



Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
Semester : (Spring, Year : 2025), B.Sc. in CSE (Day)

Assignment-01

Course Title : Web Programming

Course Code : CSE 301

Section : 231-D1

**Assignment Name : Build a User Registration Form Using
HTML,CSS,JavaScript**

Student Details

Name		ID
1.	Robin Hossain	231002004

Submission Date : 18/05/2025

Course Teacher's Name : Abida Sultana

[For Teachers use only: Don't Write Anything inside this box]

<u>Lab Report Status</u>	
Marks:	Signature:.....
Comments:.....	Date:.....

1. Create a user registration form using HTML, style it with CSS, and implement form validation using JavaScript.

Implementation:

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>User Registration Form</title>
  <link rel="stylesheet" href="style.css" />
</head>
<body>
  <div class="container">
    <h2>User Registration Form</h2>
    <form id="registrationForm">
      <div class="form-group">
        <label for="fullName">Full Name</label>
        <input type="text" id="fullName" name="fullName" required placeholder="Enter your full name" />
        <small class="error" id="nameError"></small>
      </div>

      <div class="form-group">
        <label for="email">Email Address</label>
        <input type="email" id="email" name="email" required placeholder="Enter your email" />
        <small class="error" id="emailError"></small>
      </div>

      <div class="form-row">
        <div class="form-group">
          <label for="password">Password</label>
          <input type="password" id="password" name="password" required placeholder="Create a password" />
          <small class="error" id="passwordError"></small>
        </div>

        <div class="form-group">
          <label for="confirmPassword">Confirm Password</label>
          <input type="password" id="confirmPassword" name="confirmPassword" required placeholder="Confirm your password" />
          <small class="error" id="confirmPasswordError"></small>
        </div>
      </div>
    </form>
  </div>
</body>
</html>
```

```
</div>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Gender</label>
```

```
<div class="radio-group">
```

```
<label class="radio-label">
```

```
<input type="radio" name="gender" value="Male" /> Male
```

```
</label>
```

```
<label class="radio-label">
```

```
<input type="radio" name="gender" value="Female" /> Female
```

```
</label>
```

```
<label class="radio-label">
```

```
<input type="radio" name="gender" value="Other" /> Other
```

```
</label>
```

```
</div>
```

```
<small class="error" id="genderError"></small>
```

```
</div>
```

```
<div class="form-row">
```

```
<div class="form-group">
```

```
<label for="dob">Date of Birth</label>
```

```
<input type="date" id="dob" name="dob" required />
```

```
<small class="error" id="dobError"></small> </div>
```

```
<div class="form-group">
```

```
<label for="phone">Phone Number</label>
```

```
<input type="tel" id="phone" name="phone" required placeholder="Enter your  
phone number" />
```

```
<small class="error" id="phoneError"></small>
```

```
</div>
```

```
</div>
```

```
<div class="form-group">
```

```
<label for="country">Country</label>
```

```
<select id="country" name="country" required>
```

```
<option value="">-- Select Country --</option>
```

```
<option value="USA">USA</option>
```

```
<option value="Canada">Canada</option>
```

```
<option value="UK">UK</option>
```

```
<option value="Australia">Australia</option>
```

```
<option value="Bangladesh">Bangladesh</option>
```

```
<option value="India">India</option>
```

```
</select>
```

```
<small class="error" id="countryError"></small> </div>
```

```
<div class="form-group checkbox-group">
```

```
<input type="checkbox" id="terms" name="terms" />
```

```
<label for="terms">I agree to the <a href="#">Terms and Conditions</a></label>
```

```
<small class="error" id="termsError"></small>
</div>

<div class="form-group">
  <button type="submit" class="submit-btn">Register</button>
</div>
</form>
</div>

