



Overview 11

HTML Forms

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HTML FORMS

Up until now, all activity on a web site was the web site delivering information to users; there was no interactivity, no way for the user to communicate back to the holders of a web site. This shortcoming can be addressed in many ways, but one of the easiest is a form.

A form is an area of a web page that allows:
text information to be entered, or
preset options to be selected
and finally,
allow the user to then Submit that information.

Once the information is entered, the form includes a instructions on where to send the data, and a mechanism to collect and submit the information.

(While often submitted information is meant to be processed, such as a shopping cart attached to a database, this session will limit the actual implementation of forms in this arena to basic delivery (using email, or a server that will acknowledge the submission but do nothing with it. More information on processing form data would be in a class such as eCommerce, not Web Page Design.)

Of the two types of form collection areas mentioned above, there are several options.

Text information can be a smaller text fields, or a larger 'textarea' field, and
presets that include radio buttons (single selection, this or that),
checkboxes (multiple selections) or
selections from a list.

Creating a form

A form is defined with the `<form></form>` tagset.

We will add two attributes to this tag at the end of the process, beginning on page 261.

You place **all** of your form controls **between** these two tags, and you only have ONE set of form tags.

The examples below show individual forms; a *real* form would have many of the pieces between the `<form ...></form>`

```
<form ...>
</form>
```

Again, we will have to add an action and a method to the form tag in order for it to work, that is covered on page 261. For now only the data related parts of the form are covered.

As with lists, tables, and frames, simply creating the form is not enough, we need helper tags:

`input`

or

`textarea`

or

`select`

Just as with named bookmarks and frames, it is all but required to **name** the fields, so the data can be separated and processed later.

```
<form ...>
...
  <input type="something" name="something">
  </input>
...
  <textarea name="something" rows="something" cols="something">
  </textarea>
...
  <select name="something">
    <option value="something">
  </select>
...
</form>
```

Input

The most critical form tag is the `<input>` tag. The type of input is specified with the type attribute, and the values are:

checkbox,

radio, *or*

text.

• Radio Buttons

Radio Buttons are used when you want the user to select only one of a limited number of choices.

```
<form ...>
...
<input type="radio" name="sex" value="male"> Male
<br>
<input type="radio" name="sex" value="female"> Female
...
</form>
```

How it looks in a browser:

- Male
- Female

Note that the form itself is not visible.

Note that there is only ONE form tag per web page;

do not add another `<form ...>` for each element.

Note that only one option can be chosen when using radio buttons...

and each radio button *set* MUST use the same value in `name="value"`.

• Checkboxes

Checkboxes are used when you want the user to select one or more options of a limited number of choices.

```
<form ...>
...
<input type="checkbox" name="penny">
I have a penny<br>
<input type="checkbox" name="dime">
I have a dime
...
</form>
```

How it looks in a browser:

- I have a penny
- I have a dime

- **Text fields**

Text fields are used when you want the user to type a limited number of letters, numbers, etc. in a form.

```
<form ...>
...
First name:
<input type="text" name="firstname">
<br>
Last name:
<input type="text" name="lastname">
...
</form>
```

How it looks in a browser:

First name:

Last name:

Note that in most browsers, the width of the text field is 20 characters by default. It can be changed with `size=`

Note: **Textarea** fields are used when you want the user to type a longer string of letters, numbers, etc. in a form. Set the `cols` value to how many typed characters can display per line, and `rows` to the number of rows.

```
<form ...>
...
First name:
<textarea name="essay" rows="3"
cols="70">
</textarea>
...
</form>
```

How it looks in a browser:

Essay:

Select

You may also offer your user a set of options from a menu, and let them choose one...

often a default is selected

(yet another rare attribute not followed by an '=').

Selects can look like a dropdown box if `size="1"`; there will be a scroll bar if there are more options than rows.

