Controls Overview

In this lesson, we'll see the different types of controls available to us in the HTML5 form. Let's begin!

You've already seen a few controls such as the `textbox` and the `submit button` in the small markup snippets from previous lessons, but there are many more!

You will learn to use them through exercises, but first, you'll be given a short overview of them.

As you already know, `<form>` is the markup element that encapsulates all controls.

The `<input>` element

Most controls can be rendered with the `<input>` element that has a type attribute. This attribute specifies the type of control; it determines how the control is rendered in the browser, and how it behaves.

If you do not specify the type, the control will be a `textbox`. This is the same as setting type to `text`.

A myriad of buttons to choose from

You can choose from several kinds of buttons:

- button (clickable button mostly used with JavaScript)
- checkbox
- radio (radio button)
- submit (submits the form)
- image (an image as the submit button)
- reset (resets all form values to their defaults)

There are several **predefined textual controls** with some extra semantics:

- password (characters are masked)
- email (defines a field for an email address)
- url (field for entering an URL)
- tel (field for a telephone number)
- search (field for search text)
- number (field for entering a number)

The type `file` provides a **file-select** field with a `Browse` button for file uploads. You can place hidden fields in a form used to set form values programmatically.

Date and time controls

HTML5 adds a number of date and time related controls to the old markup through the type attribute of `<input>`:

- date (date control with year, month, day, and no time)
- datetime (date and time control with the precision of fraction of a second, based on UTC time zone)
- datetime-local (date and time control with no time zone)
- month (a month and year control)
- time (a control for entering time, no time zone)
- week (a week and year control, no time zone)

> 📄 **NOTE:** Using date and time related controls on your web page means you're walking on thin ice. These controls are relatively new, and as of this writing, in most browsers they are rendered only as text boxes and not as nice date and time pickup controls.

HTML5 also adds two other types: color which is a color picker, and range which is a slider to choose a number in a specified range.

Besides `<input>` there are a few other HTML tags that allow you to specify user data.

The `<select>` and `<textarea>` elements

With `<select>`, you can define a dropdown list with option values. To type in a longer text, use the `<textarea>` element.

The `<fieldset>` and `<legend>` elements

The `<fieldset>` element lets you group related controls into sections and the `<legend>` element adds a caption to a `<fieldset>` element. Input fields do not tell anything about their role to users.

The `<label>` element

You can use the `<label>` element to provide appellation to input controls. Besides adding descriptive text, `<label>` provides usability improvement for mouse users; if the user clicks on the text within `<label>`, it toggles the control (for example a checkbox, or radio button), or moves the focus to the related input field. Used with the button, submit, or reset types, `<input>` elements are rendered as **pushbuttons**.

The `<button>` element

With the `<button>` element you can create clickable buttons with the same behavior, but you can create compound button content instead of a simple

behavior, but you can create compound button content instead of a simple text.

Well, the enumeration of controls seems very long, too long to recall by heart, so in the *next lesson*, you are going to build web forms that help you understand how they work and in what scenarios they are useful.

See you there! :)