<script src="script.js"></script> </body>
</html>
```

script.js

```
document.addEventListener("DOMContentLoaded", function() {
  document.getElementById("registrationForm").addEventListener("submit", function (e) {
    e.preventDefault();

    let isValid = true;

    document.querySelectorAll(".error").forEach(el => el.textContent = "");

    const fullName = document.getElementById("fullName").value.trim();
    const email = document.getElementById("email").value.trim();
    const password = document.getElementById("password").value;
    const confirmPassword = document.getElementById("confirmPassword").value;
    const dob = document.getElementById("dob").value;  const phone =
document.getElementById("phone").value.trim();
    const country = document.getElementById("country").value;
    const genderSelected = document.querySelector('input[name="gender"]:checked');
    const termsChecked = document.getElementById("terms").checked;
```

```
const emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;  
const phonePattern = /^\d{10}$/; // Assumes 10-digit phone number
```

```
if (fullName.length < 3) {  
    document.getElementById("nameError").textContent = "Full Name must be at least 3  
characters long.";   
    isValid = false;  
}
```

```
if (!emailPattern.test(email)) {  
    document.getElementById("emailError").textContent = "Please enter a valid email  
address.";   
    isValid = false;  
}
```

```
if (password.length < 6) {  
    document.getElementById("passwordError").textContent = "Password must be at least  
6 characters.";   
    isValid = false;  
}
```

```
if (password !== confirmPassword) {  
    document.getElementById("confirmPasswordError").textContent = "Passwords do not  
match.";   
    isValid = false;  
} else if (confirmPassword === "" && password.length >= 6 ) {  
    document.getElementById("confirmPasswordError").textContent = "Please confirm  
your password.";   
    isValid = false;  
}
```

```
if (!genderSelected) {  
    document.getElementById("genderError").textContent = "Please select your gender.";   
    isValid = false;  
}
```

```
if (dob === "") {  
    document.getElementById("dobError").textContent = "Please enter your Date of Birth.";   
    isValid = false;  
}
```

```
    if (!phonePattern.test(phone)) {  
        document.getElementById("phoneError").textContent = "Phone number must be  
exactly 10 digits.";  
        isValid = false;  
    }  
  
    if (country === "") {  
        document.getElementById("countryError").textContent = "Please select your country.";  
        isValid = false;  
    }  
  
    if (!termsChecked) {  
        document.getElementById("termsError").textContent = "You must agree to the terms  
and conditions.";  
        isValid = false;  
    }  
  
    if (isValid) {  
        alert("Form submitted successfully!");  
  
        document.getElementById("registrationForm").reset();  
    }  
});
```

style.css

```
* {  
    margin: 0;  
    padding: 0;  
    box-sizing: border-box;  
}  
  
body {  
  
    background: linear-gradient(135deg, #e0c3fc 0%, #8ec5fc 100%);  
    font-family: 'Poppins', sans-serif;  
    min-height: 100vh;  
    display: flex;  
    align-items: center;  
    justify-content: center;  
    padding: 20px;
```

```
}

.container {
  background: #ffffff;
  padding: 35px 45px;
  border-radius: 20px;

  box-shadow: 0 15px 45px rgba(0, 0, 0, 0.12), 0 5px 15px rgba(0, 0, 0, 0.08);
  width: 100%;
  max-width: 580px;
  border-top: 5px solid #007bff;
  transition: transform 0.3s ease-out, box-shadow 0.3s ease-out;
}

.container:hover {
  transform: translateY(-5px);
  box-shadow: 0 20px 55px rgba(0, 0, 0, 0.15), 0 8px 20px rgba(0, 0, 0, 0.1);
}

.container h2 {
  text-align: center;
  margin-bottom: 30px;
  color: #1A202C;
  font-weight: 700;
  font-size: 1.75em;
  letter-spacing: 0.5px;
}

.form-group {
  margin-bottom: 25px;

  .form-group label {
    display: block;
    margin-bottom: 10px;
    font-weight: 700;
    color: #2D3748;
    font-size: 1em;
  }

  .form-group input[type="text"],
  .form-group input[type="email"],
  .form-group input[type="password"],
  .form-group input[type="date"],
  .form-group input[type="tel"],
  .form-group select {
    width: 100%;
```

```
border: 1px solid #e2e8f0;
border-radius: 10px
font-size: 0.95em;
background-color: #fdfdff;
color: #2D3748;
transition: border-color 0.2s ease-in-out, box-shadow 0.2s ease-in-out, background-color
0.2s ease;
}
.form-group input::placeholder {
  color: #a0aec0;
}