Selects are like lists: lists require the helper tag `` for each item on a list; selects require the helper tag `<option>`

```
<form ...>
...
<SELECT SIZE="3" name="something">
<OPTION VALUE="1">1-2
<OPTION VALUE="2">2-3
<OPTION SELECTED VALUE="3">4-5
</SELECT>
...
</form
```

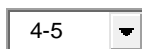
How it looks in a browser:



or change the select size

```
<form ...>
...
<SELECT SIZE="1" name="dropmenu">
<OPTION VALUE="1">1-2
<OPTION VALUE="2">2-3
<OPTION SELECTED VALUE="3">4-5
</SELECT>
...
</form
```

How it looks in a browser:



Form Delivery Options

The discussion thus far has just been on collecting the information, but without some method of delivering the collected info, our form is useless. The two `<form>` attributes that take care of this job are `action` and `method`.

`Action` is a URL that defines where to send the data when the submit button is pushed.

`Method` has two settings, the default is `get`, the other is `post`.

`Get` is used if you are sending more than 100 typed characters.

We also need to add the button to do the actual submission, an `input` tag with a `type="submit"`

```
<form action="URL"
method="something">
...all your other selects and inputs...
<input type="submit" value="Submit">
</form>
```

How it looks in a browser:

Username:
...all your other selects and inputs...

Example:

Processed on studentweb.templejc.edu to simply echo values chosen

```
<form action="http://studentweb.templejc.edu/imed1316/cgi-bin/FormValues.asp"
method="post">
```

or

mail the results to craig.collins@templejc.edu

```
<FORM ACTION="mailto:craig.collins@templejc.edu?subject=Lab 8 " METHOD="POST"
ENCTYPE="text/plain">
```

See the class website for a humorous(?) working form example or Joe Teakell's forms.

FORM Submission Options

Aside from the `<input type="submit" value="Submit">` at the bottom of the form, you may also add a `<input type="reset" value="Reset Form">`

FORM Template

(Replace items like this with **your** text, values, and change names if you like; the *form* action will work as is, generating a list of what is being processed.

