# **HTML Form Elements**

**The HTML <form> Elements**

One or more of the following form elements can be found in the HTML <form> element:

* <input>
* <label>
* <select>
* <textarea>
* <button>
* <fieldset>
* <legend>
* <datalist>
* <output>
* <option>
* <optgroup>

## The <input> Element

The <input> element is one of the most commonly used form elements.

Depending on the type attribute, the <input> element can be displayed in a variety of ways.

### **Example**

<label for="fname">First name:</label>  
<input type="text" id="fname" name="fname">

## The <label> Element

A label for several form elements is defined by the <label> element.

When the user focuses on the input element, the screen-reader will read out loud the label, which is useful for screen-reader users.

The <label> element also aids users who have trouble clicking on small regions (such as radio buttons or checkboxes) because it toggles the radio button/checkbox when the user clicks the text within the <label> element.

To connect them, the for attribute of the label> tag should be equal to the id attribute of the <input> element.

## The <select> Element

The <select> element defines a drop-down list:

### **Example**

<label for="cars">Choose a car:</label>  
<select id="cars" name="cars">  
  <option value="volvo">Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="fiat">Fiat</option>  
  <option value="audi">Audi</option>  
</select>

The <option> element specifies a selectionable option.

The first option in the drop-down list is selected by default.

Add the selected attribute to the option to define a pre-selected option:

### **Example**

<option value="fiat" selected>Fiat</option>

### **Visible Values:**

To specify the number of visible values, use the size attribute:

### **Example**

<label for="cars">Choose a car:</label>  
<select id="cars" name="cars" size="3">  
  <option value="volvo">Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="fiat">Fiat</option>  
  <option value="audi">Audi</option>  
</select>

### **Allow Multiple Selections:**

Allow the user to select multiple values by using the multiple attribute:

### **Example**

<label for="cars">Choose a car:</label>  
<select id="cars" name="cars" size="4"multiple>  
  <option value="volvo">Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="fiat">Fiat</option>  
  <option value="audi">Audi</option>  
</select>

## The <textarea> Element

## A multi-line input field (a text area) is defined by the <textarea> element:

### **Example**

<textarea name="message" rows="10" cols="30">  
The cat was playing in the garden.  
</textarea>

The rows attribute specifies how many lines are visible in a text area.

The cols attribute specifies a text area's visible width.

In a browser, the HTML code above will look like this:

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You can also define the size of the text area by using CSS:

### **Example**

<textarea name="message" style="width:200px; height:600px;">  
The cat was playing in the garden.  
</textarea>

## The <button> Element

The <button> element defines a clickable button:

### **Example**

<button type="button" onclick="alert('Hello World!')">Click Me!</button>

**Note:** The type attribute for the button element must always be specified. For the button element, different browsers may use different default types.

## The <fieldset> and <legend> Elements

## In a form, the <fieldset> element is used to group related data.

## The legend> element gives the <fieldset> element a caption.

### **Example**

<form action="/action\_page.php">  
  <fieldset>  
    <legend>Personalia:</legend>  
    <label for="fname">First name:</label><br>  
    <input type="text" id="fname" name="fname" value="John"><br>  
    <label for="lname">Last name:</label><br>  
    <input type="text" id="lname" name="lname" value="Doe"><br><br>  
    <input type="submit" value="Submit">  
  </fieldset>  
</form>

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## The <datalist> Element

## For an input> element, the <datalist> element specifies a list of pre-defined options.

## As they enter data, users will see a drop-down list of pre-defined options.

## The id attribute of the datalist element must be referenced by the list attribute of the <input> element.

### **Example**

<form action="/action\_page.php">  
  <input list="browsers">  
  <datalist id="browsers">  
    <option value="Internet Explorer">  
    <option value="Firefox">  
    <option value="Chrome">  
    <option value="Opera">  
    <option value="Safari">  
  </datalist>  
</form>

## The <output> Element

### The result of a calculation is represented by the output> element (like one performed by a script).

### **Example**

Perform a calculation and show the result in an <output> element:

<form action="/action\_page.php"  
  oninput="x.value=parseInt(a.value)+parseInt(b.value)">  
  0  
  <input type="range"  id="a" name="a" value="50">  
  100 +  
  <input type="number" id="b" name="b" value="50">  
  =  
  <output name="x" for="a b"></output>  
  <br><br>  
  <input type="submit">  
</form>

## HTML Form Elements

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| **Tag** | **Description** |
| [<form>](https://www.w3schools.com/tags/tag_form.asp) | Creates a user-input HTML form. |
| [<input>](https://www.w3schools.com/tags/tag_input.asp) | This class defines an input control. |
| [<textarea>](https://www.w3schools.com/tags/tag_textarea.asp) | A multiline input control is defined by this function (text area) |
| [<label>](https://www.w3schools.com/tags/tag_label.asp) | A label for an input> element is defined by this property. |
| [<fieldset>](https://www.w3schools.com/tags/tag_fieldset.asp) | In a form, it groups together elements that are related. |
| [<legend>](https://www.w3schools.com/tags/tag_legend.asp) | A caption for a <fieldset> element is defined by this property. |
| [<select>](https://www.w3schools.com/tags/tag_select.asp) | Creates a drop-down menu. |
| [<optgroup>](https://www.w3schools.com/tags/tag_optgroup.asp) | In a drop-down list, this specifies a group of related options. |
| [<option>](https://www.w3schools.com/tags/tag_option.asp) | Defines a drop-down list option. |
| [<button>](https://www.w3schools.com/tags/tag_button.asp) | A clickable button is defined by this property. |
| [<datalist>](https://www.w3schools.com/tags/tag_datalist.asp) | Provides a list of pre-defined input control options. |
| [<output>](https://www.w3schools.com/tags/tag_output.asp) | The result of a calculation is defined by this variable. |