.form-group input:focus,
.form-group select:focus {
  border-color: #007bff;
  background-color: #fff;
  outline: none;
  box-shadow: 0 0 0 3.5px rgba(0, 123, 255, 0.15), 0 1px 3px rgba(0,0,0,0.05) inset;
}

.form-row {
  display: flex;
  flex-wrap: wrap;
  gap: 25px;
}

.form-row .form-group {
  flex: 1;
  min-width: calc(50% - 12.5px);
}

.radio-group,
.checkbox-group {
  margin-top: 12px;
  display: flex;
  flex-wrap: wrap;
  align-items: center;
}

.radio-group .radio-label {
  margin-right: 25px;
  font-weight: 500;
  color: #4A5568;
  display: flex;
  align-items: center;
  cursor: pointer;
  font-size: 0.9em;
}
```



```
..radio-group .radio-label input[type="radio"] {  
  margin-right: 8px;  
  accent-color: #007bff;  
  transform: scale(1.1);  
}  
  
.checkbox-group label {  
  font-weight: 500;  
  color: #4A5568;  
  display: flex;  
  align-items: center;  
  cursor: pointer;  
  font-size: 0.9em;  
}  
.checkbox-group input[type="checkbox"] {  
  margin-right: 10px;  
  accent-color: #007bff;  
  transform: scale(1.1);  
}  
.checkbox-group a {  
  color: #007bff;  
  text-decoration: none;  
  font-weight: 600;  
}  
.checkbox-group a:hover {  
  text-decoration: underline;  
  color: #0056b3;  
}  
  
.error {  
  color: #e53e3e;  
  font-size: 0.85em;  
  display: block;  
  margin-top: 8px;  
  font-weight: 600;  
  padding-left: 5px;  
}  
.error::before {  
  content: "•";  
  margin-right: 6px;  
  font-weight: bold;  
}  
  
.submit-btn {  
  width: 100%;  
  padding: 15px 20px;  
  background: linear-gradient(135deg, #007bff 0%, #0056b3 100%);  
  color: white;  
  font-weight: 700;
```

```
font-size: 1.05em;
text-transform: uppercase;
letter-spacing: 0.8px;
border: none;
border-radius: 10px;
cursor: pointer;
transition: background 0.3s ease, transform 0.25s ease-out, box-shadow 0.3s ease-out;
position: relative;
overflow: hidden;
z-index: 1;
box-shadow: 0 5px 18px rgba(0, 123, 255, 0.25);
}
```

```
.submit-btn::before {
  content: "";
  position: absolute;
  top: 50%;
  left: 50%;
  width: 0;
  height: 0;
  background: rgba(255, 255, 255, 0.2);
  border-radius: 50%;
  transform: translate(-50%, -50%);
  opacity: 0;
  transition: width 0.5s cubic-bezier(0.22, 1, 0.36, 1),
    height 0.5s cubic-bezier(0.22, 1, 0.36, 1),
    opacity 0.5s cubic-bezier(0.22, 1, 0.36, 1);
  z-index: -1;
}
```

```
.submit-btn:hover {
  background: linear-gradient(135deg, #0069d9 0%, #004085 100%);
  transform: translateY(-4px) scale(1.01);
  box-shadow: 0 8px 25px rgba(0, 91, 179, 0.35);
}
```

```
.submit-btn:hover::before {
  width: 300%;
  height: 300%;
  opacity: 1;
  animation: lightPulse 0.7s ease-out forwards;
}
```

```
@keyframes lightPulse {
  0% { width: 0; height: 0; opacity: 0.3; }
  50% { opacity: 0.1; }
  100% { width: 300%; height: 300%; opacity: 0; }
}
```

```
.submit-btn:active {  
  transform: translateY(-1px) scale(0.99);  
  background: linear-gradient(135deg, #004085 0%, #00274f 100%);  
  box-shadow: 0 3px 10px rgba(0, 64, 133, 0.2);  
}
```

