

CSC435: Web Programming

Lecture 3: HTML basics (2)

Bei Xiao

American University

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Upload your file to a web server

- Open Firefox.
- Connect to <https://mynet.american.edu/NetStorage>
- Go to G@AU/WWW
- Upload your .html, start with a simple index.html
- <http://eagle1.american.edu/~username/index.html>

Outline

- Forms
- Input Types
- Name,
- Value
- Query result

Form

- **<form></form>** contains buttons, input fields, and drop down menus
- **<input>** element, defines the type of the input and the value.

Make a form

- Open a text editor and write:

```
<html>  
  <body>  
    <form>  
      <input Name="q">  
    </form>  
  </body>  
</html>
```

Save and open, what happened?

Submit a form

- Write in your form.html:
`<input type="submit">`
- Note “submit” is a different type than the default, which is “text”
- Enter some text, and then click “submit”, are there difference from simply pressing enter?

Action

```
<form action="url">  
  <input name="q">  
  <input type="submit" value="submit">  
</form>
```

Quick Quiz

- Write some text in the input box in your browser and press **enter**, what will happen?
 1. Nothing
 2. URL changes
 3. Text disappears
 4. Error message

Quiz

In the <input> element, put action = <http://google.com/search>, click submit, what happens.

1. The URL changes with my text.
2. It goes to Google search engine.
3. Nothing

Quiz

In the <input> element, put action = <http://google.com/search>, type “cheese cake” and click submit, what is the value of the q parameter of the final URL?

Quiz

In the <input> element, put action = <http://google.com/search>, type “cheese cake” and click submit, what is the value of the q parameter of the final URL?

Answer: q=Cheese+Cake

Query in the URL

What happens in your URL after you input text and hit “submit”?

[http://nw08.american.edu/~bxiao/
form_textinput.html?q=xiao&q=bei](http://nw08.american.edu/~bxiao/form_textinput.html?q=xiao&q=bei)

Forms: Method

Two methods, **Get and **Post****

```
<input method="get">
```

```
<input method="post">
```

Try both method in the input element and see what happens

Quiz

Type some words in the input box in the following html, what happens? If you hit “submit”?

```
<form method="post">  
<input name="q">  
<input type="submit">  
</form>
```

- 1. The text is displayed**
- 2. The Google search result was displayed**
- 3. An error message was displayed.**

Answer

Type some words in the input box in the following html, what happens? If you hit “submit”?

```
<form method="post">  
<input name="q">  
<input type="submit">  
</form>
```

- 1. The text is displayed**
- 2. The Google search result was displayed**
- 3. An error message was displayed.**

Get vs Post

Get:

- parameters in URL.
- Use for fetching documents
- **There is maximum URL length**
- OK to cache
- Shouldn't change the server

Post:

- parameters in body
- Used for updating data
- No maximum length
- No cache
- Ok to change the server

Quiz

- Which of these are appropriate for GET requests?
 1. Fetch a document
 2. Updating data
 3. Requests that can be cached
 4. Sending a lot of data to the server

Answer

- Which of these are appropriate for GET requests?
 1. Fetch a document
 2. Updating data (Post)
 3. Requests that can be cached
 4. Sending a lot of data to the server (Post)

Form: password

- `<input type="password">` hide the text input as dots. Again, it is different from the default, which is "text".
- `<input type="submit">`

Quiz

- When we submit this form, what is the value of the q parameter in the url? Please test this when you upload your file to a web server
 1. Whatever password I typed in the box
 2. The parameter won't appear at all
 3. Nothing.

Answer

- When we submit this form, what is the value of the q parameter in the url? Please test this when you upload your file to a web server
 1. Whatever I typed in the box
 2. The parameter won't appear at all
 3. Nothing.

Form: checkbox

```
<input type="checkbox">
```

```
<input type="submit">
```

- Question: what happens when you don't check the check box and click submit?
 1. the parameter doesn't appear at all in the url?
 2. wrong message.
 3. off

Form: multiple checkbox

```
<input type="checkbox" name="q">
```

```
<input type="checkbox" name="r">
```

```
<input type="checkbox" name="s">
```

```
<input type="checkbox" name="t">
```

```
<br>
```

```
<input type="submit">
```

Quiz

Select multiple checkboxes (the first two), and hit the “submit” button, what will the query section of the URL look like?

Answer

Select multiple checkboxes, and hit the “submit” button, what will the query section of the URL look like?

