IP-PRACTICAL NO 7

Date of Performance: 27-09-2022

Software Requirement: Visual Studio Code, Notepad, Notepad++, NodeJS

Aim: To use JavaScript to implement form validation.

Objectives: The aim of this experiment is that the students will :

- Implement JavaScript syntax to create forms.
- Understand different features of JavaScript & its usage in form validation.

Outcomes: After study of this experiment, the students will be able to:

- Create forms and validate different fields in it.
- Implement the usage of JavaScript in creation and validation of forms.

Prerequisite: Basic knowledge of JavaScript and HTML/CSS syntax required.

Theory:

Forms are used in webpages for the user to enter their required details that further send it to the server for processing. A form is also known as a web form or HTML form. Examples of form use are prevalent in e-commerce websites, online banking, online surveys to name a few.

Validating a form: The data entered into a form needs to be in the right format and certain fields need to be filled in order to effectively use the submitted form. Username, password, contact information are some details that are mandatory in forms and thus need to be provided by the user.

JavaScript provides facility to validate the form on the client-side so data processing will be faster than server-side validation. Most of the web developers prefer JavaScript form validation.

Through JavaScript, we can validate name, password, email, date, mobile numbers and more fields.

Problem Statement:

Implement form validation in JavaScript.

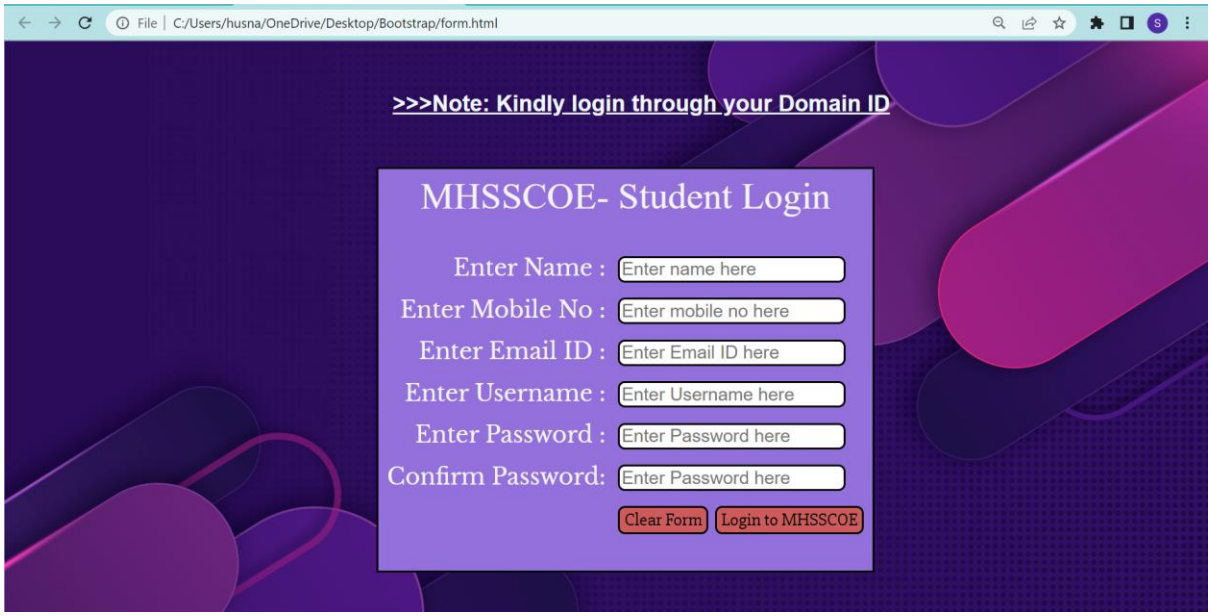
Source Code and Output:

```
<!DOCTYPE html>
<html>
<head>
<title>Student Login Form-MHSSCOE</title>
<link
href="https://fonts.googleapis.com/css2?family=Libre+Baskerville&family=Slabo+
27px&display=swap" rel="stylesheet">
<link
href="https://fonts.googleapis.com/css2?family=IBM+Plex+Sans+Hebrew:wght@300&d
isplay=swap" rel="stylesheet">
<script type="text/javascript">
 function registration() {
 var name = document.getElementById("t1").value;
 var mobno = document.getElementById("t2").value;
 var email = document.getElementById("t3").value;
 var uname = document.getElementById("t4").value;
 var pwd = document.getElementById("t5").value;
 var cpwd = document.getElementById("t6").value;

 //email id expression code
 var pwd_expression = /^(?=.*?[A-Z])(?=.*?[a-z])(?=.*?[0-9])(?=.*?[#?!@$%^&*-
])/;
 var letters = /^[A-Za-z]+$/;
 var filter = /^([a-zA-Z0-9_\.\-])+\@(([a-zA-Z0-9\-])+\.)+([a-zA-Z0-
9]{2,4})+$/;
 if (name == '') {
 alert('Please enter your name');
 }
 else if (!letters.test(name)) {
 alert('Name field required only alphabet characters');
 }
 else if (mobno == ''){
 alert('Please enter your mobile number');
 }
 else if (email == '') {
 alert('Please enter your user email id');
 }
 else if (!filter.test(email)) {
 alert('Invalid email');
 }
 else if (uname == '') {
```