Actually having a database process the form is beyond Web Page Design, but you may replace the *form* action if you have access to a server with a database.)

```
<html>
<head><title>Your Title</title></head>
<body ...>
<a href=" ../index.html">To Home</a>

<form action="http://studentweb.templejc.edu/imed1316/cgi-bin/FormValues.asp"
      method="post">

<!--alternate action=: "mailto:email address"-->
<!--alternate method: "get"-->

text<input type="text" name="item">

<!--each field should have a unique name-->
<br>

text<textarea name="item1"
rows="3" cols="10">
</textarea>
<br>

<input type="radio" name="item2" value="something">text<br>
<input type="radio" name="item2" value="something else">text
<!--for radio only, the fields share the same name-->
<br>

<input type="checkbox" name="item3a">text<br>
<input type="checkbox" name="item3b">text
<br>

<SELECT SIZE="3" name="item4">
<OPTION VALUE="1">text
<OPTION VALUE="2">text
<OPTION SELECTED VALUE="3">text
</SELECT>
<br>

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

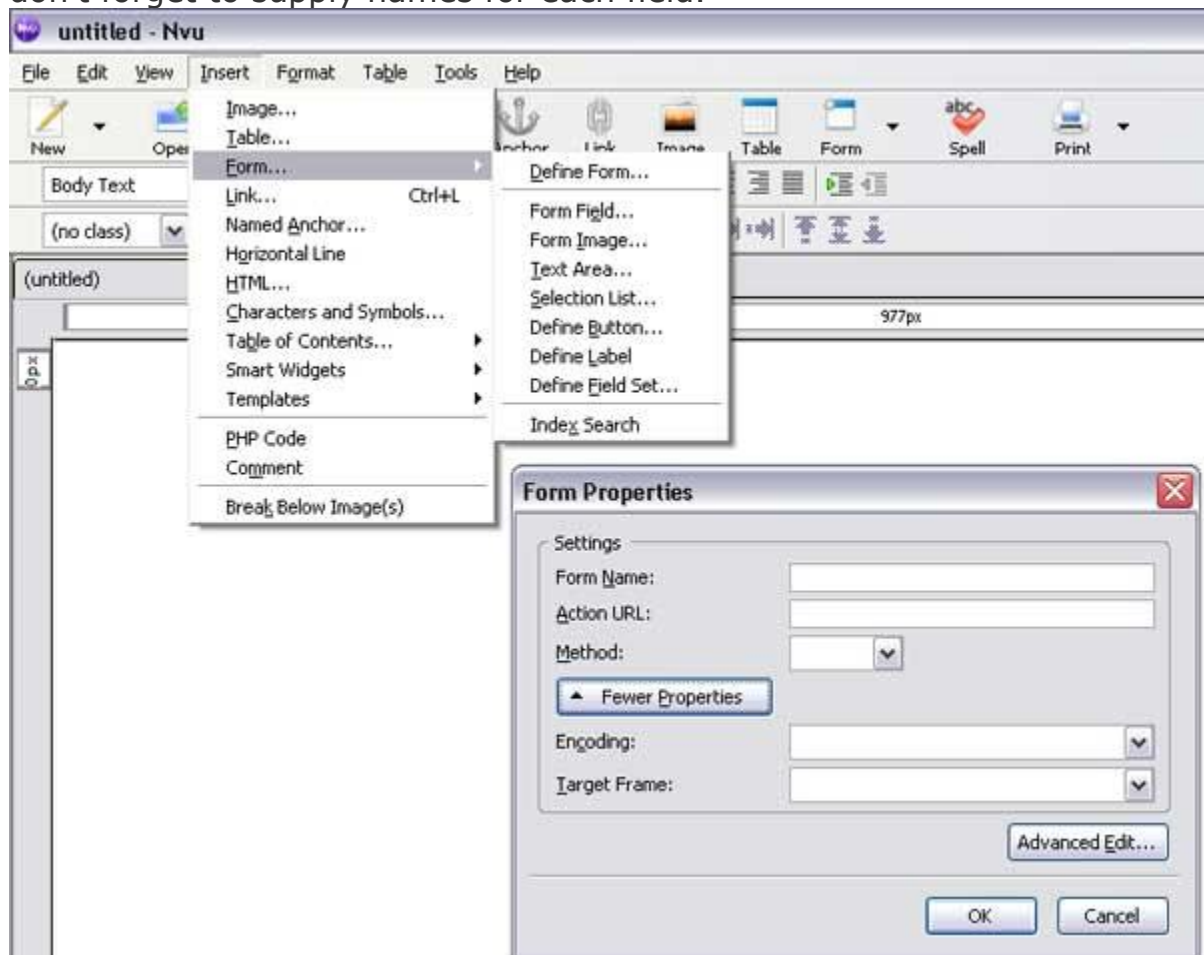
</form>
</body>
</html>
```

NVu Form Quickstart

Tip: copy the template above, open NVu, change to source view, and paste... then switch back to normal view and edit

(Don't forget to correct items like title, links to web page, and you will need to add body attributes...)

NVu Forms menu and dialog box screenshot;
1st, choose Form\Define form first... and supply the **action** and **method**.
Then, choose Form and then the type of field...
don't forget to supply names for each field.

