FORMS

Without using JS, there are two basic forms of interaction on the web:

- Following links (`<a href="SOME_URL">` tags)
- Submitting data via forms

Let's look at that second case

BASIC HTML TAGS FOR FORMS

```html
<form action="SOME_URL" method="GET">
  <label>Username: <input name="fieldName" placeholder="try it"/></label>
  <label>Password: <input type="password" name="otherField" value="demo"/></label>
  <label>Checkbox: <input type="checkbox" name="checkField" checked/></label>
  <label>Radio 1: <input type="radio" name="radioField" value="One"/></label>
  <label>Radio 2: <input type="radio" name="radioField" value="Two"/></label>
  <label>Select:
    <select name="selectField">
      <option value="1">One</option>
      <option value="2">Two</option>
      <option value="3">Three</option>
    </select>
  </label>
  <button type="submit">Try it</button>
</form>
```

THE FORM TAG

```
<form action="SOME_URL" method="GET">...</form>
```

- `action` of a form is the url to submit to.
  - fully qualified or a relative or absolute path
  - No url means same page
- `method` is normally GET or POST
  - We'll cover these when we get to HTTP methods
  - GET will send query params in url
  - POST will send params in body of request, not in URL

SUBMITTING

- `<button type="submit">...</button>`
- `<input type="submit">...</input>`
- On most browsers: If no submit button defined, use first button
    - Don't Rely On This

The data from the form is submitted to the `action` url.

The `name` props of the fields will be the keys

- spaces become + or %20. Special characters will be encoded in hex with % (like %20 being a space)

PASSWORD FIELDS

Password fields are NOT secure - they visually hide the text on display, but transmit the data in the clear.

CHECKBOXES

- Send a value of "on" if checked (by default)
- Will not send a value, or even a field name, if not checked

RADIO BUTTONS

- Only one of the same `name` can be selected at a time
- Will send the value of the selected one as the value of the name/value pair
- Will not send any value (or even the name) if none of the radio buttons of the name are selected

SELECT (DROPDOWN)

- Will show the CONTENT of the option tag on the screen, but send the VALUE of the option tag in the submitted data.
- If there is no value for an option, the content is used as the default value
  - Don't do this - always set a value
  - Always set a value to separate the appearance from the data - that way you can later change the appearance/wording without breaking your data
- Will select the first option by default if one isn't set to `selected`

LABEL

`label` tags allow you to "click" the label and it counts as selecting the element

Also provides semantic value (tying a textual label to a related field)

label tags automatically connect to an input that is their child

- You can also connect them when separate, but that requires an id of the element to connect them to
  - Remember that most of the time you don't want to have ids on a bunch of elements