**HTML Forms**

To collect user input, an HTML form is used. The most common method of processing user input is to send it to a server.

Graphical user interface, application

Description automatically generated

## **The <form> Element**

The HTML <form> element is used to create a user-input HTML form:

Graphical user interface, text, application

Description automatically generated

Text fields, checkboxes, radio buttons, submit buttons, and other input elements are all contained within the <form> element.

## **The <input> Element**

The <input> element in HTML is the most commonly used form element.

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

Some examples are as follows:

|  |  |
| --- | --- |
| **Type** | **Description** |
| <input type="text"> | A single-line text input field appears. |
| <input type="radio"> | A radio button appears (for selecting one of many choices) |
| <input type="checkbox"> | A checkbox is displayed (for selecting zero or more of many choices) |
| <input type="submit"> | A submit button appears (for submitting the form) |
| <input type="button"> | A clickable button is displayed. |

## **Text Fields**

The <input type="text"> specifies a single-line text input field.

A form with input fields for text:

<form>  
  <label for="fname">First name:</label><br>  
  <input type="text" id="fname" name="fname"><br>  
  <label for="lname">Last name:</label><br>  
  <input type="text" id="lname" name="lname">  
</form>

This is how the HTML code above will be displayed in a browser:

Table

Description automatically generated

**Note:** The form is not visible in its entirety. It's also worth noting that an input field's default width is 20 characters.

## **The <label> Element**

In the preceding example, the <label> element is used.

Many form elements have a label defined by the <label> tag.

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. The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

**Radio Buttons**

### A radio button is defined by the <input type="radio">.

### A user can select ONE of a limited number of options using radio buttons.

### **Example**

A form with radio buttons:

<p>Choose your favorite Web language:</p>  
  
<form>  
  <input type="radio" id="html" name="fav\_language" value="HTML">  
  <label for="html">HTML</label><br>  
  <input type="radio" id="css" name="fav\_language" value="CSS">  
  <label for="css">CSS</label><br>  
  <input type="radio" id="javascript" name="fav\_language" value="JavaScript">  
  <label for="javascript">JavaScript</label>  
</form>

This is how a browser will render the HTML code above.:

Graphical user interface, text, application, email

Description automatically generated

**Checkboxes**

A checkbox is defined by the <input type="checkbox">.

Checkboxes allow a user to choose ZERO or MORE options from a limited set of options.

### **Example**

<form>  
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">  
  <label for="vehicle1"> I have a bike</label><br>  
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">  
  <label for="vehicle2"> I have a car</label><br>  
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">  
  <label for="vehicle3"> I have a boat</label>  
</form>

This is how the HTML code above will be displayed in a browser:

 I have a bike  
 I have a car  
 I have a boat

## **The Submit Button**

* A button for submitting form data to a form-handler is defined by the <input type="submit">.
* The form-handler is usually a server-side file that contains a script for processing input data.
* The form's action attribute specifies the form's handler.

### **Example**

A form with a submit button:

<form action="/action\_page.php">  
  <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">  
</form>

This is how the HTML code above will be displayed in a browser:

Graphical user interface, text, application

Description automatically generated

## **The Name Attribute for <input>**

It's worth noting that in order to be submitted, each input field must have a name attribute.

The value of the input field will not be sent at all if the name attribute is omitted.

### **Example**

This example will not submit the value of the "First name" input field:

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