



## Overview

- Fragment Identifiers
- Maps
- Frames
- Forms
- Style Sheets

## Fragment Identifiers

- Any characters following a '#' character in a hypertext address constitute a fragment identifier.
- An address of the form '#fragment' refers to an anchor in the same document.
- The meaning of fragment identifiers depends on the media type of the anchor's resource.
  - For 'text/html' representations, it refers to the <A> element with a NAME attribute whose value is the same as the fragment identifier.
- The user agent should indicate the anchor element, for example by scrolling to and/or highlighting the phrase.

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3

## Image tags

- IMG -- an inline image
  - SRC = URL for the images
  - WIDTH = pixels
  - HEIGHT = pixels
    - NB specifying these in advance allows the browser to leave space speeding the display process.
  - ALT = alternative description
  - BORDER = the thickness in pixels of the border around the image
  - ALIGN specifies where the image is placed and how text flows
  - USEMAP = client side map being used for the image

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4

## Map Tags

- MAP -- a client side image map
- NAME = the name of the image map
- AREA -- definition of an area of an image -- part of a map
  - SHAPE = RECT | CIRCLE | POLY | DEFAULT
  - Default is for points not otherwise defined
  - COORDS = coma separated list of coordinates for area
  - HREF = the target
  - NOHREF = a dead area
  - ALT = text to be displayed if image can't load
  - TABINDEX = tab order for the area over the page
  - TARGET = frame in which URL is to be loaded

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5

## Frame tags

- FRAMESET -- a frameset definition, may take only one of the following
  - ROWS = sizes of the rows -- pixels or percents
  - COLS = sizes of the columns -- pixels or percents
- FRAME
  - FRAMEBORDER = 1=true, 0=false
  - MARGINHEIGHT = top margin of frame – pixels
  - MARGINWIDTH = left margin of frame – pixels
  - NAME
  - NORESIZE resizing of internal borders
  - SCROLLING = NO, YES AUTO
  - SRC = URL to load
- NOFRAMES – display text if frames not supported

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6

## Forms

- A form is a template for a form data set and an associated method and action URI.
- A form data set is a sequence of name/value pair fields.
- The names are specified on the NAME attributes of form input elements
- The values are given initial values by various forms of markup and edited by the user.
- The resulting form data set is used to access an information service as a function of the action and method.
- Form processing is a level 2 feature.

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7

## Form Elements

- The <FORM> element contains a sequence of input elements, along with document structuring elements.
- The attributes are:
  - ACTION specifies the action URI for the form. The action URI of a form defaults to the base URI of the document
  - METHOD selects a method of accessing the action URI. The set of methods is a function of the URI
    - METHOD = GET
    - METHOD = POST
  - ENCTYPE specifies the media type used to encode the name/value pairs for transport.
- The <INPUT> element represents a field for user input. The TYPE attribute discriminates between variations.

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8

## INPUT TYPE=TEXT

- Required attributes are:

NAME name for the form field of the element.

- The optional attributes are:

MAXLENGTH the number of characters that can be entered. If the value of MAXLENGTH is greater than the value of the SIZE attribute, the field should scroll. The default number of characters is unlimited.

SIZE specifies the amount of display space allocated to this input field according to its type.

VALUE The initial value of the field.

- Example:

```
<p>Street Address: <input name=street><br>
```

```
Postal City code: <input name=city size=16 maxlength=16><br>
```

```
Zip Code: <input name=zip size=10 maxlength=10 value="99999-9999"><br>
```

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9

## INPUT TYPE=PASSWORD

- An <INPUT> element with 'TYPE=PASSWORD' is a text field as above,
- the value is obscured as it is entered.

```
<p>Name: <input name=login> Password: <input  
type=password name=passwd>
```

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10

## INPUT TYPE=CHECKBOX

- `<INPUT TYPE=CHECKBOX>` is a boolean choice.
- A set of elements with the same name represents an n-of-many choice field.
- Required attributes are:
  - NAME symbolic name for the form field corresponding to this element or group of elements.
  - VALUE The value of the field contributed by this element.
- Optional attributes are:
  - CHECKED indicates that the initial state is on.
- Example:

```
<p>What flavors do you like?
<input type=checkbox name=flavor value=vanilla>Vanilla<br>
<input type=checkbox name=flavor value=strawberry>Strawberry<br>
<input type=checkbox name=flavor value=chocolate checked>Chocolate<br>
```

