A form is the usual way information is gotten from a browser to a server

- HTML has tags to create a collection of objects that implement this information gathering
  - The objects are called widgets (e.g., radio buttons and checkboxes)
- When the Submit button of a form is clicked, the form’s values are sent to the server
- All of the widgets, or components of a form are defined in the content of a `<form>` tag
  - The only required attribute of `<form>` is action, which specifies the URL of the application that is to be called when the Submit button is clicked

    ```html
    action = "http://www.cs.ucp.edu/cgi-bin/survey.pl"
    ```

    - If the form has no action, the value of action is the empty string
- The method attribute of `<form>` specifies one of the two possible techniques of transferring the form data to the server, get and post
  - get and post are discussed in Chapter 10

- Widgets
  - Many are created with the `<input>` tag
    - The type attribute of `<input>` specifies the kind of widget being created
    - Text
    - Creates a horizontal box for text input
    - Default size is 20; it can be changed with the size attribute
    - If more characters are entered than will fit, the box is scrolled (shifted) left
  - If you don’t want to allow the user to type more characters than will fit, set `maxlength`, which causes excess input to be ignored

    ```html
    <input type = "text" name = "Phone"
    size = "12" >
    ```

2. Checkboxes - to collect multiple choice input
  - Every checkbox requires a value attribute, which is the widget’s value in the form data when the checkbox is ‘checked’
    - A checkbox that is not ‘checked’ contributes no value to the form data
  - By default, no checkbox is initially ‘checked’
  - To initialize a checkbox to ‘checked’, the checked attribute must be set to "checked"
Widgets (continued)

Grocery Checklist

<form action = "">
<p>
<input type = "checkbox" name="groceries" value = "milk" checked = "checked"> Milk
<input type = "checkbox" name="groceries" value = "bread"> Bread
<input type = "checkbox" name="groceries" value= "eggs"> Eggs
</p>
</form>

3. Radio Buttons - collections of checkboxes in which only one button can be ‘checked’ at a time

- Every button in a radio button group MUST have the same name

- Widgets (continued)

3. Radio Buttons (continued)

- If no button in a radio button group is ‘pressed’, the browser often ‘presses’ the first one

Age Category

<form action = "">
<p>
</p>
</form>
4. Menus - created with <select> tags
   - There are two kinds of menus, those that behave like checkboxes and those that behave like radio buttons (the default)
     - Menus that behave like checkboxes are specified by including the multiple attribute, which must be set to "multiple"
   - The name attribute of <select> is required
   - The size attribute of <select> can be included to specify the number of menu items to be displayed (the default is 1)
     - If size is set to > 1 or if multiple is specified, the menu is displayed as a pop-up menu

Menus (continued)

   - Each item of a menu is specified with an <option> tag, whose pure text content (no tags) is the value of the item
   - An <option> tag can include the selected attribute, which when assigned "selected" specifies that the item is preselected

Grocery Menu - milk, bread, eggs, cheese
<form action = "">
<p>
With size = 1 (the default)
<select name = "groceries">
<option> milk </option>
<option> bread </option>
</select>
</p>
</form>
- Widgets (continued)

5. Text areas - created with `<textarea>`

- Usually include the rows and cols attributes to specify the size of the text area
- Default text can be included as the content of `<textarea>`
- Scrolling is implicit if the area is overfilled

Please provide your employment aspirations

<form action=""/>
<p>
<textarea name = "aspirations" rows = "3"
    cols = "40">
(Brief and concise)
</textarea>
</p>
</form>

- **Widgets** (continued)

6. Reset and Submit buttons
  - Both are created with `<input>`
    <input type = "reset" value = "Reset Form">
    <input type = "submit" value = "Submit Form">
  - Submit has two actions:
    1. Encode the data of the form
    2. Request that the server execute the server-resident program specified as the value of the action attribute of `<form>`
    3. A Submit button is required in every form

-- SHOW popcorn.html and display it

Source: [http://elearningatria.files.wordpress.com/2013/10/cse-vii-programming-the-web-10cs73-notes.pdf](http://elearningatria.files.wordpress.com/2013/10/cse-vii-programming-the-web-10cs73-notes.pdf)