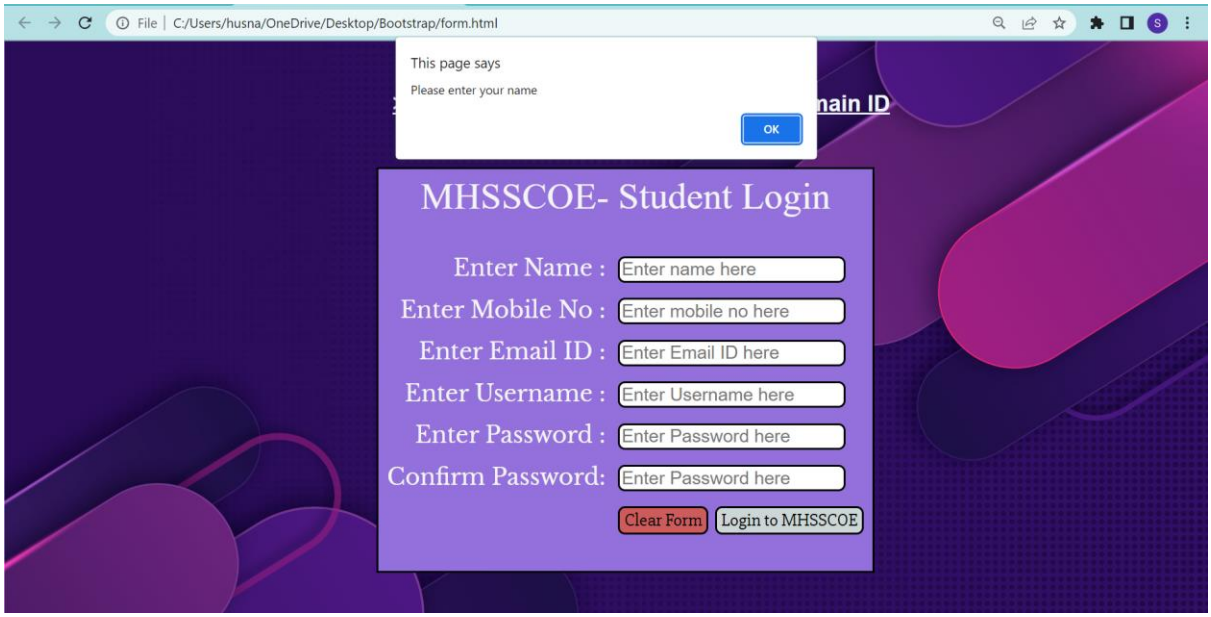
```
 alert('Please enter the user name.');
 }
 else if (!letters.test(uname)) {
 alert('User name field required only alphabet characters');
 }
 else if (pwd == '') {
 alert('Please enter Password');
 }
 else if (cpwd == '') {
 alert('Enter Confirm Password');
 }
 else if (!pwd_expression.test(pwd)) {
 alert('Upper case, Lower case, Special character and Numeric letter are
required in Password filed');
 }
 else if (pwd != cpwd) {
 alert('Password not Matched');
 }
 else if (document.getElementById("t5").value.length <
6) {
 alert('Password minimum length is 6');
 }
 else if (document.getElementById("t5").value.length >
12) {
 alert('Password max length is 12');
 }
 else {
 alert('Thank You for Registration, we are Redirecting you to MHSSCOE
Website');
 // Redirecting to other page or website code.
 window.location = "https://www.mhssce.ac.in/";
 }
 }
</script>
</head>
<style>
 body{
 background: url('bgr.jpg') ;
 background-repeat: no-repeat;
 background-size:cover;
 }
 #main{
 border: 3px solid black;
 box-sizing:unset;
 float: left;
 margin-top: 50px;
 margin-left: 520px;
 font-size: 2rem;
```

```
 background-color:mediumpurple;
 color:whitesmoke;
 font-family: 'Libre Baskerville', serif;
 }
 input{
 font-size: 1.6rem;
 border-radius: 10px;
 border: 3px solid black;
 }
 input:hover{
 background-color:darkseagreen;
 color: black;
 }
 .btn{
 background-color:indianred;
 border: 3px solid black;
 font-family: 'Slabo 27px', serif;
 }
 .btn:hover{
 background-color:#ced7d8;
 color: black;
 }
 .login{
 width: 700px;
 height: 560px;
 }
 .heading{
 font-family: 'Times New Roman', Times, serif;
 font-size: 3.3rem;
 text-align: center;
 color:whitesmoke;
 margin-top: 8px;
 }
 h1{
 text-align: center;
 margin-left:100px;
 margin-top: 70px;
 text-decoration: underline;
 font-family:Arial, Helvetica, sans-serif;
 }
</style>
<body>
<h1>>>>Note: Students kindly login through your Domain ID</h1>
 <div id="main">

 <!-- create account div -->
 <div class="login">
 <div class="heading">MHSSCOE- Student Login</div>
```

