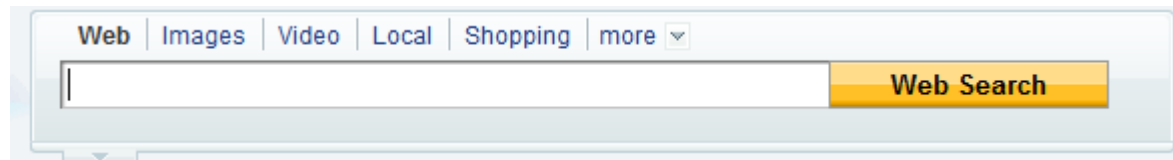


HTML Forms

OVERVIEW OF FORMS

Forms are used all over the Web to:

- Accept information
- Provide interactivity



Types of forms:

- Search form, Order form, Newsletter sign-up form, Survey form, Add to Cart form, Login form, and so on...

FORM ELEMENTS

The `<form>` element can contain one or more of the following sub-elements:

`<input>`

`<textarea>`

`<select>`

`<label>`

`<option>`

`<fieldset>`

FORM CONTROLS:

<INPUT>

The **<input>** element of a form allows various kinds of data to be accepted from the user.

Include one of the following **type** attributes:

- **text**
- **password**
- **hidden**
- **radio**
- **checkbox**
- **submit**
- **reset**

TYPE="TEXT"

<form>

**First name:<input type="text">
**

**Last name:<input type="text">
**

</form>

The **type= "text"** attribute creates a 20-character box for user input.

How the HTML code above looks in a browser:

First name:

Last name:

TYPE="PASSWORD"

<form>

Password: <input type="password" name="pwd">

...

</form>

This attribute creates a standard text box but with bullets instead of characters as the user types.

How the HTML code above looks in a browser:

Password:

Note: this does not encrypt the password; it simply provides a shield for anyone looking at the user's screen.

TYPE= "HIDDEN"

Use the hidden type attribute for sending string values along with other data that the user doesn't see or input – a product ID for example

```
<input type="hidden" name="productid"  
value="C1003">
```

THE NAME ATTRIBUTE

<form>

**First name:< input type="text" name="firstname">
**

**Last name:< input type="text" name="lastname">
**

...

</form>

Creates variables, *firstname* and *lastname* which hold the values of the strings entered into each text box.

Necessary to process the user's data

RADIO BUTTONS

Radio buttons let a user select ONLY ONE of a limited number of choices:

```
<form>
```

```
  < input type="radio" name="gender" value="m">Male<br>
```

```
  < input type="radio" name="gender" value="f">Female<br>
```

```
</form>
```

How the HTML code above looks in a browser:

☐ Male

☐ Female

Note: The value attribute is needed here. Otherwise, the value for gender is “on” and there’s no way to tell which was selected.

CHECKBOXES

Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```
<form>  
  < input type="checkbox" name="bike">I have a bike<br>  
  < input type="checkbox" name="car">I have a car <br>  
< /form>
```

☐ I have a bike
☐ I have a car

Notes:

The name attributes must have different values.

If no value attribute is given, and the box is selected, the value will be “on”

SELECTION

Selection, or drop-down, lists typically allow the user to select *one* value from a list of options.

```
<form>
```

```
  <select name="cars">
```

```
    <option value="volvo">Volvo</option>
```

```
    <option value="saab">Saab</option>
```

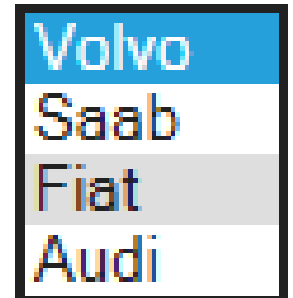
```
    <option value="fiat">Fiat</option>
```

```
    <option value="audi">Audi</option>
```

```
  </select>
```

```
</form>
```

Note: If no value attribute is given, and the value assigned will be the text in the option element.




TEXT AREAS

The HTML for a text area with default text:

**Comments:
**

<textarea name="comments" placeholder="If you have any comments, please enter them here.">

</textarea>

A screenshot of a web form. It features a label "Comments:" in a small, dark font. Below the label is a rectangular text area with a thin border. Inside the text area, the placeholder text "If you have any comments, please enter them here." is displayed in a light gray font. The text area is currently empty of user input.

Note: This input will require special handling. More to come about that later...

TYPE= "SUBMIT"

<input type="submit">

The submit button is used to send form data somewhere for processing. The data is sent to the page specified in the form's action attribute. The file defined in the action attribute usually does something with the received input:

**<form name="input" action= "xxx.php"
method="get">**

Username: <input type="text" name="user">

**<input type="submit" name= "submit"
value="Submit">**

< /form>

How the HTML code above looks in a browser:

Username:

The value attribute specifies the text to display on the button

TYPE= "RESET"

A reset button will clear the form of all data so the user can start with a blank form:

```
<input type= "reset" value= "Reset">
```

Sample Reset Button



ATTRIBUTES OF THE <FORM> ELEMENT:

- **name:** identifier for the form
- **action:** URL or local filename of the file that will process the data
- **method:** HTTP method for submitting the data; “get” or “post”
- **[target]:** where to open the pages specified in the action attribute; _blank opens in a new window or tab.

GET OR POST?

Get: form data is sent as part of URL

- the data is visible and can be bookmarked

The URL when the form is submitted with the get method:

subscribe.php?email=zak%40modulemedia.com&submit=Subscribe

Post: form data is packaged as part of an HTTP request and isn't visible by the browser

- more secure
- resulting page can't be bookmarked

URL ENCODING

With the get method, the form data is sent as part of URL

Certain characters aren't allowed in a URL, so they are encoded according to the character set given for the page:

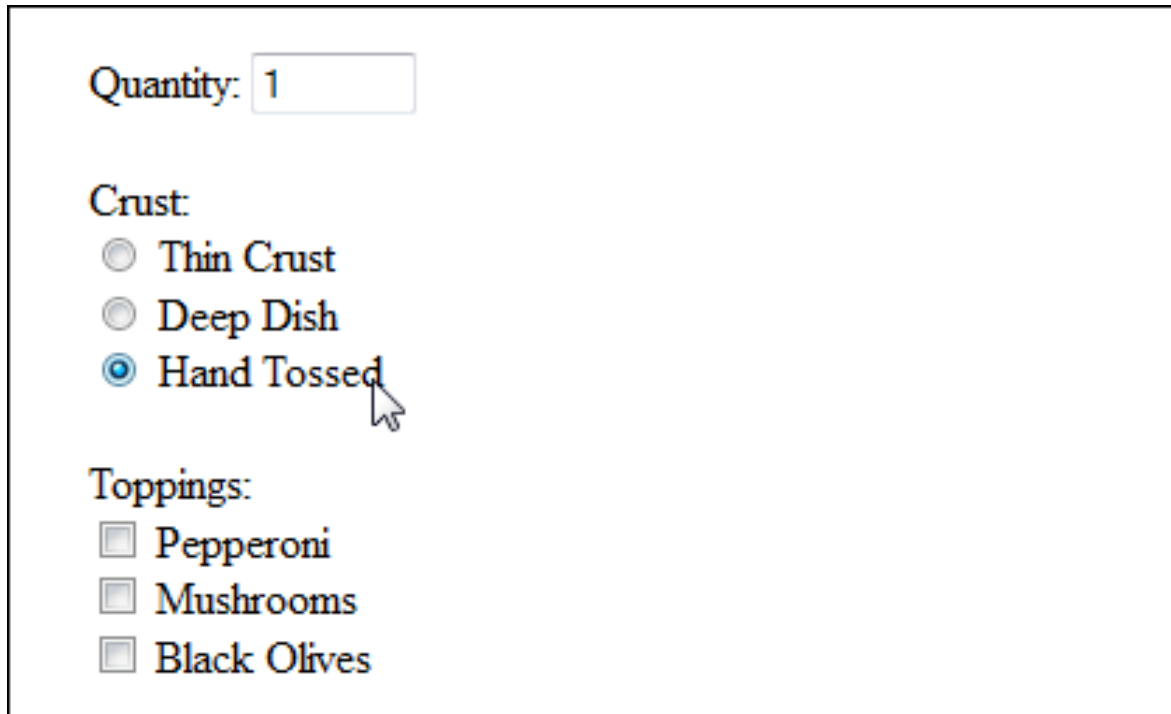
subscribe.php?email=zak%40modulemedia.com&submit=Subscribe

https://www.w3schools.com/tags/ref_urlencode.ASP

Because each of these encoded characters begin with a % symbol, this is sometimes called percent encoding.

ACCESSIBILITY GUIDELINE

Use labels associate text with form input controls so the user can click on the label text to select the control that the label is associated with. This also helps assistive devices.



Quantity:

Crust:

- ☐ Thin Crust
- ☐ Deep Dish
- ☒ Hand Tossed

Toppings:

- ☐ Pepperoni
- ☐ Mushrooms
- ☐ Black Olives

LABEL ELEMENT

Associates a text label with a form control

Two Different Formats:

```
<label>  
    <input type="radio" name="crust" value=  
        "hand">    Hand Tossed  
</label><br>
```

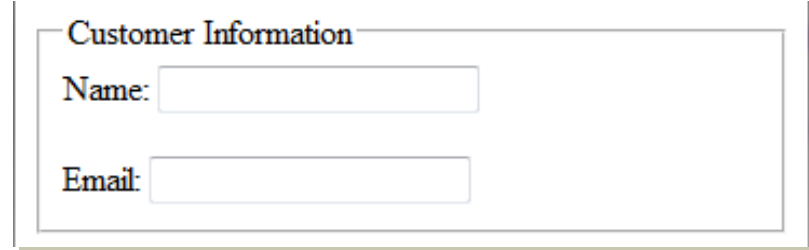
Or

