MIS3690 - Web Technologies

HTML Forms

HTML forms

- Why forms?
  - to interact with users
  - to collect data from users
- `<form>` components:
  - form attributes:
    - `action`
    - `method`
  - `<input>`
  - `<label>`
  - `<textarea>`
  - other HTML elements

Form example

```html
<form method="post" action="mailto:zli@babson.edu">
    <input
      type="text"
      name="name"
      placeholder="Enter your full name here..."
    />
    <button type="submit">Send</button>
</form>
```

Enter your full name here... | Send

Form attributes

- `action`
  - defines where the data gets sent
  - must be a valid relative or absolute URL, for example:
    - `<form action="https://www.google.com">`
    - `<form action="/process-form">`
    - `<form action="mailto:email-address">`
- `method`
  - describes how form's data is sent to server
  - most common ones are the `GET` method and the `POST` method
    - Compare `GET` vs. `POST`

`<input>`

- Text line: `<input type="text" />`

- Password: `<input type="password" />`

- Radio buttons: `<input type="radio" />`

- Check boxes: `<input type="checkbox" />`

- Files: `<input type="file" />`

- Hidden data: `<input type="hidden" />`

- and many more …

`<input>` attributes

- `type` : type of the input
- `name` : name of the input
  - submitted with the form as part of a name/value pair
  - is a *required* attribute
- other attributes (dependent on type of):
  - `maxlength`
  - `placeholder`
  - `value`
  - `checked`
  - ...

`<input>` type: `"text"` / `"password"`

- Example

```html
<form>
  <label for="username">Username:</label>
  <input
    type="text"
    id="username"
    name="username"
    maxlength="100"
    placeholder="Username"
  />
</form>
```

Username: `Username`
Password: `Password`

- Try `type="password"`

`<input>` type: `"radio"`

- Example:

```html
<form>
  <div>
    Gender:
    <label>Male
      <input type="radio" name="gender" value="male" />
    </label>
    <label>Female
      <input type="radio" name="gender" value="female" />
    </label>
  </div>
</form>
```

Gender: Male ⚪ Female ⚪

`<input>` type: `"checkbox"`

- Example:

```html
<div>What product(s) do you own?</div>
<div>
  <input type="checkbox" id="smartphone" name="products" value="smartphone" />
  <label for="smartphone">Smartphone</label>
</div>
<div>
  <input type="checkbox" id="desktop" name="products" value="desktop"/>
  <label for="desktop">Desktop computer</label>
</div>
<div>
  <input type="checkbox" id="laptop" name="products" value="laptop"
  checked />
  <label for="laptop">Laptop computer</label>
</div>
```
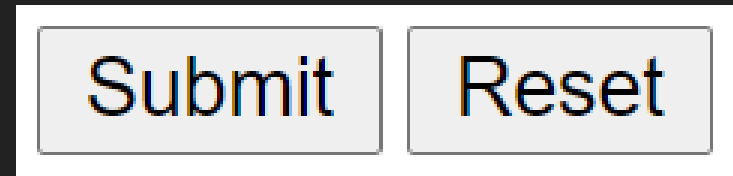

What product(s) do you own?
☐ Smartphone
☐ Desktop computer
☑ Laptop computer

`<input>` type: `"submit"` / `"reset"`

- Example:

```html
<input type="submit" value="Submit" name="submit" />
<input type="reset" value="Reset" name="reset" />
```

- These two `<input>` s are standard buttons.

- The `type` value should not be changed.

In-class exercise: *ex09.html*

- Create a fomr that looks like what is shown below:

In-Class Exercise 09 - HTML Form

Last Name: [Last name]

First Name: [First name]

Email: [Email address]

Gender: Male ○ Female ○

My favorite topics are:
☐ Basic HTML
☐ CSS
☐ Tables

[Click me to submit] [Clear form]

More form controls for input

- `<select>`
  - provides a menu of options
  - `<option>`
- `<textarea>`
  - allows user to enter multi-line plain-text
  - good for a comment on a review or feedback form.
- `<button>`
  - creates a clickable button
  - if there's only one `<button>` inside the `<form>`, that button will be treated as the "submit" button.

`<select>`

- Example:

```html
<div>
  <div>
    <label for="state-select">Which state do you live in?</label>
  </div>
  <div>
    <select name="state" id="state-select">
      <option value="">-- Please select your state --</option>
      <option value="ME">Maine</option>
      <option value="MA">Massachusetts</option>
      <option value="NH">New Hampshire</option>
    </select>
  </div>
</div>
```

Which state do you live in?

-- Please select your state -- ∨

-- Please select your state --
Maine
Massachusetts
New Hampshire

`<textarea>`

- Example:

```html
<div>
  <div>
    <label for="comments">Leave a Reply:</label>
  </div>
  <div>
    <textarea
      id="comments"
      name="comments"
      rows="5"
      cols="25"
      placeholder="Enter your comment here..."
    ></textarea>
  </div>
</div>
```
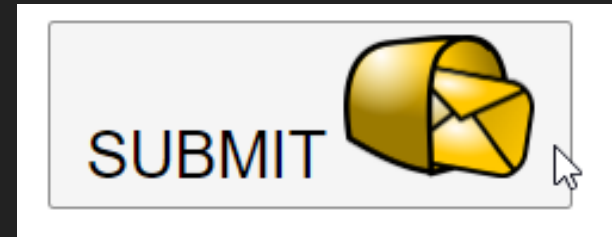
Leave a Reply:

Enter your comment here...

`<button>`

- Use a `<button>` element if you want to
    - create a custom button
    - customize the behavior using JavaScript
- Example:


```
<button type="submit" name="submit-button">
        SUBMIT <img src="images/mailbox.png"
                    height="30"
                    alt="submit button" />
</button>
```

In-class exercise: *ex09.html* (cont.)

- Add a drop-down menu

- Add a text area for comments

- Add two icon buttons.

- Add styles
  - make it look like the form in next slide

- *Commit/push* to GitHub. Update *sitemap.html*.

In-Class Exercise 09 - HTML Form

Last Name: [Last name]

First Name: [First name]

Email: [Email address]

Gender: Male ○ Female ○

My favorite topics are:
- ☐ Basic HTML
- ☐ CSS
- ☐ Tables

Which grade do you expect to receive? [A ▾]

A
A-
B+
B
B-
C+

Leave a Reply:

[Enter your comment here...]

Questions?