```
.logo {  
  display: block;  
  margin: 0 auto 20px;  
  width: 90px;  
}
```

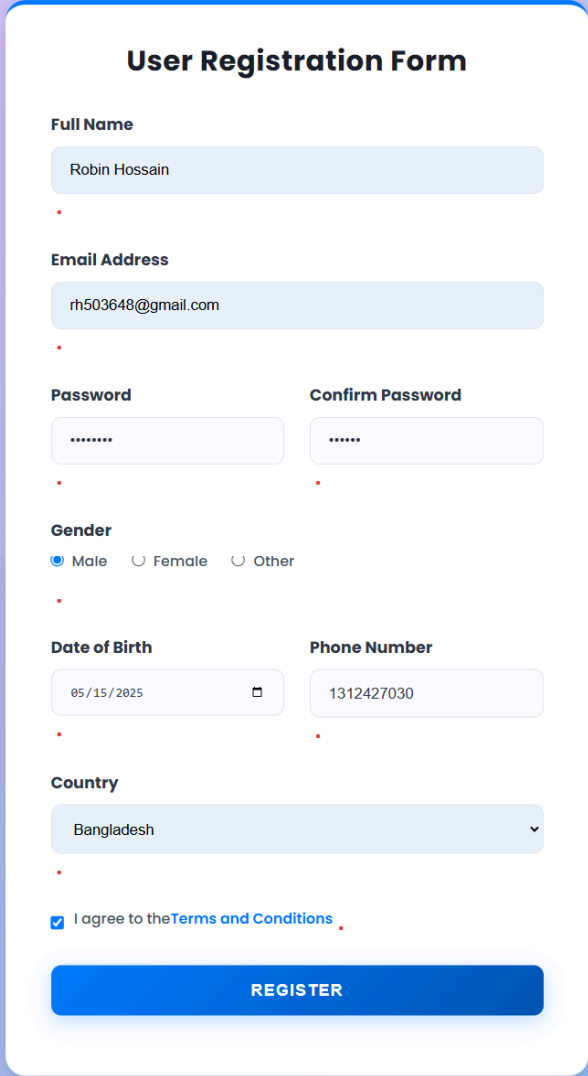
```
@media (max-width: 768px) {  
  .container {  
    margin: 20px;  
    padding: 30px;  
    border-top-width: 4px;  
  }  
  .container h2 {  
    font-size: 1.6em;  
  }  
  .form-row {  
    flex-direction: column;  
    gap: 0;  
  }  
  .form-row .form-group {  
    min-width: 100%;  
    margin-bottom: 25px;  
  }  
  .form-row .form-group:last-child {  
    margin-bottom: 0;  
  }  
}
```

```
@media (max-width: 480px) {  
  body {  
    padding: 15px;  
  }  
  .container {  
    padding: 25px 20px;  
    border-radius: 16px;  
  }  
  .container h2 {  
    font-size: 1.45em;  
    margin-bottom: 25px;  
  }  
  .form-group label {  
    font-size: 0.95em;  
    margin-bottom: 8px;  
  }  
}
```