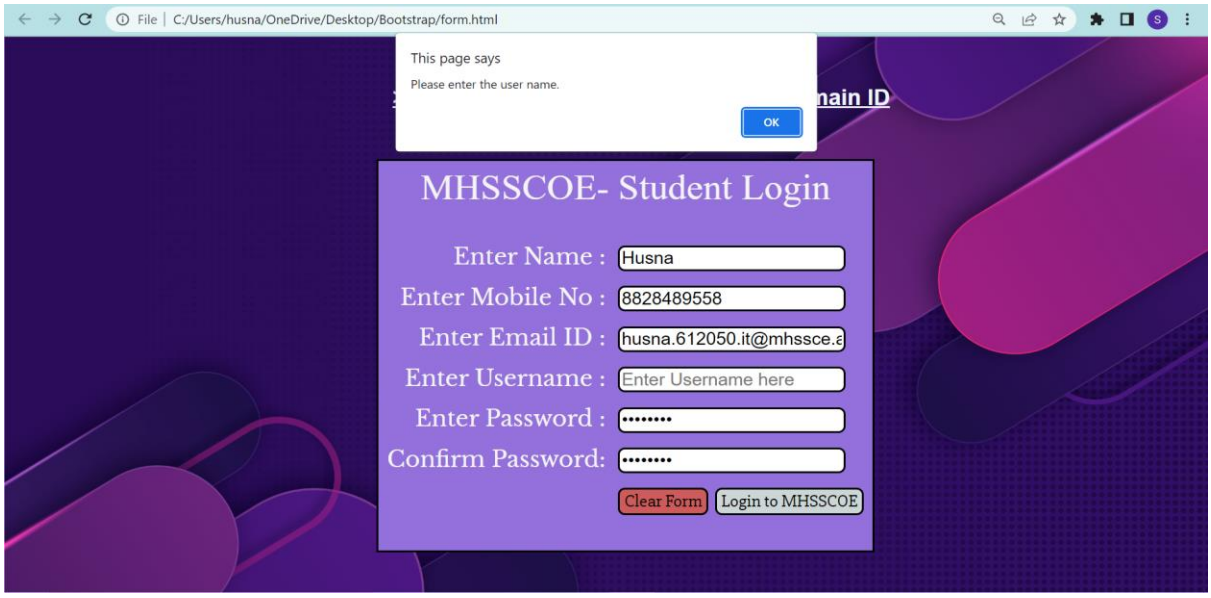
```
 <br>
 <table cellspacing="2" align="center" cellpadding="8" border="0">
 <tr>
 <td align="right">Enter Name :</td>
 <td><input type="text" placeholder="Enter name here" id="t1" class="tb"
/></td>
 </tr>
 <td align="right">Enter Mobile No :</td>
 <td><input type="number" placeholder="Enter mobile no here" id="t2"
class="tb" /></td>
 </tr>
 <tr>
 <td align="right">Enter Email ID :</td>
 <td><input type="text" placeholder="Enter Email ID here" id="t3" class="tb"
/></td>
 </tr>
 <tr>
 <td align="right">Enter Username :</td>
 <td><input type="text" placeholder="Enter Username here" id="t4" class="tb"
/></td>
 </tr>
 <tr>
 <td align="right">Enter Password :</td>
 <td><input type="password" placeholder="Enter Password here" id="t5"
class="tb" /></td>
 </tr>
 <tr>
 <td align="right">Confirm Password:</td>
 <td><input type="password" placeholder="Enter Password here" id="t6"
class="tb" /></td>
 </tr>
 <tr>
 <td></td>
 <td>
 <input type="reset" value="Clear Form" id="res" class="btn" />
 <input type="submit" value="Login to MHSSCOE" class="btn"
onclick="registration()" />

</td>
</tr>
</table>
</div>
</div>
</body>
</html>
```

