# . Lab Tasks

## 3.1 Task 1

Implementing basic JavaScript events and form validation, enhancing your skills in handling user interactions on a web page.1. HTML Structure:

* Create an HTML file with a form containing the following fields:
  + Name (text input)
  + Email (email input)
  + Password (password input)
  + Confirm Password (password input)
  + Submit Button

2. CSS Styling:

* Apply basic CSS styling to make the form visually appealing.
* Style the form elements, labels, and error messages.

3. JavaScript Events and Validation:

* **Name Validation:**

Implement an event handler for the name input.

Check if the name contains only letters and spaces.

Display an error message near the name field if the input is invalid.

* **Email Validation:**

Implement an event handler for the email input.

Check if the input is a valid email address using a regular expression.

Display an error message near the email field if the input is invalid.

* **Password Matching:**

Implement event handlers for the password and confirm password inputs.

Check if the passwords match.

Display an error message near the confirm password field if the passwords do not match.

* **Form Submission:**

Implement a function to handle the form submission when the user clicks the submit button.

Validate all fields.

If any fields are invalid, prevent the form submission and display appropriate error messages.

If all fields are valid, display an alert saying "Form submitted successfully."

**Html Code:**

<!DOCTYPE html><html lang="en">

<head><meta charset="UTF-8"><meta name="viewport" content ="width=device-width , initial-scale=1.0"><title>Registration Form</title><link rel="stylesheet" href="styles.css"></head><body><form id="form"><h1 id="h1">Registration Form</h1><label for="name">Name: </label><input type="text" id="name" name="name" required oninput= "validateName()"><label for="email" >Email : </label><input type="email" id="email" name="email" required oninput="validateEmail()">

<label for="password">Password : </label><div class="password-container"><input type="password" id="password" name="password"

required oninput="validatePassword()">

<span class="eye-icon" onclick="togglePassword()">&#128065;</span></div><label for="cpassword">Confirm Password : </label><div class="password-container"><input type="password" id="cpassword" name="cpassword" required oninput="validatePassword()"><span class="eye-icon" onclick="togglePassword()" >&#128065;</span></div>

<span id="message"></span><br><br>

<button type="button" onclick="valid()"> Submit</button></form><script>function validateName() {var nameInput = document.getElementById("name"); var regex = /^[a-zA-Z\s]+$/;if (!regex.test(nameInput.value)) {document.getElementById("message").innerHTML = "Invalid name. Please use only letters and spaces.";}else{

document.getElementById("message").innerHTML = "";}}function validateEmail() {var emailInput = document.getElementById("email");

var regex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;

if (!regex.test(emailInput.value)) {

document.getElementById("message").innerHTML = "Invalid email address."; } else{document.getElementById("message").innerHTML = "";}}function validatePassword() {var passwordInput = document.getElementById(" password");var cpasswordInput = document.getElementById("cpassword");

var messageElement = document.getElementById(" message");

if (passwordInput.value !== cpasswordInput.value) {

messageElement.innerHTML = "Passwords do not match.";

} else {messageElement.innerHTML = "";}}function togglePassword(){var passwordInput=document.getElementById("password");var eyeIcon = document.querySelector(".eye-icon");if (passwordInput.type ==="password"){passwordInput.type = "text";eyeIcon.innerHTML = "&#128064;";

}else {passwordInput.type = "password";eyeIcon.innerHTML = "&#128065;";}}function valid() {validateName();validateEmail();validatePassword();var messageElement = document.getElementById("message");

if (messageElement.innerHTML === "") {alert('Form Submitted!'); document.getElementById("form").submit();}}</script></body></html>

**CSS Code:**

body {font-family: Arial, sans-serif;

    background-color: #f4f4f4;}

form {max-width: 400px; margin: 50px auto;padding: 20px;background: #fff; box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);}

label {display: block; margin-bottom: 8px;}

input{width: 100%;padding: 8px; margin-bottom: 15px; box-sizing: border-box;}

button {background-color: teal; color: white;padding: 10px 15px; border: none;border-radius: 4px; cursor: pointer;}

.password-container {position: relative;}

.eye-icon {position: absolute;top: 50%;right: 10px;transform: translateY(-50%);cursor: pointer;}

body{font-family: Arial, sans-serif;

background-color: #f4f4f4;}

form {max-width: 400px;margin: 50px auto;padding: 20px;background: #fff;box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);border-radius: 8px;}

label {display: block; margin-bottom: 8px;

font-weight: bold; }

input {width: 100%;padding: 8px; margin-bottom: 15px;box-sizing: border-box;border: 1px solid #ccc;border-radius: 4px; }

.password-container {position: relative; }

.eye-icon {position: absolute;top: 50%;right: 10px; transform: translateY(-50%);cursor: pointer; }

button {background-color: teal; color: white; padding: 10px 15px; border: none; border-radius: 4px; cursor: pointer; }

#message {color: red;margin-bottom: 15px;}

