

Unit1: HTML, CSS & Client Side Scripting

Forms

A form is a component of a Web page that has form controls, such as text, buttons, checkboxes, range, or colour picker controls. A user can interact with such a form, providing data that can then be sent to the server for further processing (e.g. returning the results of a search or calculation). No client-side scripting is needed in many cases, though an API is available so that scripts can augment the user experience or use forms for purposes other than submitting data to a server.

HTML forms could have their own category because they have many elements that have to work together in order for the form to work. Forms are the primary way users pass information to the server. The HTML form is encapsulated by the `<form>` tags and all of the inputs will fall in between the opening and closing form tags.

All forms start with the <FORM> tag and end with </FORM>. All other form objects go between these two tags.

The form tag has two main properties: **METHOD** and **ACTION**.

METHOD refers to post or get. The post attribute will send the information from the form as a text document. The get attribute is used mostly with search engines, and will not be discussed. We will generally set METHOD="post".

ACTION usually specifies the location of the CGI script that will process the form data.

```
<FORM METHOD="post" ACTION="mailto:put.your@email.address.here"></FORM>
```

HTML Form Inputs

HTML Form Inputs are :

- Text Fields – Allows the user to input text data in a one line field
- Radio Buttons – Allows the user to select one option from multiple options
- Checkboxes – Allows the user to select many options from multiple options
- Submit Button – Allows the user to send the data

Example:

```
<!DOCTYPE html>
<html>
  <head>Sample form</head>
  <form>
    Your name:<input type="text" name="yourName" /><br>
    <input type="radio" name="group1" value="1" /> Pick me! <br>
    <input type="radio" name="group1" value="2" /> No pick me! <br>
    <input type="checkbox" name="checkBox1" value="1" /> Pick me! <br>
    <input type="checkbox" name="checkBox1" value="2" /> Pick me too! <br>
    <input type="submit" value="Send Data"/>
  </form>
</html>
```

Results:

Sample form

Your name:

☐ Pick me!

☐ No pick me!

☒ Pick me!

☒ Pick me too!

Typically, the form tag will have several attributes including the name, action, and the method. The name attribute is only to differentiate one form from another on the page. The action attribute is set to the page where you will pass the data (generally, this will not be an HTML page). Finally, the method attribute will determine how you want to send the data.

Single-line Text Entry

A single-line text entry allows the user to input a small amount of text, like a name or an email address.

Details Needed

Please input your name:

Syntax:

Please input your name: `<INPUT TYPE="text" SIZE="40" MAXLENGTH="30" NAME="personal-name">`

The tag has the following elements:

`<INPUT>` is the tag used for most of the form objects.

TYPE="text" sets the object to a single-line text field.

Size="40" sets the field to show 40 characters.

MAXLENGTH="30" means that only a total of 30 characters can be typed in this field.

NAME="personal-name" sets the text field's name to be personal-name (this information is part of the form data sent on for further processing). The name is required to identify the value data which will be associated with it. For example, if the text box was for an email address or telephone number, it might set this attribute with a more suggestive value, e.g. *NAME*="email" or *NAME*="tel-no". The easiest way to choose the name is simply to use the purpose of the field.

VALUE=... Another attribute, *VALUE*, can be used to place an initial text in the field. As might be expected, if this text is left unchanged it becomes the value associated with the *NAME* when the form is submitted. Putting an initial value in the field is usually not required, but can be used as a prompt. For example, the following HTML produces the figure that comes after it:

Syntax:

Name: <INPUT TYPE="text" NAME="name" SIZE="35" VALUE="---please type here---">

Details Needed

Name:

Multi-line Text Entry

While you can type as much text as you need into a single line text field, entering large quantities of text into a multi-line input field is more realistic. HTML calls these fields' text areas.

`<TEXTAREA></TEXTAREA>` tags are used for the following. They create a scrollable text area for larger amount of text:

```
<TEXTAREA NAME="movie-comments" COLS="50" ROWS="5">
```

```
</TEXTAREA>
```

NAME="movie-comments" supplies the text field with the given label. Here, because the example allows the user to write about movies, its named the form element "movie-comments".

COLS="50" specifies the width, in characters, of the text area. Here 50 characters have been specified. *ROWS*="5" specifies the height of the text area in rows. This examples specifies five columns. Note that the text that should appear in the multi-line field is placed between the `<TEXTAREA>` and `</TEXTAREA>` tags. So, for example, users could be prompted to input their comments on a movie thus:

```
<TEXTAREA NAME="movie-comments" COLS="50" ROWS="5"> ---  
please enter your comments here--- </TEXTAREA>
```

Details Needed

---please enter your comments here---

A WRAP attribute is available, and the default value is WRAP="ON". You can change wrapping to off, which will cause a horizontal scroll bar to appear at the bottom edge of the text area.

Menu Buttons and Scrolling Lists

Menu buttons and scrolling lists are useful when you have multiple options to choose from. For example, the following shows a menu button (sometimes imprecisely called a pull-down or drop-down menu). Clicking on the 'select a colour' option on the button displays all the other options in the button's menu. Pulling down to the required option will set the value for this element.

Choosing colours

Which colour you like:



blue

select a colour

red

blue

green

yellow

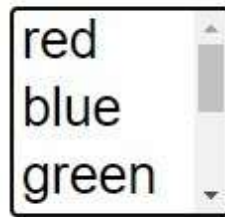
purple

orange

because of variations in the
process we cannot guarantee
these colours. Customers may
a small handling charge.

Scrolling lists, otherwise known as selection lists, are similar to menu buttons, but they usually display more than one of the available options at a time. They rarely show all options, and the user is required to scroll in order to view them all. If all the options are displayed, no scroll bar is included with the list, and it may not be obvious to the user that they should select an option.

colour:



red
blue
green

Please note that because of variations