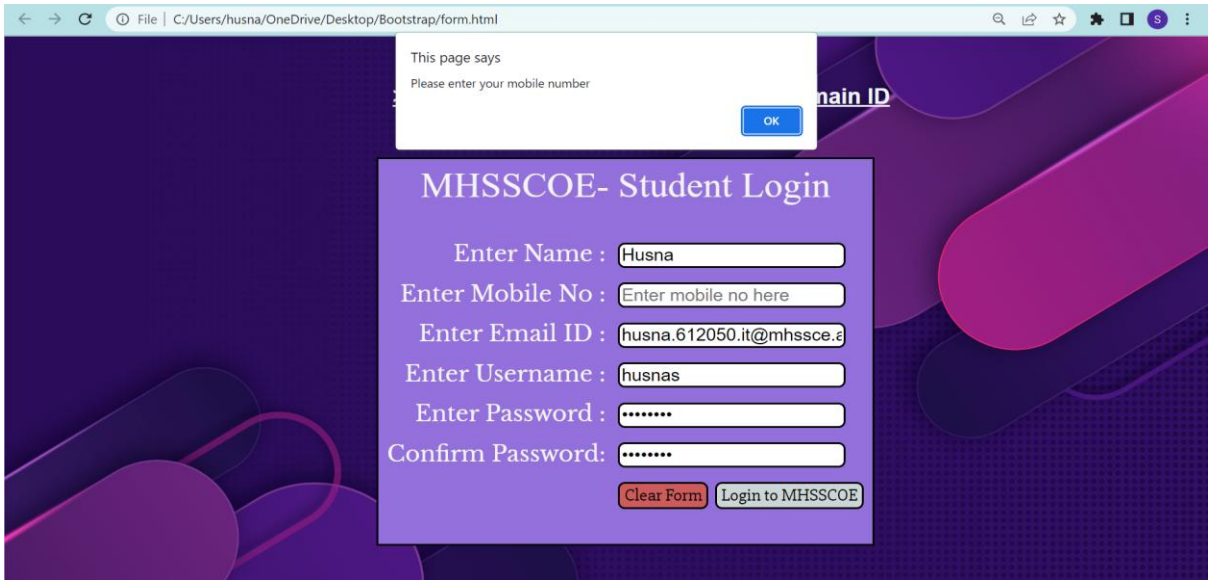


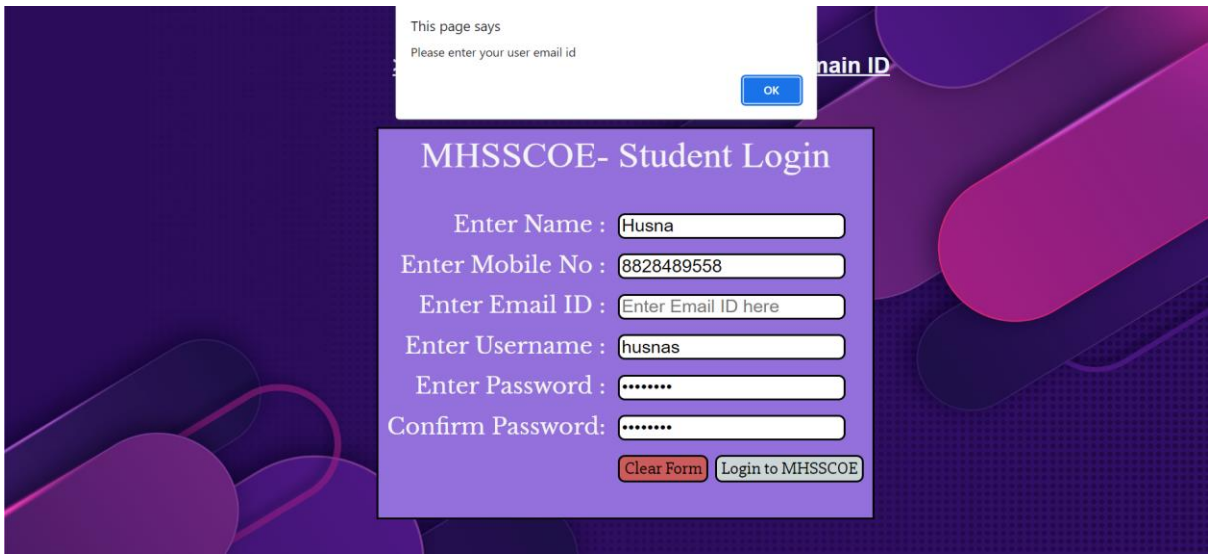
Alert pops up if the form is not filled & submitted. Click on OK to continue filling the form.



