HTML Form

An **HTML form** is *a section of a document* which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.

An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. .

## **Why use HTML Form**

HTML forms are required if you want to collect some data from of the site visitor.

For example: If a user want to purchase some items on internet, he/she must fill the form such as shipping address and credit/debit card details so that item can be sent to the given address.

## **HTML Form Syntax**

1. **<form** action="server url" method="get|post"**>**
2. //input controls e.g. textfield, textarea, radiobutton, button
3. **</form>**

## **HTML Form Tags**

Let's see the list of HTML 5 form tags.

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <form> | It defines an HTML form to enter inputs by the used side. |
| <input> | It defines an input control. |
| <textarea> | It defines a multi-line input control. |
| <label> | It defines a label for an input element. |
| <fieldset> | It groups the related element in a form. |
| <legend> | It defines a caption for a <fieldset> element. |
| <select> | It defines a drop-down list. |
| <optgroup> | It defines a group of related options in a drop-down list. |
| <option> | It defines an option in a drop-down list. |
| <button> | It defines a clickable button. |

## **HTML <input> element**

The HTML <input> element is fundamental form element. It is used to create form fields, to take input from user. We can apply different input filed to gather different information form user. Following is the example to show the simple text input.

## **Example:**

1. **<body>**
2. **<form>**
3. Enter your name  **<br>**
4. **<input** type="text" name="username"**>**
5. **</form>**
6. **</body>**

## **HTML TextField Control**

The type="text" attribute of input tag creates textfield control also known as single line textfield control. The name attribute is optional, but it is required for the server side component such as JSP, ASP, PHP etc.

1. **<form>**
2. First Name: **<input** type="text" name="firstname"**/>** **<br/>**
3. Last Name:  **<input** type="text" name="lastname"**/>** **<br/>**
4. **</form>**

## **HTML <textarea> tag in form**

The <textarea> tag in HTML is used to insert multiple-line text in a form. The size of <textarea> can be specify either using "rows" or "cols" attribute or by CSS.

**Example:**

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **<title>**Form in HTML**</title>**
5. **</head>**
6. **<body>**
7. **<form>**
8. Enter your address:**<br>**
9. **<textarea** rows="2" cols="20"**></textarea>**
10. **</form>**
11. **</body>**
12. **</html>**

## **Label Tag in Form**

It is considered better to have label in form. As it makes the code parser/browser/user friendly.

If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.

1. **<form>**
2. **<label** for="firstname"**>**First Name: **</label>** **<br/>**
3. **<input** type="text" id="firstname" name="firstname"**/>** **<br/>**
4. **<label** for="lastname"**>**Last Name: **</label>**
5. **<input** type="text" id="lastname" name="lastname"**/>** **<br/>**
6. **</form>**

## **HTML Password Field Control**

The password is not visible to the user in password field control.

1. **<form>**
2. **<label** for="password"**>**Password: **</label>**
3. **<input** type="password" id="password" name="password"**/>** **<br/>**
4. **</form>**

## **HTML 5 Email Field Control**

The email field in new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.

1. **<form>**
2. **<label** for="email"**>**Email: **</label>**
3. **<input** type="email" id="email" name="email"**/>** **<br/>**
4. **</form>**

## **Radio Button Control**

The radio button is used to select one option from multiple options. It is used for selection of gender, quiz questions etc.

If you use one name for all the radio buttons, only one radio button can be selected at a time.

Using radio buttons for multiple options, you can only choose a single option at a time.

1. **<form>**
2. **<label** for="gender"**>**Gender: **</label>**
3. **<input** type="radio" id="gender" name="gender" value="male"**/>**Male
4. **<input** type="radio" id="gender" name="gender" value="female"**/>**Female **<br/>**
5. **</form>**

## **Checkbox Control**

The checkbox control is used to check multiple options from given checkboxes.

1. **<form>**
2. Hobby:**<br>**
3. **<input** type="checkbox" id="cricket" name="cricket" value="cricket"**/>**
4. **<label** for="cricket"**>**Cricket**</label>** **<br>**
5. **<input** type="checkbox" id="football" name="football" value="football"**/>**
6. **<label** for="football"**>**Football**</label>** **<br>**
7. **<input** type="checkbox" id="hockey" name="hockey" value="hockey"**/>**
8. **<label** for="hockey"**>**Hockey**</label>**
9. **</form>**

## **Submit button control**

HTML **<input type="submit">** are used to add a submit button on web page. When user clicks on submit button, then form get submit to the server.

Syntax:

1. **<input** type="submit" value="submit"**>**

**Example:**

1. **<form>**
2. **<label** for="name"**>**Enter name**</label><br>**
3. **<input** type="text" id="name" name="name"**><br>**
4. **<label** for="pass"**>**Enter Password**</label><br>**
5. **<input** type="Password" id="pass" name="pass"**><br>**
6. **<input** type="submit" value="submit"**>**
7. **</form>**

## **HTML <fieldset> element:**

The <fieldset> element in HTML is used to group the related information of a form. This element is used with <legend> element which provide caption for the grouped elements.