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11

## INPUT TYPE=RADIO

- `<INPUT TYPE=RADIO>` is a boolean choice
- A set of such elements with the same name represents a 1-of-many choice field.
- The NAME and VALUE attributes are required.
- Optional attributes are:
  - CHECKED indicates that the initial state is on. At all times, exactly one of the radio buttons in a set is checked.
  - If none of the `<INPUT>` elements of a set of radio buttons specifies 'CHECKED', then the user agent must check the first radio button of the set initially.
- Example:

```
<p>Which is your favorite?
<input type=radio name=flavor value=vanilla>Vanilla<br>
<input type=radio name=flavor value=strawberry>Strawberry<br>
<input type=radio name=flavor value=chocolate>Chocolate<br>
```

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12

## INPUT TYPE=IMAGE

- `<INPUT TYPE=IMAGE>` specifies an image resource to display, and allows input of two form fields: the x and y coordinate of a pixel chosen from the image.
- The names of the fields are the name of the field with ``.x'`` and ``.y'`` appended. ``.TYPE=IMAGE'`` implies ``.TYPE=SUBMIT'`` processing; that is, when a pixel is chosen, the form as a whole is submitted.
- `NAME` and `SRC` attributes are required
- `ALIGN` is optional as for the `<IMG>` element
- Example:

```
<p>Choose a point on the map:  
<input type=image name=point src="map.gif">
```

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13

## INPUT TYPE=HIDDEN

- An `<INPUT>` element with ``.TYPE=HIDDEN'`` represents a hidden field.
- The user does not interact with this field; instead, the `VALUE` attribute specifies the value of the field. The `NAME` and `VALUE` attributes are required.
- Example:

```
<input type=hidden name=context value="l2k3j4l2k23">
```

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14

## INPUT TYPE=SUBMIT

- An `<INPUT>` element with `TYPE=SUBMIT` represents an input option, typically a button, that instructs the user agent to submit the form.
- Optional attributes are:
  - `NAME` indicates that this element contributes a form field whose value is given by the `VALUE` attribute. If the `NAME` attribute is not present, this element does not contribute a form field.
  - `VALUE` indicates a label for the input (button).
- You may submit this request internally:
  - `<input type=submit name=recipient value=internal><br>`
- or to the external world:
  - `<input type=submit name=recipient value=world>`

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15

## INPUT TYPE=RESET

- An `<INPUT>` element with `TYPE=RESET` represents an input option, typically a button, that instructs the user agent to reset the form's fields to their initial states.
- The `VALUE` attribute, if present, indicates a label for the input (button).

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16



## Selection: SELECT

- The `<SELECT>` element presents an enumerated list.
- The initial state is first option, unless a `SELECTED` attribute is specified for an `<OPTION>` element.
- Attributes are:
  - `MULTIPLE` indicates multiple select allowed.
  - `NAME` specifies the name of the form field.
  - `SIZE` specifies the number of visible items. Select fields of size one are typically pop-down menus.

- Example:

```
<SELECT NAME="flavor">
  <OPTION>Vanilla
  <OPTION>Strawberry
  <OPTION value="RumRasin">Rum and Raisin
  <OPTION selected>Peach and Orange</SELECT>
```

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17

## Option: OPTION

- The Option element can only occur within a Select element. It represents one choice
- Option has the following attributes:
  - `SELECTED` Indicates that this option is initially selected.
  - `VALUE` indicates the value to be returned if this option is chosen. The field value defaults to the content of the `<OPTION>` element.

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18

## Selected Keys to Good Pages

- **Navigation Aids**
  - Use a single local imagemap to navigate the site – have x versions of a single image that identify location
  - Use a frame with a TOC to bring up pages
  - Use target = TOP for distant “unrelated” links
- **Format**
  - Use borderless frames to organize material more invisibly
    - Use width % rather than absolute pixel

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19

## Selected Keys to Good Pages

- **Images**
  - Don't use images as anchors
  - Use alt with images
  - Use <BR CLEAR= with <IMAGE ALIGN=
  - Use HEIGHT and WIDTH to speed loading
  - Use small animated gifs in tables for important points
- **Forms**
  - Use tables within forms to add structure
  - Use good data entry form rules about grouping and spacing in building building forms

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20