```
}  
.form-group input[type="text"],  
.form-group input[type="email"],  
.form-group input[type="password"],  
.form-group input[type="date"],  
.form-group input[type="tel"],  
.form-group select {  
  padding: 12px 15px;  
  font-size: 0.9em;  
}  
.submit-btn {  
  padding: 14px 18px;  
  font-size: 1em;  
  letter-spacing: 0.5px;  
}  
.error {  
  font-size: 0.8em;  
  margin-top: 6px;  
}  
}
```

Output:

Step-1: Form With only normal text input



The image shows a user registration form titled "User Registration Form" centered on a white card with rounded corners, set against a light blue gradient background. The form contains several input fields with labels and placeholder text, each followed by a small red asterisk indicating a required field. The fields are: "Full Name" with the placeholder "Robin Hossain"; "Email Address" with the placeholder "rh503648@gmail.com"; "Password" and "Confirm Password" both with placeholder "*****"; "Gender" with radio buttons for "Male", "Female", and "Other"; "Date of Birth" with a date picker showing "05 / 15 / 2025" and a calendar icon; "Phone Number" with the placeholder "1312427030"; and "Country" with a dropdown menu showing "Bangladesh". At the bottom, there is a checkbox labeled "I agree to the" followed by a link "Terms and Conditions", and a large blue "REGISTER" button.

User Registration Form

Full Name
Robin Hossain

Email Address
rh503648@gmail.com

Password

Confirm Password

Gender
☒ Male ☐ Female ☐ Other

Date of Birth
05 / 15 / 2025

Phone Number
1312427030

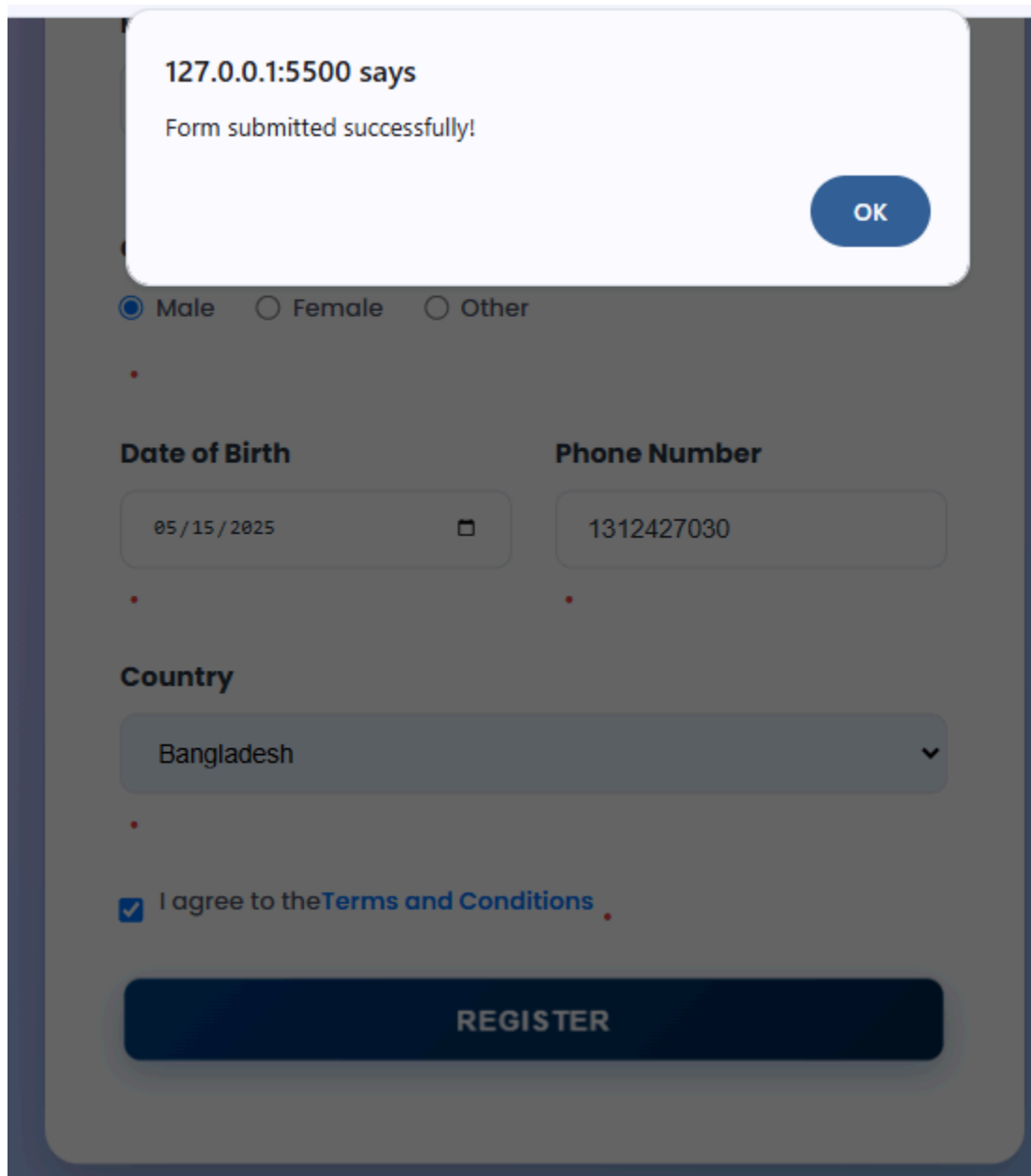
Country
Bangladesh

☒ I agree to the [Terms and Conditions](#)

REGISTER

Figure-01

Step-2 , Successfully Registered for Valid input of Name,Email, 10 Digits of Phone Number ,and Checkbox



The image shows a registration form with a success message overlay. The overlay is a white box with rounded corners, containing the text "127.0.0.1:5500 says" and "Form submitted successfully!". Below the text is a blue button labeled "OK".

The registration form itself is dark-themed and contains the following fields and elements:

- Gender:** Three radio buttons labeled "Male", "Female", and "Other". The "Male" button is selected.
- Date of Birth:** A text input field containing "05 / 15 / 2025" and a calendar icon.
- Phone Number:** A text input field containing "1312427030".
- Country:** A dropdown menu showing "Bangladesh" with a downward arrow.
- Terms and Conditions:** A checkbox labeled "I agree to the Terms and Conditions". The checkbox is checked.
- REGISTER:** A large, dark blue button at the bottom of the form.

Figure-02

Step3-Showing error for mismatch of password and confirm password and others that form can not be submitted.

•

Password

• Password must be at least 6 characters.

Confirm Password

