

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

WEB TECHNOLOGY LAB

BCSL504

EXPERIMENT – 04
REGISTRATION FORM USING HTML
AND CSS

5th Semester

HTML Forms • Input Elements • Tables

CSS • Background Colours • Font Styling

Prepared by Search Creators

Learn • Practice • Execute

1. Experiment 04

Aim

Develop an HTML page named `registration.html` having a variety of HTML input elements with background colours and a table for alignment.
Apply CSS styles to provide different font colours and font sizes.

2. Requirements

- Search Creators Compiler / Code Studio (Recommended)

<https://searchcreators.org/compiler/>

- Modern web browser such as Chrome, Edge or Firefox
- Internet connection for accessing Search Creators Compiler
- Alternatively, VS Code, Notepad or another suitable HTML/CSS editor
- Basic knowledge of HTML Forms and CSS

3. Search Creators Compiler

Run This Program on Search Creators

Practice the Web Technology Lab program using the **Search Creators Compiler / Code Studio**.

Open Search Creators Compiler

<https://searchcreators.org/compiler/>

Write the registration form program, execute it and verify different HTML form controls directly using the coding environment.

4. Problem Statement

Develop an HTML page named:

`registration.html`

The webpage should demonstrate:

1. Different HTML input elements.
2. Student registration form.
3. Table-based alignment.
4. Background colours.
5. Different font colours.
6. Different font sizes.
7. CSS styling.

5. Introduction to HTML Forms

HTML forms are used to collect information from users.

The main form element is:

```
1 <form>
2   Form controls
3 </form>
```

A registration form can collect information such as:

- Student Name
- USN
- Password
- Email
- Mobile Number
- Date of Birth
- Gender
- Skills
- Branch
- Address

6. Important Form Elements

HTML Element	Purpose
<form>	Creates an HTML form.
<input type="text">	Accepts single-line text.
<input type="password">	Accepts password input.
<input type="email">	Accepts an email address.
<input type="tel">	Accepts telephone/mobile number.
<input type="number">	Accepts numerical input.
<input type="date">	Provides a date input control.
<input type="radio">	Allows one selection from a group.
<input type="checkbox">	Allows multiple selections.
<select>	Creates a drop-down list.
<textarea>	Accepts multi-line text.
<input type="file">	Allows file selection.
<input type="submit">	Creates a submit button.
<input type="reset">	Creates a reset button.

7. HTML Program – registration.html

Important

Create the file:

registration.html

Practice and execute the program using:

Search Creators Compiler / Code Studio

<https://searchcreators.org/compiler/>

```

1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5
6   <meta charset="UTF-8">
```

```
<title>Student Registration Form</title>
```

```
<style>
```

```
    body {  
        background-color: lightyellow;  
        font-family: Arial, sans-serif;  
    }
```

```
    h2 {  
        color: darkgreen;  
        font-size: 30px;  
        text-align: center;  
    }
```

```
    table {  
        background-color: lightcyan;  
        margin: auto;  
        padding: 20px;  
        border: 2px solid darkgreen;  
    }
```

```
    td {  
        padding: 8px;  
        font-size: 17px;  
        color: darkblue;  
    }
```

```
    .label {  
        font-weight: bold;  
        color: darkgreen;  
    }
```

```
    input,  
    select,  
    textarea {  
        font-size: 16px;  
        padding: 5px;  
    }
```

```
    .submit-btn {  
        background-color: green;  
        color: white;  
        font-size: 17px;  
        padding: 8px 18px;  
    }
```

```
55     .reset-btn {
56         background-color: red;
57         color: white;
58         font-size: 17px;
59         padding: 8px 18px;
60     }
61
62     </style>
63
64 </head>
65
66 <body>
67
68 <h2>Student Registration Form</h2>
69
70 <form>
71
72 <table>
73
74     <tr>
75         <td class="label">
76             Student Name:
77         </td>
78
79         <td>
80             <input
81                 type="text"
82                 name="studentname"
83                 placeholder="Enter your name"
84                 required>
85         </td>
86     </tr>
87
88     <tr>
89         <td class="label">
90             USN:
91         </td>
92
93         <td>
94             <input
95                 type="text"
96                 name="usn"
97                 placeholder="Enter USN"
98                 required>
99         </td>
100     </tr>
101
102     <tr>
```

```
103     <td class="label">
104         Password:
105     </td>
106
107     <td>
108         <input
109             type="password"
110             name="password"
111             placeholder="Enter password">
112     </td>
113 </tr>
114
115 <tr>
116     <td class="label">
117         Email:
118     </td>
119
120     <td>
121         <input
122             type="email"
123             name="email"
124             placeholder="Enter email">
125     </td>
126 </tr>
127
128 <tr>
129     <td class="label">
130         Mobile Number:
131     </td>
132
133     <td>
134         <input
135             type="tel"
136             name="mobile"
137             placeholder="Enter mobile number">
138     </td>
139 </tr>
140
141 <tr>
142     <td class="label">
143         Age:
144     </td>
145
146     <td>
147         <input
148             type="number"
149             name="age"
150             min="17"
```

```
151         max="100">
152     </td>
153 </tr>
154
155 <tr>
156     <td class="label">
157         Date of Birth:
158     </td>
159
160     <td>
161         <input
162             type="date"
163             name="dob">
164     </td>
165 </tr>
166
167 <tr>
168     <td class="label">
169         Gender:
170     </td>
171
172     <td>
173
174         <input
175             type="radio"
176             name="gender"
177             value="Male">
178         Male
179
180         <input
181             type="radio"
182             name="gender"
183             value="Female">
184         Female
185
186         <input
187             type="radio"
188             name="gender"
189             value="Other">
190         Other
191
192     </td>
193 </tr>
194
195 <tr>
196     <td class="label">
197         Skills:
198     </td>
```

```
199
200     <td>
201
202         <input
203             type="checkbox"
204             name="skill"
205             value="HTML">
206         HTML
207
208         <input
209             type="checkbox"
210             name="skill"
211             value="CSS">
212         CSS
213
214         <input
215             type="checkbox"
216             name="skill"
217             value="JavaScript">
218         JavaScript
219
220     </td>
221 </tr>
222
223 <tr>
224     <td class="label">
225         Branch:
226     </td>
227
228     <td>
229
230         <select name="branch">
231
232             <option value="">
233                 Select Branch
234             </option>
235
236             <option value="CSE">
237                 CSE
238             </option>
239
240             <option value="ISE">
241                 ISE
242             </option>
243
244             <option value="AIML">
245                 AIML
246             </option>
```

```
247
248         <option value="ECE">
249             ECE
250         </option>
251
252     </select>
253
254 </td>
255 </tr>
256
257 <tr>
258     <td class="label">
259         Semester:
260     </td>
261
262     <td>
263
264         <select name="semester">
265
266             <option>1</option>
267             <option>2</option>
268             <option>3</option>
269             <option>4</option>
270             <option selected>5</option>
271             <option>6</option>
272             <option>7</option>
273             <option>8</option>
274
275         </select>
276
277     </td>
278 </tr>
279
280 <tr>
281     <td class="label">
282         Address:
283     </td>
284
285     <td>
286
287         <textarea
288             name="address"
289             rows="4"
290             cols="30"
291             placeholder="Enter your address"></textarea>
292
293     </td>
294 </tr>
```

```
295
296     <tr>
297         <td class="label">
298             Upload Photo:
299         </td>
300
301         <td>
302             <input
303                 type="file"
304                 name="photo">
305         </td>
306     </tr>
307
308     <tr>
309
310         <td colspan="2"
311             align="center">
312
313             <input
314                 type="submit"
315                 value="Register"
316                 class="submit-btn">
317
318             <input
319                 type="reset"
320                 value="Reset"
321                 class="reset-btn">
322
323         </td>
324
325     </tr>
326
327 </table>
328
329 </form>
330
331 </body>
332 </html>
```

8. Program Explanation

8.1 Form Element

The registration form is created using:

```
1 <form>
2     ...
```

```
3 </form>
```

The `form` element acts as a container for the different form controls.

8.2 Table for Alignment

A table is used to arrange the labels and input fields in rows and columns.

Example:

```
1 <tr>
2
3     <td>
4         Student Name:
5     </td>
6
7     <td>
8         <input type="text">
9     </td>
10
11 </tr>
```

This gives proper alignment to the registration form.

9. Different Input Elements

9.1 Text Field

```
1 <input type="text"
2     name="studentname">
```

It is used to accept single-line text such as a student name or USN.

9.2 Password Field

```
1 <input type="password"
2     name="password">
```

It is used to accept password input.

The browser normally hides the entered characters.

9.3 Email Field

```
1 <input type="email"
2     name="email">
```

It is intended for accepting an email address.