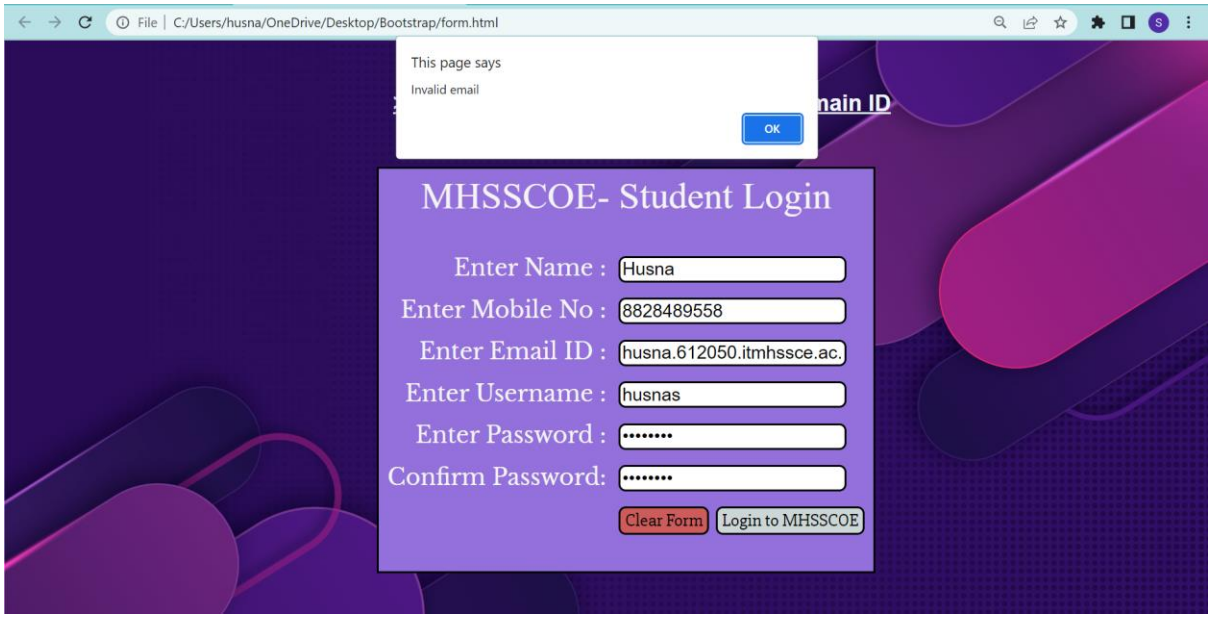
Alert pops up if any of the fields are left to be filled before submitting form.