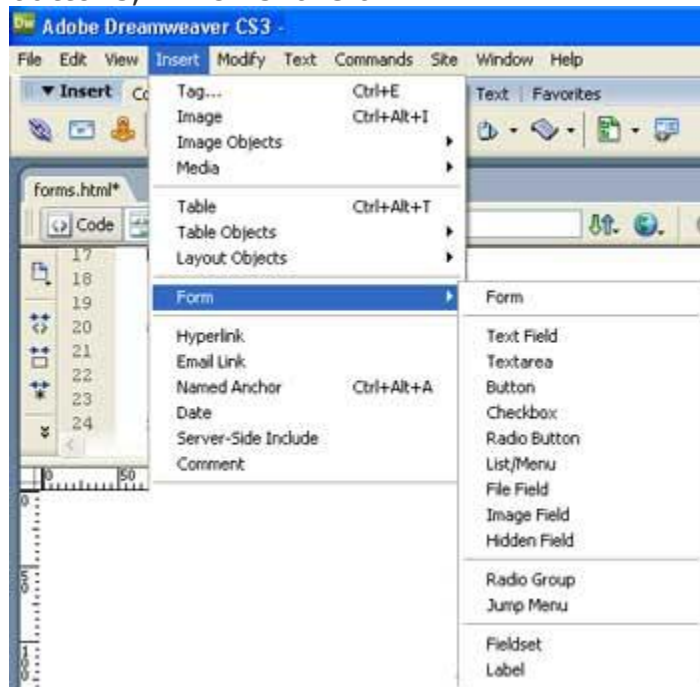


Dreamweaver Form Quickstart

Tip: copy the template above, open Dreamweaver, change to source view, and paste... (Don't forget to correct items like title, links to web page, and you will need to add body attributes...)

Note, Dreamweaver used **ID** instead of name for fields, and **label** is text that displays next to the form control.

As before, each field needs a uniquely named ID, aside from radio buttons, which share an ID.



Lab 8

General Lab Directions

Note: There is not enough time in lecture to cover all the material; read your book BEFORE you begin the lab

Note: Typically labs will require you to invest some time in the lab, outside of class lecture hours

Check with your Instructor for due date, typically Friday, 11:59PM
(see due dates on web site)

•**NOTE:** Do NOT use CAPITAL letters OR spaces in file names.

•**NOTE:** Do NOT use curly quotation marks, such as `”`;
only use straight quotation marks, such as `”`.

- Note: If you need to stop work on a web page:
Save your changes in your text editor (Notepad)
When ready to resume, open the file in notepad
and double click web page to open browser

Part 1, Documentation (30%) You will later transfer this information into a D2L quiz

While information on tags and attributes are included in the appendix, a great way to learn HTML is to write down what each tag does, how it works, list useful attributes, and perhaps include an example.

Tag: `<form> </form>` form

Syntax (required and [optional attributes]; including `action=`, and `method=`)

What do these do?:

Example:

Tag: `<input>` Input

Syntax (required and [optional attributes]; including `name=` and `type=radio`, `checkbox`, and `text`)

What do these do?:

Example:

Tag: `<textarea> </textarea>` A larger text box where the size can be set

Syntax (required and [optional attributes]; including `name=`, `rows=`, and `cols=`)

What do these do?:

Example:

Tag: `<select> </select>` Select

Syntax (required and [optional attributes]; including `name=` and the helper tag `<option>` with the attribute `value=` and `selected`)

What do these do?:

Example:

Part 2, Activity (40%): You will later transfer this information into a D2L dropbox

Create a folder named lab8

(QUICKSTART ALTERNATIVE: copy your lab7 FOLDER, and rename the copy to lab8)

CHOOSE EITHER FAST OPTION 1 OR SECOND OPTION, YOU DON'T DO BOTH

• Option 1: Copy the template at the bottom of the form web page, or duplicate the template on page 262, and **edit** to make a working form

OR

• Option 2: Create a page of your own design that includes **ONE**

`<form action=... method=...> ... </form>` tagset,

and includes a working radio box, checkboxes, select, and text or textarea **between** the

`<form action=... method=...> ... </form>`.

Note: this is a form **design** lab; but if you use the proper code, it should actually work.

Option 2, Start with

```
<form action="http://studentweb.templejc.edu/imed1316/cgi-bin/FormValues.asp"
method="post">
```

or, if you have a dedicated (non-web-based) email program set on your computer, you can use the form action mailto to mail the results to you

```
<FORM ACTION="mailto:your-email@templejc.edu?subject=Lab 8"
METHOD="POST" ENCTYPE="text/plain">
```

or

mail the results to craig.collins@templejc.edu

```
<FORM ACTION="mailto:craig.collins@templejc.edu?subject=Lab 8" METHOD="POST"
ENCTYPE="text/plain">
```

Option 2, Don't forget to end with

```
<input type="submit" value="Submit">
</form>
```

Note: Dreamweaver will expect you to fill out the properties for each item you add to a form, and you will have to manually change the name of your input fields.

Not recommended unless you really understand forms.