9.4 Telephone Field

```
1 <input type="tel"  
2     name="mobile">
```

It is used for telephone or mobile number input.

9.5 Number Field

```
1 <input type="number"  
2     name="age"  
3     min="17"  
4     max="100">
```

It accepts numerical values.

Here:

- min="17" specifies the minimum value.
- max="100" specifies the maximum value.

9.6 Date Field

```
1 <input type="date"  
2     name="dob">
```

It provides a date input control.

9.7 Radio Button

```
1 <input type="radio"  
2     name="gender"  
3     value="Male">  
4 Male
```

Radio buttons are used when one option is selected from a group.

The gender radio buttons use the same name:

```
name="gender"
```

Therefore, only one gender option can be selected at a time.

9.8 Checkbox

```
1 <input type="checkbox"
2     name="skill"
3     value="HTML">
4 HTML
```

Checkboxes allow multiple options to be selected.

For example, a student can select:

- HTML
- CSS
- JavaScript

9.9 Drop-down List

The `select` element creates a drop-down list.

Example:

```
1 <select name="branch">
2
3     <option>CSE</option>
4     <option>ISE</option>
5     <option>AIML</option>
6     <option>ECE</option>
7
8 </select>
```

Each choice is represented using the `option` element.

9.10 Text Area

```
1 <textarea
2     name="address"
3     rows="4"
4     cols="30">
5 </textarea>
```

The `textarea` element accepts multi-line text.

It is useful for information such as:

- Address
- Comments

- Feedback
- Description

9.11 File Input

```
1 <input type="file"  
2     name="photo">
```

It allows the user to select a file from the device.

9.12 Submit Button

```
1 <input  
2     type="submit"  
3     value="Register">
```

The submit button is used to submit the form.

9.13 Reset Button

```
1 <input  
2     type="reset"  
3     value="Reset">
```

The reset button returns the form controls to their initial values.

10. CSS Styling

CSS is used to provide background colours, font colours and font sizes.

10.1 Page Background

```
1 body {  
2     background-color: lightyellow;  
3     font-family: Arial, sans-serif;  
4 }
```

The background-color property changes the background colour of the webpage.

10.2 Heading Style

```
1 h2 {  
2   color: darkgreen;  
3   font-size: 30px;  
4   text-align: center;  
5 }
```

Here:

- `color` changes the text colour.
- `font-size` changes the size of the text.
- `text-align` controls text alignment.

10.3 Table Background

```
1 table {  
2   background-color: lightcyan;  
3   margin: auto;  
4   padding: 20px;  
5   border: 2px solid darkgreen;  
6 }
```

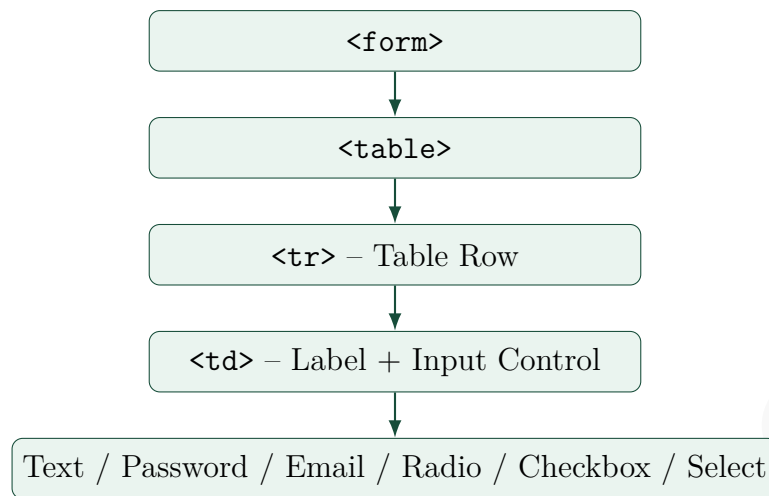
The registration form is displayed inside a coloured table.

10.4 Label Styling

```
1 .label {  
2   font-weight: bold;  
3   color: darkgreen;  
4 }
```

The labels are displayed using bold dark-green text.

11. Form Structure



12. Input Type Summary

Input Type	Use in Program
text	Student Name and USN
password	Password
email	Email Address
tel	Mobile Number
number	Age
date	Date of Birth
radio	Gender
checkbox	Skills
file	Photo selection
submit	Register button
reset	Reset button

13. How to Execute the Program

Run This Program on Search Creators

Recommended Method – Search Creators Compiler

Open:

Search Creators Compiler / Code Studio

<https://searchcreators.org/compiler/>

Create the HTML program, execute it and verify the registration form using the web preview/output environment.