```
<label for="email" >Email: </label>  
<input type="text" name="CustEmail" id="email">
```

FIELDSET AND LEGEND ELEMENTS

The Fieldset Element

- Creates a visual group of form elements on a web page by adding a border



The Legend Element

- Creates a text label within the fieldset
<fieldset>

<legend>Customer Information</legend>

<label>Name:

**<input type="text" name="name"
id="Name"></label>**

**

**

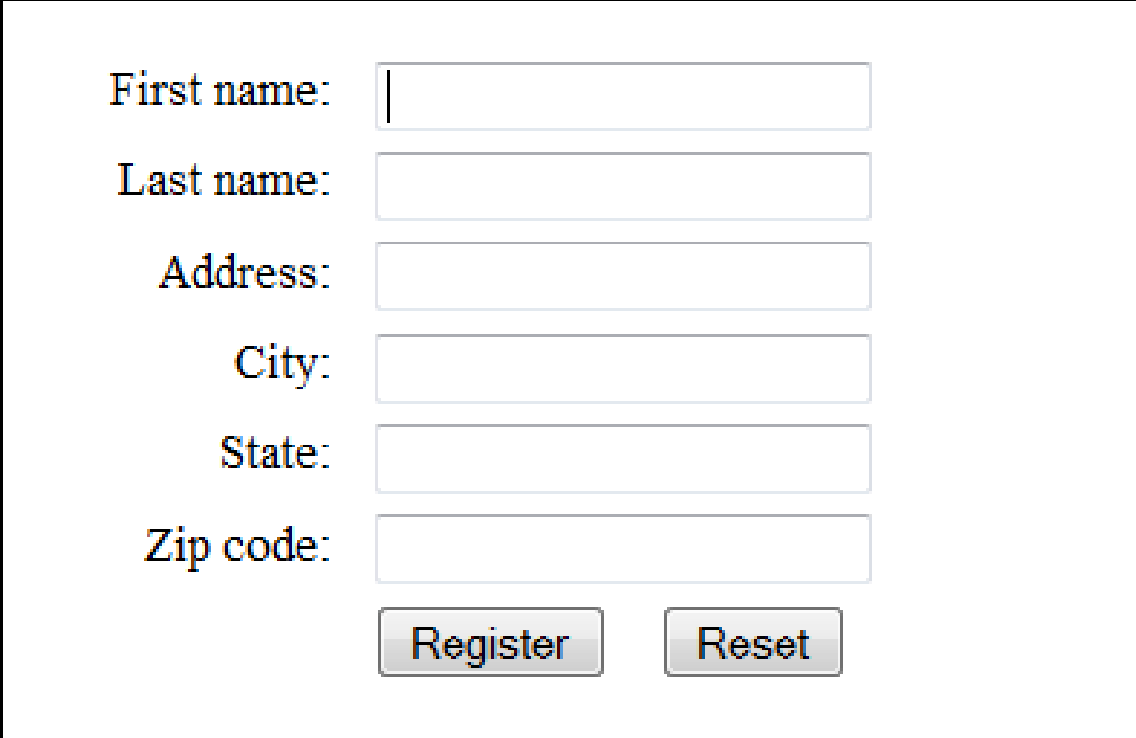
<label>Email:

**<input type="text" name="Email"
id="Email"></label>**

</fieldset>

FORMATTING

Aligned label, text box, and button controls



A registration form with the following elements:

- First name:
- Last name:
- Address:
- City:
- State:
- Zip code:
- Register
- Reset

THE HTML FOR THE FORM

`<label for="firstname">First name:</label>`

`<input type="text" name="firstname" id="firstname" autofocus>
`

`<label for="lastname">Last name:</label>`

`<input type="text" name="lastname" id="lastname">
`

`<label for="address">Address:</label>`

`<input type="text" name="address" id="address">
`

`<label for="city">City:</label>`

`<input type="text" name="city" id="city">
`

`<label for="state">State:</label>`

`<input type="text" name="state" id="state">
`

`<label for="zip">Zip code:</label>`

`<input type="text" name="zip" id="zip">
`

`<input type="submit" name="register" id="button" value="Register">`

`<input type="reset" name="reset" id="reset" value="Reset">`

THE CSS FOR THE CONTROLS

```
label {  
    float: left;  
    width: 5em;  
    text-align: right;}  
  
input {  
    margin-left: 1em;  
    margin-bottom: .5em;}  
  
#button {  
    margin-left: 7em;}
```

HTML5

HTML 5 supports several additional input types such as:

Color, Date, Email, etc. Check the following sites for current features and browser compatibilities:

https://www.w3schools.com/html/html_form_elements.asp

https://www.w3schools.com/html/html_form_input_types.asp

https://www.w3schools.com/html/html_form_attributes.asp