="!!Fill district"

return false

}

else{

document.getElementById('districts').innerHTML=""

}

var state=document.querySelector('#state').value

if(state==""){

document.getElementById('states').innerHTML="!!Fill states"

return false

}

else{

document.getElementById('states').innerHTML=""

}

var pincode=document.getElementById('pcode').value

var p1=/^[0-9]{6}$/;

if(!pincode.match(p1)){

document.getElementById('pincodes').innerHTML="!!Enter pincode2"

return false

}

else{

document.getElementById('pincodes').innerHTML=""

}

var email=document.getElementById('eid').value

var p2=/^[a-zA-Z0-9]{1,20}\@[a-z]{2,10}\.[a-z]{3}$/;

if(!email.match(p2)){

document.getElementById('emailds').innerHTML="!!Enter mailId"

return false

}

else{

document.getElementById('emailds').innerHTML=""

}

var dob=document.getElementById('dob').value

var p3=/\d{1,2}\/\d{1,2}\/\d{4}/;

if(!dob.match(p3)){

document.getElementById('dateofbirth').innerHTML="!!Enter dob"

return false

}

else{

document.getElementById('dateofbirth').innerHTML=""

}

var mno=document.getElementById('mobile').value

var p4=/\d{10}/;

if(!mno.match(p4)){

document.getElementById('mno').innerHTML="!!Enter Mobile Number"

return false

}

else{

document.getElementById('mno').innerHTML=""

}

var p5=/[a-zA-Z0-9]{5,}/

var p6=/[!@#$%^&\*()]{1,}/

var orig\_pass=document.getElementById('pass').value;

var conf\_pass=document.getElementById('cpass').value;

if(!(orig\_pass.match(p5)&&orig\_pass.match(p6))){

document.getElementById('p').innerHTML="!!Password should contain a minimum of 5 characters and a special character"

return false;

}

else{

document.getElementById('p').innerHTML=""

}

if(orig\_pass!=conf\_pass){

document.getElementById('cp').innerHTML="!!Password not matching";

return false;

}

else{

document.getElementById('cp').innerHTML=""

}

alert("Form Submitted Successfully")

}

**success.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Document</title>

</head>

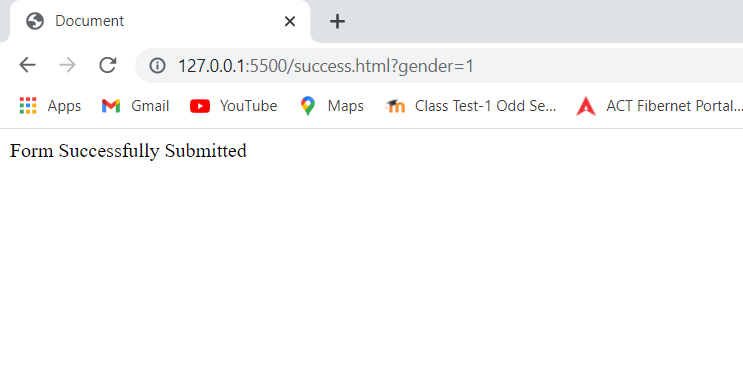
<body>

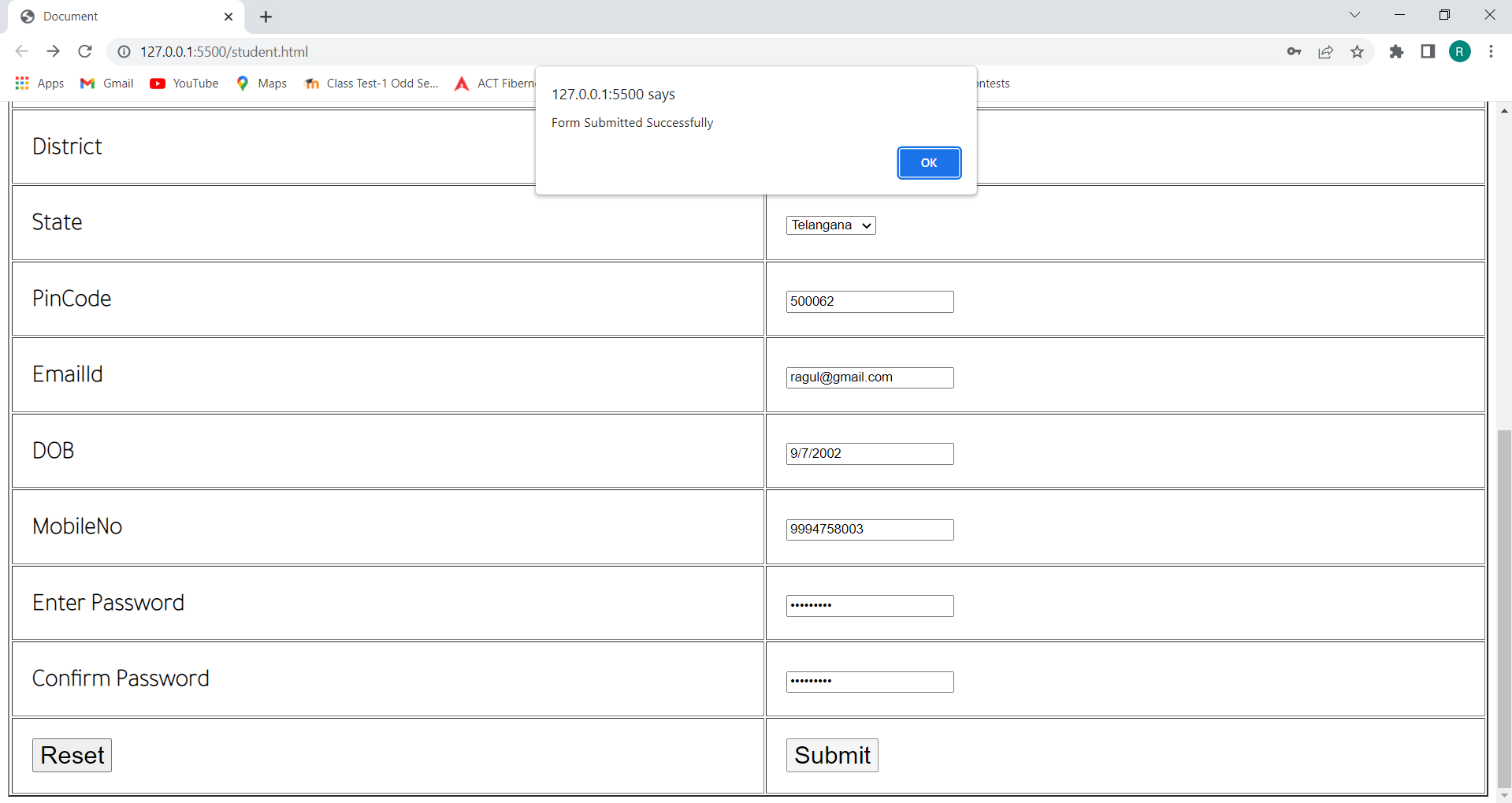
Form Successfully Submitted

</body>

</html>

**OUTPUT :**

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**RESULT ANALYSIS :**

Understood about the importance of validation of user data, understood how to use regex for different forms of data.