14. Procedure

1. Open the **Search Creators Compiler / Code Studio**:

<https://searchcreators.org/compiler/>

2. Create a new HTML file or web project.

3. Name the HTML file:

`registration.html`

4. Enter the given HTML and CSS program.
5. Create the registration form using the `form` element.
6. Use an HTML table to align the labels and input controls.
7. Add text fields for student name and USN.
8. Add password, email, telephone, number and date input controls.
9. Add radio buttons for gender.
10. Add checkboxes for skills.
11. Add drop-down lists for branch and semester.
12. Add a text area for the address.
13. Add a file input for photo selection.
14. Add Register and Reset buttons.
15. Apply CSS for background colours.
16. Apply different font colours and font sizes.

17. Save the program.
18. Run or preview the webpage using the Search Creators coding environment.
19. Enter sample values in the registration form.
20. Verify all the form controls and CSS styles.
21. If required, the same program can alternatively be executed using VS Code, Notepad or another HTML editor and a web browser.

15. Expected Output

The browser displays a styled registration form similar to the following:

Student Registration Form

Student Name:	[Enter your name]
USN:	[Enter USN]
Password:	[*****]
Email:	[student@email.com]
Mobile Number:	[9876543210]
Age:	[20]
Date of Birth:	[DD / MM / YYYY]
Gender:	☐ Male ☐ Female ☐ Other
Skills:	☐ HTML ☐ CSS ☐ JavaScript
Branch:	[Select Branch]
Semester:	[5]
Address:	[Enter your address]
Upload Photo:	[Choose File]
Register Reset	

16. Important Viva Questions

Viva Questions

1. **What is an HTML form?**

An HTML form is used to collect information from a user.

2. **Which tag is used to create a form?**

`<form>`

3. **What is the use of the input element?**

It is used to create different input controls in a form.

4. **What is `type="text"` used for?**

It creates a single-line text input field.

5. **What is `type="password"` used for?**

It creates a password input field.

6. **What is `type="email"` used for?**

It creates an input field intended for email addresses.

7. **What is `type="date"` used for?**

It provides a date input control.

8. **What is the difference between radio buttons and checkboxes?**

Radio buttons are generally used for one selection from a group, whereas checkboxes allow multiple selections.

9. **Why do the gender radio buttons use the same name?**

It groups the radio buttons so that only one option can be selected at a time.

10. **What is the use of `<select>`?**

It creates a drop-down list.

11. **What is the use of `<option>`?**

It defines an option inside a drop-down list.

12. **What is the use of `<textarea>`?**

It accepts multi-line text.

13. **What does `type="file"` do?**

It allows the user to select a file.

14. **What is the purpose of the submit button?**

It is used to submit form data.

15. What is the purpose of the reset button?

It resets the form controls to their initial values.

16. Why is a table used in this experiment?

The table is used to align the registration form labels and input controls.

17. Which CSS property changes the background colour?

background-color

18. Which CSS property changes the text colour?

color

19. Which CSS property changes the font size?

font-size

20. Which online coding platform can be used to practice this experiment?

Search Creators Compiler / Code Studio:

<https://searchcreators.org/compiler/>

17. Quick Revision

Concept	Remember
Required Filename	registration.html
HTML Form	<form>
Text Input	type="text"
Password	type="password"
Email	type="email"
Mobile	type="tel"
Number	type="number"
Date	type="date"
Single Selection	radio
Multiple Selection	checkbox
Drop-down	<select>
Multi-line Text	<textarea>
File Selection	type="file"
Submit	type="submit"
Reset	type="reset"
Background Colour	background-color
Text Colour	color
Font Size	font-size
Practice Platform	Search Creators Compiler
Website	searchcreators.org/compiler/

18. Result

Result

The HTML page `registration.html` was developed successfully using different HTML input elements.

The form controls were aligned using an HTML table and CSS styles were applied successfully to provide background colours, different font colours and font sizes.

The experiment can be practised and executed using the **Search Creators Compiler / Code Studio**.

<https://searchcreators.org/compiler/>

END OF EXPERIMENT – 04

BCSL504 – Web Technology Lab

Prepared by Search Creators

Practice Online: searchcreators.org/compiler/