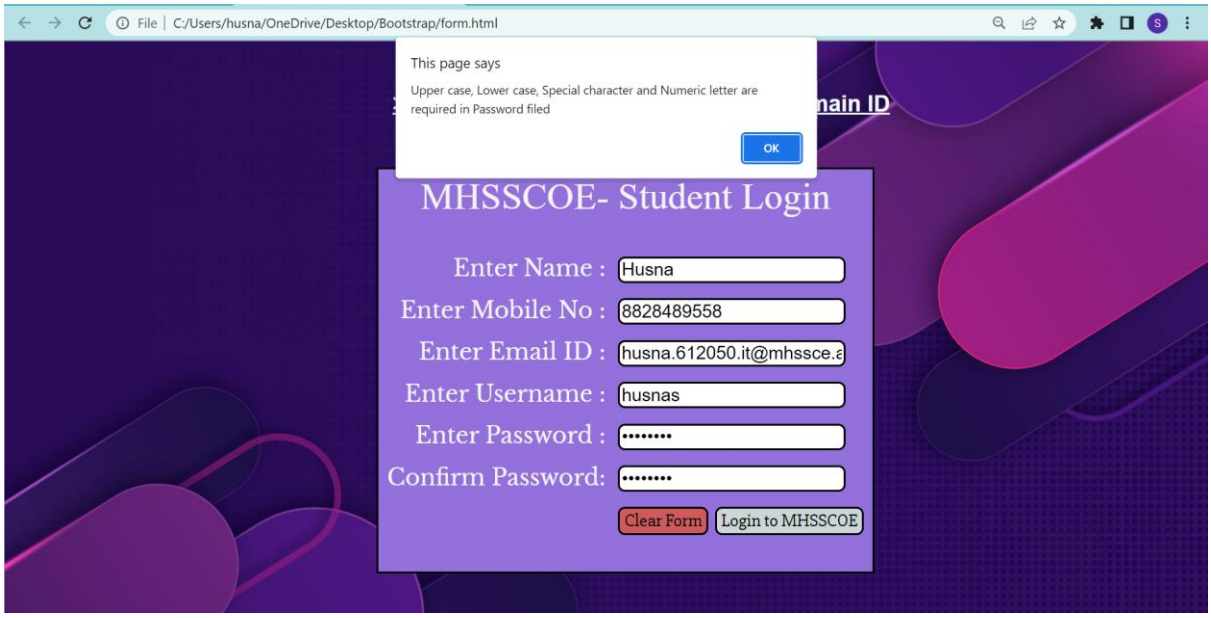




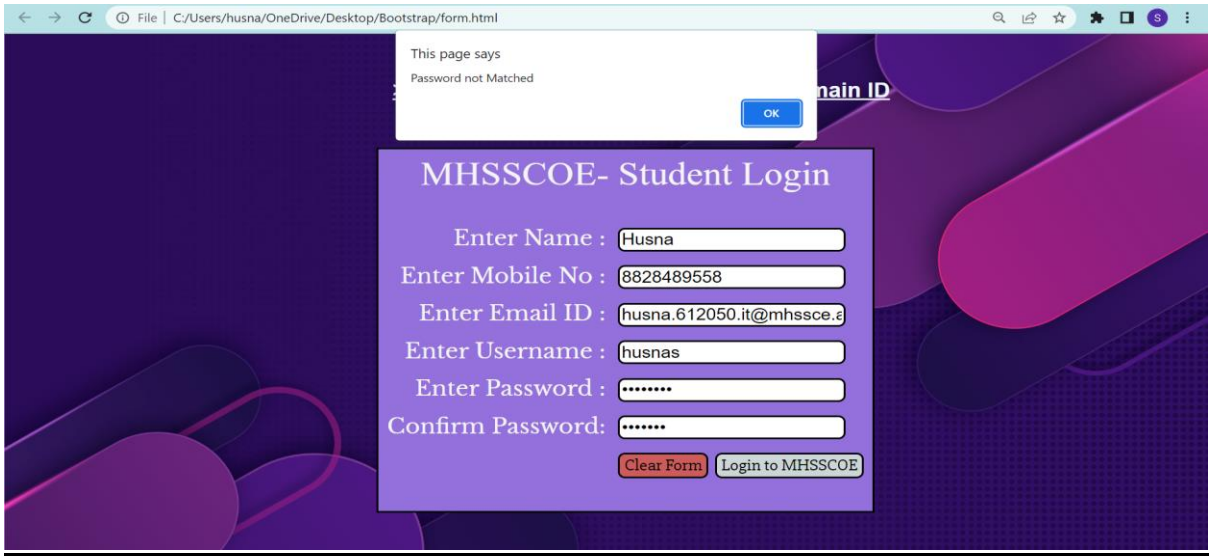
Alert pops up if any special character