`q=on&r=on`

Form: radio button

- `<input type="radio" name="r" value="red">`
red
- `<input type="submit">`

Form: multiple radio button

```
<input type="radio" name="q">
```

```
<input type="radio" name="r">
```

```
<input type="radio" name="s">
```

Quiz: How to enabling ONLY selecting one radio button?

Form: multiple radio button

```
<input type="checkbox" name="q">
```

```
<input type="checkbox" name="r">
```

```
<input type="checkbox" name="s">
```

Quiz: How to enabling ONLY selecting one radio button?

Answer: make them all the same name attribute

Quiz

Type:

```
<input type="checkbox" name="q">
```

```
<input type="checkbox" name="q">
```

```
<input type="checkbox" name="q">
```

```
<br>
```

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

After you hit “submit”, what is the query section?

Value attribute

Problem: no matter which radio button you select, you have the same query: **q=on**

How does the browser know which radio parameter you selected?

Solution: Value attribute

```
<input type="checkbox" name="q" value="one">
```

```
<input type="checkbox" name="q" value="two">
```

```
<input type="checkbox" name="q" value="three">
```

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

Quiz

Select the second radio button, click “submit”, what will happen to the query section of the URL?

Answer

Select the second radio button, click “submit”, what will happen to the query section of the URL?

q= two

This makes the server side app very easy. You can choose to look whatever the user submitted.

Form: label

- Label your radio or checkbox element.

```
<label>
```

```
One
```

```
<input type="radio" name="q" value="one">
```

```
</label>
```

Forms: drop down menu

- `<select>` element displays a drop-down menu by default when no size is specified. Only one item can be selected.
- `<form>`

```
<select name="q">  
  <option>Volvo</option>  
  <option>Saab</option>  
  <option>Opel</option>  
  <option>Audi</option>  
</select>  
<input type="submit">  
</form>
```

Quiz

- Select “saab” from the dropdown menu and hit “submit”, what happens to the query result in the URL?

Answer

- Select “saab” from the dropdown menu and hit “submit”, what happens to the query result in the URL?

q=saab

Quiz

- Write the following into a html:

```
<form>
  <select name="q">
    <option value="1">Number one</option>
    <option>Two</option>
    <option>Three</option>
  </select>
  <input type="submit">
</form>
```

- What URL do you have after you select “Number one” and hit “submit”?

Answer

- Write the following into a html:

```
<form>  
  <select name="q">  
    <option value="1">Number one</option>  
    <option>Two</option>  
    <option>Three</option>  
  </select>  
  <input type="submit">  
</form>
```

- What URL do you have after you select “Number one” and hit “submit”?
- 1

Forms: drop down with value

- `<select>` element displays a drop-down menu by default when no size is specified. Only one item can be selected.
- `<form>`
 - `<select name="q">`
 - `<option value="volvo">Volvo</option>`
 - `<option value="Saab">Saab</option>`
 - `<option value="Opel">Opel</option>`
 - `<option value="Audi">Audi</option>`
 - `</select>`
 - `</form>`

Forms: <input> element attribute

Type: defines input type such as text, password, radio button, check box, etc.

<input type="text"> test input

<input type="password"> password

<input type="radio"> radio button

<input type="checkbox"> checkbox

<input type="submit"> submit button

Forms: <input> element attribute

Name: defines the variable name for the control, create mutually exclusive sets. The following input element have the same name but different values.

```
<input type="radio" name="age" value="25-34"> 25 to 34
```

```
<input type="radio" name="age" value="35-44"> 35 to 44
```

Forms: <input> element attribute

Value: specify values of an input element. For “checkbox”, “radio”, it defines the value associated with the input and the submitted value. In the query, it is what the value was received by the server of the element.

```
<input type="checkbox" name="q" value="one">
```

Exercise: payment forms

Please create a .html that generate a page looks like this. You can download icon images from the folder on blackboard or search them online.

Buying is easy. Just fill out the following form.

Full Name:

Email address:



Hint: payment forms

- This exercise uses two types
- `<input>`
- `<input type="radio">`
- Answer is `buyingform.html`

Exercise: Address forms

Please create a .html that generate a page looks like this.

Please fill out your address

Street line 1:

Street line 2:

City:

State/Province:

Zip/Postal code:

Country:

Hint: Address forms

This exercise uses two types of input:

`<input>` default text

`<input type="submit" value="Send">` the submit button.

Answer is at [address.html](#)

Homework & Exercises

Homework1 will be due Monday, 27th.

Homework 2 will be out before Monday, 27th.

You should finish the exercise on code academy on HTML basics.

Finish tracks 4-6.

<http://www.codecademy.com/tracks/web>