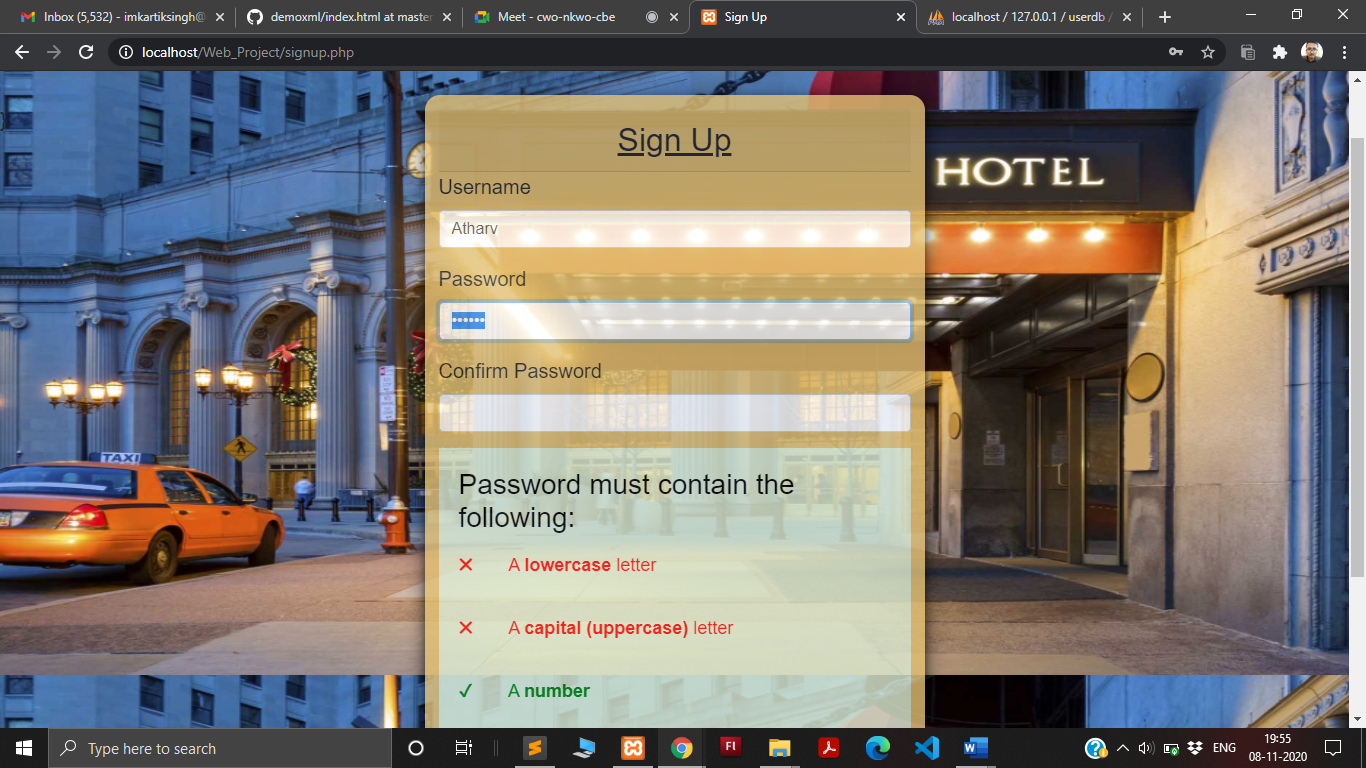
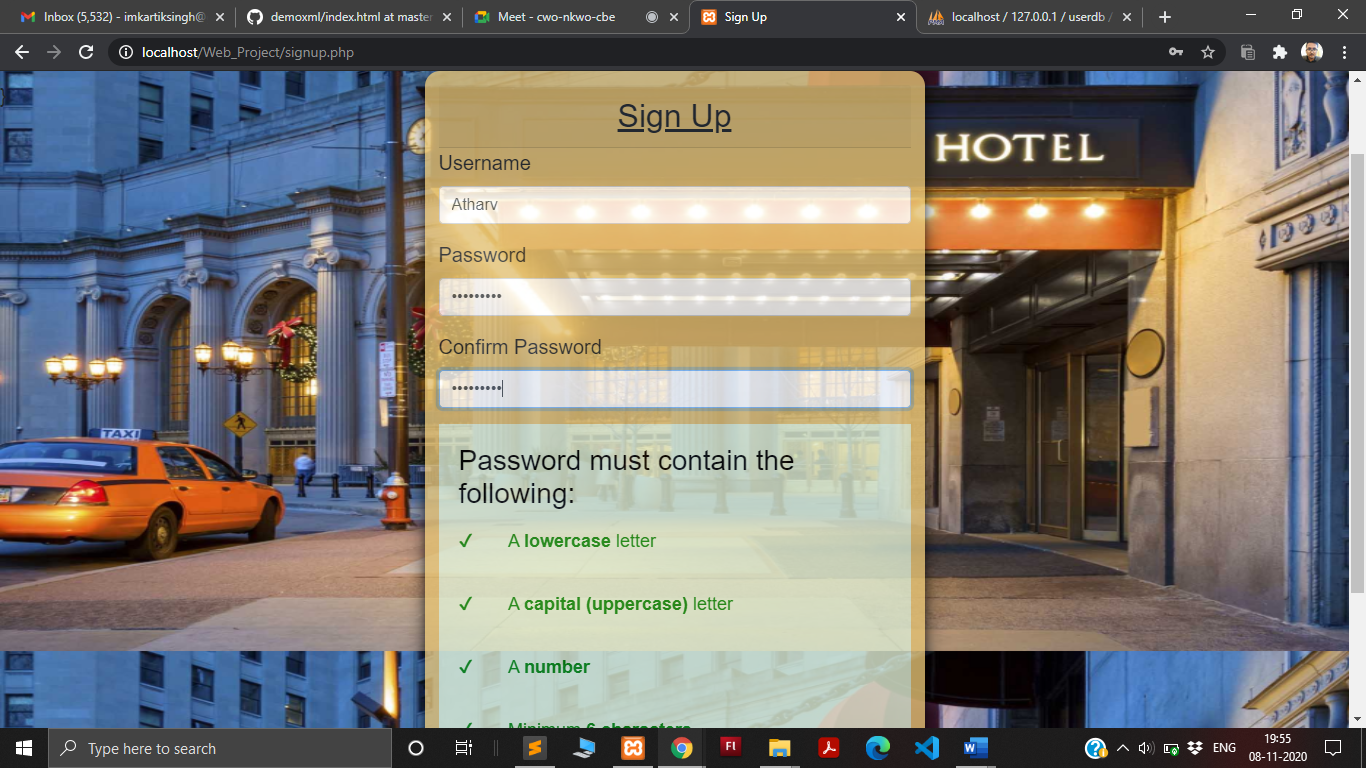
**Experiment 7: Dynamic web page validation using JavaScript**