is missing from email.



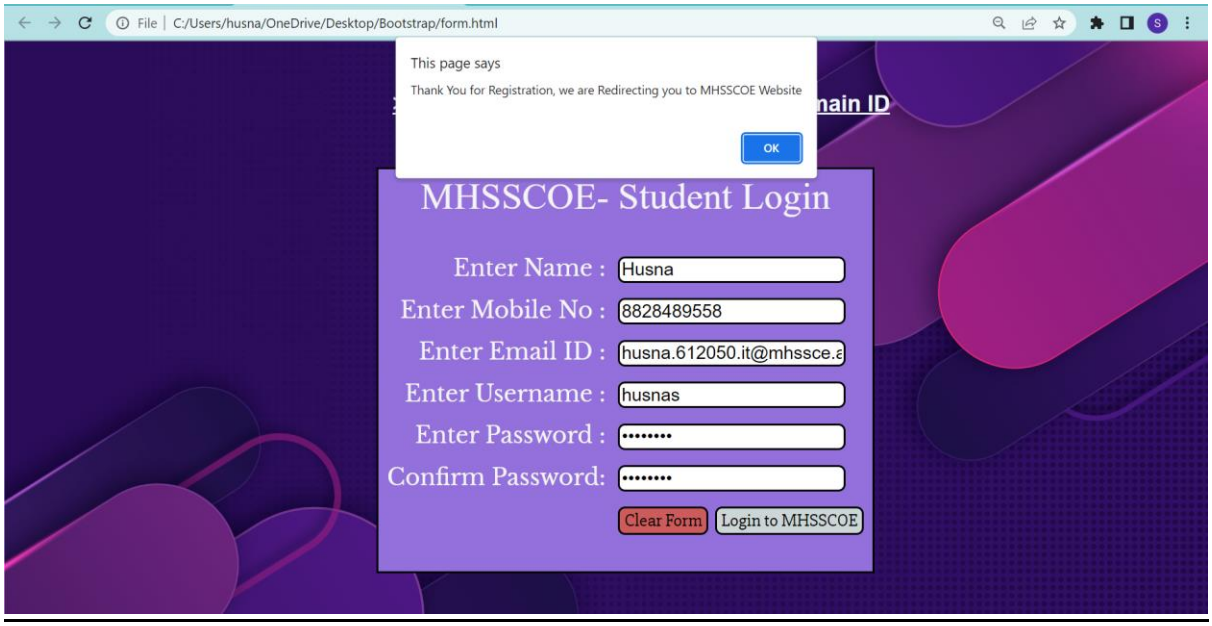
Alert pops up if the password doesn't match the criteria.