**Example:**

1. **<form>**
2. **<fieldset>**
3. **<legend>**User Information:**</legend>**
4. **<label** for="name"**>**Enter name**</label><br>**
5. **<input** type="text" id="name" name="name"**><br>**
6. **<label** for="pass"**>**Enter Password**</label><br>**
7. **<input** type="Password" id="pass" name="pass"**><br>**
8. **<input** type="submit" value="submit"**>**
9. **</fieldset>**
10. </form**>**

## **HTML Form Example**

Following is the example for a simple form of registration.

1. <!DOCTYPE html**>**
2. **<html>**
3. **<head>**
4. **<title>**Form in HTML**</title>**
5. **</head>**
6. **<body>**
7. **<h2>**Registration form**</h2>**
8. **<form>**
9. **<fieldset>**
10. **<legend>**User personal information**</legend>**
11. **<label>**Enter your full name**</label><br>**
12. **<input** type="text" name="name"**><br>**
13. **<label>**Enter your email**</label><br>**
14. **<input** type="email" name="email"**><br>**
15. **<label>**Enter your password**</label><br>**
16. **<input** type="password" name="pass"**><br>**
17. **<label>**confirm your password**</label><br>**
18. **<input** type="password" name="pass"**><br>**
19. **<br><label>**Enter your gender**</label><br>**
20. **<input** type="radio" id="gender" name="gender" value="male"**/>**Male  **<br>**
21. **<input** type="radio" id="gender" name="gender" value="female"**/>**Female **<br/>**
22. **<input** type="radio" id="gender" name="gender" value="others"**/>**others **<br/>**
23. **<br>**Enter your Address:**<br>**
24. **<textarea></textarea><br>**
25. **<input** type="submit" value="sign-up"**>**
26. **</fieldset>**
27. **</form>**
28. **</body>**
29. **</html>**

### **<input type="submit">:**

The <input> element of type "submit" defines a submit button to submit the form to the server when the "click" event occurs.

### **Example:**

1. **<form** action="https://www.google.co.in/"**>**
2. **<label>**Enter User name**</label><br>**
3. **<input** type="text" name="firstname"**><br>**
4. **<label>**Enter Password**</label><br>**
5. **<input** type="Password" name="password"**><br>**
6. **<br><input** type="submit" value="submit"**>**
7. **</form>**

# HTML Classes

## **Class Attribute in HTML**

The HTML class attribute is used to specify a single or multiple class names for an HTML element. The class name can be used by CSS and JavaScript to do some tasks for HTML elements. You can use this class in CSS with a specific class, write a period (.) character, followed by the name of the class for selecting elements.

A class attribute can be defined within <style> tag or in separate file using the (.) character.

In an HTML document, we can use the same class attribute name with different elements.

## **Defining an HTML class**

To create an HTML class, firstly define style for HTML class using <style> tag within <head> section as following example:

### **Example:**

1. **<head>**
2. **<style>**
3. .headings{
4. color: lightgreen;
5. font-family: cursive;
6. background-color: black; }
7. **</style>**
8. **</head>**
9. <!DOCTYPE html**>**
10. **<html>**
11. **<head>**
12. **<style>**
13. .headings{
14. color: lightgreen;
15. font-family: cursive;
16. background-color: black; }
17. **</style>**
18. **</head>**
19. **<body>**
20. **<h1** class="headings"**>**This is first heading**</h1>**
21. **<h2** class="headings"**>**This is Second heading**</h2>**
22. **<h3** class="headings"**>**This is third heading**</h3>**
23. **<h4** class="headings"**>**This is fourth heading**</h4>**
24. **</body>**
25. **</html>**

# HTML Id Attribute

The **id attribute** is used to specify the unique ID for an element of the HTML document. It allocates the unique identifier which is used by the **CSS** and the **JavaScript** for performing certain tasks.

### **Syntax**

1. **<tag** id="value"**>**
2. <!DOCTYPE html**>**
3. **<html>**
4. **<head>**
5. **<title>**
6. Example of Id attribute in CSS
7. **</title>**
8. **<style>**
9. #Cars {
10. padding: 40px;
11. background-color: lightblue;
12. color: black;
13. text-align: center;
14. }
16. #Bikes
17. {
18. padding: 50px;
19. background-color: lightGreen;
20. text-align: center;
21. }
22. **</style>**
23. **</head>**
24. **<body>**
25. **<p>** Use CSS to style an element with the id: **</p>**
26. **<h1** id="Cars"**>** Cars **</h1>**
27. **<h1** id="Bikes"**>** Bikes **</h1>**
28. **</body>**
29. **</html>**