**Aim:** To make a dynamic web page validation using JavaScript

**Implementation:**

**Output:**

****

****

**Code:**

<?php

// Include config file

require\_once "config.php";

// Define variables and initialize with empty values

$username = $password = $confirm\_password = "";

$username\_err = $password\_err = $confirm\_password\_err = "";

// Processing form data when form is submitted

if($\_SERVER["REQUEST\_METHOD"] == "POST"){

// Validate username

if(empty(trim($\_POST["username"]))){

$username\_err = "Please enter a username.";

} else{

// Prepare a select statement

$sql = "SELECT id FROM users WHERE username = ?";

if($stmt = mysqli\_prepare($link, $sql)){

// Bind variables to the prepared statement as parameters

mysqli\_stmt\_bind\_param($stmt, "s", $param\_username);

// Set parameters

$param\_username = trim($\_POST["username"]);

// Attempt to execute the prepared statement

if(mysqli\_stmt\_execute($stmt)){

/\* store result \*/

mysqli\_stmt\_store\_result($stmt);

if(mysqli\_stmt\_num\_rows($stmt) == 1){

$username\_err = "This username is already taken.";

} else{

$username = trim($\_POST["username"]);

}

} else{

echo "Oops! Something went wrong. Please try again later.";

}

// Close statement

mysqli\_stmt\_close($stmt);

}

}

// Validate password

if(empty(trim($\_POST["password"]))){

$password\_err = "Please enter a password.";

} elseif(strlen(trim($\_POST["password"])) < 6){

$password\_err = "Password must have atleast 6 characters.";

} else{

$password = trim($\_POST["password"]);

}

// Validate confirm password

if(empty(trim($\_POST["confirm\_password"]))){

$confirm\_password\_err = "Please confirm password.";

} else{

$confirm\_password = trim($\_POST["confirm\_password"]);

if(empty($password\_err) && ($password != $confirm\_password)){

$confirm\_password\_err = "Password did not match.";

}

}

// Check input errors before inserting in database

if(empty($username\_err) && empty($password\_err) && empty($confirm\_password\_err)){

// Prepare an insert statement

$sql = "INSERT INTO users (username, password) VALUES (?, ?)";

if($stmt = mysqli\_prepare($link, $sql)){

// Bind variables to the prepared statement as parameters

mysqli\_stmt\_bind\_param($stmt, "ss", $param\_username, $param\_password);

// Set parameters

$param\_username = $username;

$param\_password = password\_hash($password, PASSWORD\_DEFAULT); // Creates a password hash