NVu actually does a better job for novices, prompting you to fill out a dialog box for each item added, including the form you begin with.

Of course, coding in notepad always works; copy/paste from form web page, or duplicate the template on page 262 to get a jump start :)

Grading Points

- (5 points) index.html links to this file, and this links to your default document.
- (5 points) Make sure you have a meaningful title, background color/image, and control text colors
Verify you have ONLY ONE `<form ...>` tag, and one `</form>`
- (5 points) at least one working radio button
- (5 points) at least one working checkbox
- (5 points) at least one working select, such as a dropdown menu
- (5 points) at least one working text area or text box
- (5 points) working submit button
`<input type="submit" value="Submit">`
(this is the last thing before `</form>`)
- (5 points) properly coded

Part 3: Hands On (30%)

You will later transfer this information into a D2L quiz

Posers, could you answer the following on the test?

Why do you name values?

Describe the different form tools, such as radio, checkbox, etc.

Why might you use select instead of input?

What does `<form action=" "...>` do?

What does `<form method=" "...>` do?

What usually goes at the end of a form?

Answer the following questions. (6 points each)

1. Match the example to the tag or attribute

checkbox

select

action

post

form

input

name

radio

text

option selected value=

1. Tag that identifies certain data types the form can use, such as radio or checkbox
2. Input attribute used to uniquely identifies or names the input, to keep different groups of values separate
3. Input attribute that allows only one choice of many options
4. Input attribute that allows several choices to be made of many options
5. Tag that offers your user a set of options from a menu, and let them choose one... often a default is selected
6. Tag that starts and ends a form
7. A method attribute option
8. Attribute that defines where to send the data (a URL) when the submit button is pushed
9. Input attribute to accept about 20 typed characters
10. the attribute and value to set a default in a select menu

2. Why do you name values?

To display alternate text if the form doesn't display
So that the data can be distinguished, such as which is home phone or cell phone
So that the data can be sent to a frame
So it doesn't feel left out

3. Describe the different form tools, such as radio and checkbox

Radio is used for menu selections;
checkbox is used for multiple selections

Checkbox is to choose one of many ;
radio is used for multiple selections

Radio is to choose one of many;
checkbox is used for menu selections

Radio is to choose one of many;
checkbox is used for multiple selections

4. Why might you use select instead of input?

True or False: To give users a menu to choose from, good for long lists of options

5. What does <form action=" "...> do?

How the form data is to be delivered, either with get, or post
Delivers the URL where the data will be sent to
Causes the data to be uploaded to the server
Causes the data to be collected on your computer

6. What does <form method=" "...> do?

Delivers the URL where the data will be sent to
Causes the data to be collected on your computer
How the form data is to be delivered, either with get, or post
Causes the data to be uploaded to the server

7. What does submit do?

Causes the data to be uploaded to the server
How the form data is to be delivered, either with get, or post
Delivers the URL where the data will be sent to
Causes the data to be collected on your computer

Notes

SUBMITTING THE LAB

In Windows, zip the entire lab8 directory, and rename to yourname-lab8.zip. Directions on page 70.

Log into Desire2Learn, choose this class, choose Dropbox, select Lab 8. Browse to yourname-lab8.zip and upload it. (See page 70 or class website for detailed instructions)

You will then transfer your answers to the D2L Quiz for lab 8. You may use your notes for this part of lab. Choose the Quizzes menu, and locate Lab 8.

Completing Overview 11

- Submit by 11:59 pm, Friday, of the current week (see due dates on course web site)
 - Lab 8

MUD 11 (My Understanding, Details)

Respond in the class D2L Discussion forum to the following:

What topics, if any, during this time frame do you feel very comfortable with? Why?

What topics, if any, during this time frame do you not feel comfortable with?

- **Participation Discussion 11** Respond in the class D2L Discussion forum to the following:
Aside from data collection, what do forms actually provide users?
-

For the next time frame:

- Read Overview 12
- Each test has a review; you may wish to write out pertinent information from the readings and activities
- After completing this overview, you may wish to preview Lab 9