• Passwords do not match.

Gender

☒ Male ☐ Female ☐ Other

•

Date of Birth

•

Phone Number

• Phone number must be exactly 10 digits.

Country

Bangladesh

•

☒ I agree to the [Terms and Conditions](#) •

REGISTER

Figure-03

Step4-Showing error for unchecked gender box and terms and conditions

The image shows a registration form with the following fields and error messages:

- Password**: A text input field with a red error message below it.
- Confirm Password**: A text input field with a red error message below it.
- Gender**: Three radio buttons labeled "Male", "Female", and "Other". Below them is a red error message: "• Please select your gender."
- Date of Birth**: A date input field showing "05/16/2025" with a calendar icon. Below it is a red error message.
- Phone Number**: A text input field showing "1312427030". Below it is a red error message.
- Country**: A dropdown menu showing "Bangladesh" with a downward arrow. Below it is a red error message.
- Terms and Conditions**: A checkbox labeled "I agree to the Terms and Conditions". Below it is a red error message: "• You must agree to the terms and conditions."
- REGISTER**: A large blue button at the bottom of the form.

Figure-04

Step5-Showing error for wrong formation of Email input and empty name

User Registration Form


Full Name

Robin Hossain

•

Email Address

rh503648

 Please include an '@' in the email address. 'rh503648' is missing an '@'.

Password

•••••

•

Confirm Password


•••••

•

User Registration Form

Full Name

Enter your full name

 Please fill out this field.

•

Email Address

rh503648@gmail.com

•

Password

•••••

•

Confirm Password

•••••

•

Figure-5

Step6- Datepicker and Country Dropdown List

The image displays two versions of a registration form side-by-side, illustrating the implementation of a datepicker and a country dropdown list.

Left Version (Current State):

- Gender:** Radio buttons for Male (selected), Female, and Other. A red error message below reads: "Please select your gender."
- Date of Birth:** A date input field showing "05/16/2025" with a calendar icon. A datepicker is open, showing the month of May 2025. The date "16" is highlighted in blue. The calendar has a "Clear" button and a "Today" button.
- Phone Number:** An input field containing "1312427030".
- Buttons:** A large blue "REGISTER" button is at the bottom.

Right Version (Target State):

- Gender:** Radio buttons for Male, Female, and Other. A red error message below reads: "Please select your gender."
- Date of Birth:** A date input field showing "mm/dd/yyyy" with a calendar icon.
- Phone Number:** An input field with the placeholder text "Enter your phone number".
- Country:** A dropdown menu is open, showing a list of countries: USA, Canada, UK, Australia, Bangladesh (highlighted in blue), and India.

Figure-06