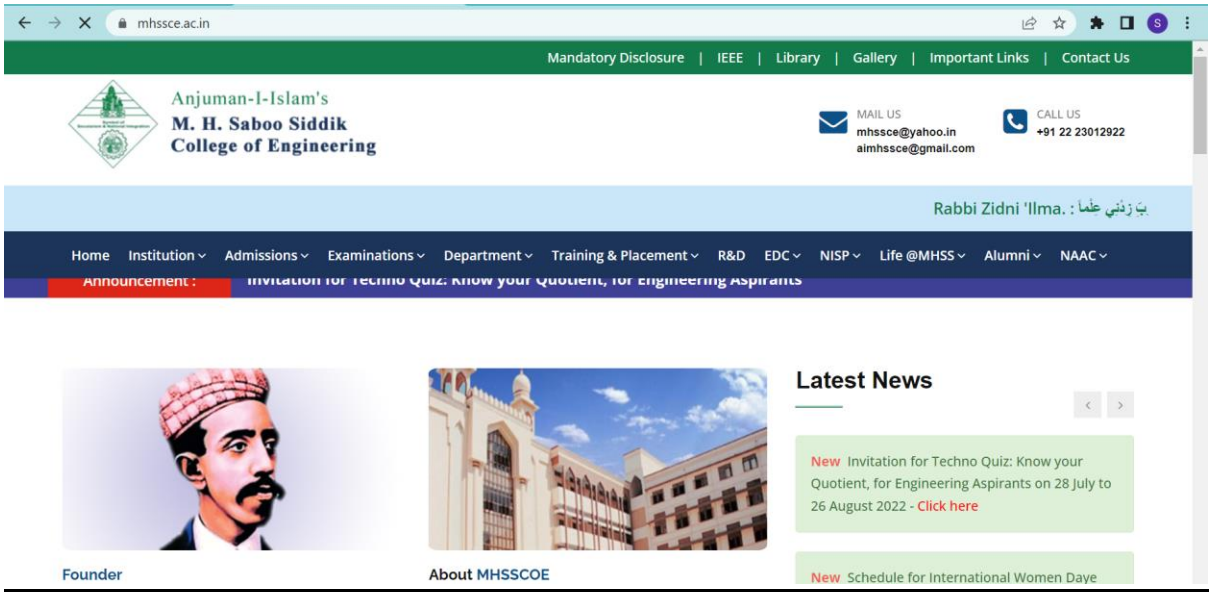
Alert pops up if the Password & Confirmed password don't match.



The login will only be successful only when both the passwords match and satisfy the password criteria. You have now successfully logged in. Click on the OK button to be redirected to college website.



After clicking on OK, MHHSCOE's landing page will open.



NOTE: If you click on Clear Form button all your entered data shall be lost as the page will be refreshed.

Conclusion:

From this experiment we understand that JavaScript is a very powerful web language and is used at a large scale. We have learned how to implement JavaScript features along with HTML and CSS to create a form and validate its different fields such as name, number, email, password, etc.