// Attempt to execute the prepared statement

if(mysqli\_stmt\_execute($stmt)){

// Redirect to login page

header("location: login.php");

} else{

echo "Something went wrong. Please try again later.";

}

// Close statement

mysqli\_stmt\_close($stmt);

}

}

// Close connection

mysqli\_close($link);

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Sign Up</title>

<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css" integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh" crossorigin="anonymous"> <title></title>

<style type="text/css">

#message {

display: none;

background: #deedd3;

color: #000;

position: relative;

padding: 20px;

margin-top: 10px;

width: 100%;

margin: auto;

}

#message p {

padding: 10px 35px;

font-size: 18px;

}

.valid {

color: green;

}

.valid:before {

position: relative;

left: -35px;

content: "✔";

}

/\* Add a red text color and an "x" when the requirements are wrong \*/

.invalid {

color: red;

}

.invalid:before {

position: relative;

left: -35px;

content: "✖";

}

body

{

font-size: 20px;

font-family: 'Arial';

padding: auto;

margin-top: 110px;

background-color: black;

background-image: url('bg.jpg');

background-size: 1400px 680px;

opacity: 120%;

}

.container

{

max-width: 500px;

padding: 14px 14px 14px 14px;

box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.5), 0 6px 20px 0 rgba(0, 0, 0, 0.8);

align-self: center;

background-color:#E2C073;

border-radius: 15px;

align-self: left;

opacity: 80%;

margin-top: -40px;

a

{

color: #7cc278;

}

</style>

}

</head>

<body>

<div class="container">

<h2 class ="text-center card-header"><u>Sign Up</u></h2>

<form action="<?php echo htmlspecialchars($\_SERVER["PHP\_SELF"]); ?>" method="post">

<div class="form-group <?php echo (!empty($username\_err)) ? 'has-error' : ''; ?>">

<label>Username</label>

<input type="text" name="username" class="form-control" value="<?php echo $username; ?>">

<span class="help-block"><?php echo $username\_err; ?></span>

</div>

<div class="form-group <?php echo (!empty($password\_err)) ? 'has-error' : ''; ?>">

<label>Password</label>

<input type="password" name="password" class="form-control" id="password" value="<?php echo $password; ?>">

<span class="help-block"><?php echo $password\_err; ?></span>

</div>

<div class="form-group <?php echo (!empty($confirm\_password\_err)) ? 'has-error' : ''; ?>">

<label>Confirm Password</label>

<input type="password" name="confirm\_password" class="form-control" id='confirmPassword'value="<?php echo $confirm\_password; ?>">

<span class="help-block"><?php echo $confirm\_password\_err; ?></span>

</div>

<div id="message">

<h3>Password must contain the following:</h3>

<p id="letter" class="invalid">A <b>lowercase</b> letter</p>

<p id="capital" class="invalid">A <b>capital (uppercase)</b> letter</p>

<p id="number" class="invalid">A <b>number</b></p>

<p id="length" class="invalid">Minimum <b>6 characters</b></p>

</div>

<div class="form-group">

<input type="submit" class="btn btn-primary " id="submitButton" value="Sign Up">

</div>

<p>Already have an account? <a href="login.php">Login here</a>.</p>

</form>

</div>

<script>

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

var myInput2 = document.getElementById("confirmPassword");

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

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

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

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

// When the user clicks on the password field, show the message box

// myInput.onfocus = function() {

// document.getElementById("message").style.display = "block";

// }

// // When the user clicks outside of the password field, hide the message box

// myInput.onblur = function() {

// document.getElementById("message").style.display = "none";

// }

// When the user starts to type something inside the password field

myInput.onkeyup = function() {

// Validate lowercase letters

var lowerCaseLetters = /[a-z]/g;

if(myInput.value.match(lowerCaseLetters)) {

letter.classList.remove("invalid");

letter.classList.add("valid");

} else {

letter.classList.remove("valid");

letter.classList.add("invalid");

}

// Validate capital letters

var upperCaseLetters = /[A-Z]/g;

if(myInput.value.match(upperCaseLetters)) {

capital.classList.remove("invalid");

capital.classList.add("valid");

} else {

capital.classList.remove("valid");

capital.classList.add("invalid");

}

// Validate numbers

var numbers = /[0-9]/g;

if(myInput.value.match(numbers)) {

number.classList.remove("invalid");

number.classList.add("valid");

} else {

number.classList.remove("valid");

number.classList.add("invalid");

}

// Validate length

if(myInput.value.length>=1)

{

document.getElementById("message").style.display = "block";

}

else

document.getElementById("message").style.display = "none";

if(myInput.value.length >= 6) {

length.classList.remove("invalid");

length.classList.add("valid");

} else {

length.classList.remove("valid");

length.classList.add("invalid");

}

}

</script>

</body>

</html>

**Result:**The experiment was successfully completed.