If your font is set to be responsive, is there a way to set a max and min font size?

Can you give your website dual design, such as fluid-responsive (to change from fluid to responsive when appropriate)?

How to make website looks exactly same on Chrome, IE, Safari, and firefox?

if i have a button that is in the middle of the screen how can i make it go to the nav once i scroll dow pass from where it use to be?

FINAL PROJECTS

AGENDA



- Review
- Forms and Inputs
- Lab
- → Form Validation
- Functional Forms

FEWD

LEARNING OBJECTIVES

- Be able to differentiate the different types of inputs and why/ where we would use each
- Explain how to group elements by name.

FEWD

REVIEW

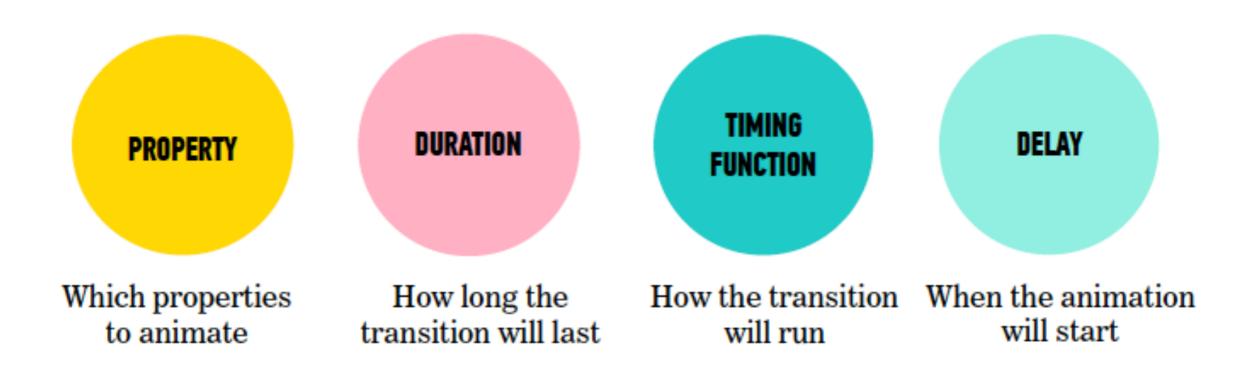
TRANSITIONS

TRANSITIONS

- Provide a way to control animation speed when changing properties
- Instead of having property changes take effect immediately, you can have them take place over a period of time.

```
.example {
  transition: [transition-property] [transition-duration] [transition-timing-function] [transition-delay];
}
```

TRANSITIONS



TRANSITIONS - TRANSITION-PROPERTY

- ▶ Can specify a specific property to transition or "all" to transition all properties
- ▶ Default: all

```
div {
  transition: opacity 0.5s;
}

div {
  transition: all 0.5s;
}

div {
  transition: height 0.5s;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

TRANSITIONS - TRANSITION-DURATION

▶ A time value, defined in seconds or milliseconds

```
div {
  transition: all 0.5s;
}

div {
  transition: all 350ms;
}

proper div {
  transition: all 350ms;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

TRANSITIONS — TIMING

- ▶ Describes how a transition will proceed over its duration, allowing a transition to change speed during its course.
- ▶ Timing functions: ease, linear, ease-in, ease-out, ease-in-out

```
div {
  transition: opacity 0.5s ease;
}

div {
  transition: opacity 0.5s ease-in-out;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

transition timing: W3 Schools

TRANSITIONS — DELAY

▶ Length of time before the transition starts

```
div {
  transition: background-color 0.5s ease 2s;
}
```

```
.example {
  transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

MORE FUN WITH TRANSITIONS — CODROPS

Fun CSS button styles: Creative buttons

Icon hover effects: Icon Hover Effects

Modal dialogue effects (advanced): <u>Dialogue Effects</u>

TRIGGERING TRANSITIONS

TRIGGERING TRANSITIONS

There are two ways to trigger CSS transitions:

- 1. Using the :hover CSS pseudo-class
- 2. Adding a class with jQuery

TRANSFORMATIONS

TRANSFORM

transform: W3 Schools

transform-origin: W3 Schools

RESPONSIVE —— REM/EM

EM

- Relative unit
- Sized based on the width of the letter "m"
- → 1em = 100% font-size
- \rightarrow .5em = 50% font-size
- Based on parent

```
Parent { font-size:16px;}
Child {font-size:2em;}
```

Child's font size is 32px (200% x 16px)

REM

- → "Root" em
- Same as em except based on the font-size of the httml element

PIXELS AND EMS AND REMS, OH MY!!

	RELATIVE?	BASED ON
PX	absolute	
EM	relative	parent
REM	relative	html element

THE BENEFIT OF USING RELATIVE UNITS

```
html { font-size: 16px; }
h1 { font-size: 33px; }
h2 { font-size: 28px; }
h3 { font-size: 23px; }
h4 { font-size: 19px; }
small { font-size: 13px; }
.box { padding: 20px; }
@media screen and (min-width: 1400px) {
  html { font-size: 20px; }
  h1 { font-size: 41px; }
  h2 { font-size: 35px; }
  h3 { font-size: 29px; }
  h4 { font-size: 24px; }
  small { font-size: 17px; }
  .box { padding: 25px; }
```

```
html { font-size: 1em; }
h1 { font-size: 2.074em; }
h2 { font-size: 1.728em; }
h3 { font-size: 1.44em; }
h4 { font-size: 1.2em; }
small { font-size: 0.833em; }
.box { padding: 1.25em; }
@media screen and (min-width: 1400px) {
  html { font-size: 1.25em; }
```

FEWD

RESPONSIVE — TYPES OF LAYOUTS

FIXED LAYOUT

- Relies on a container of a fixed width (uses static units)
- Resizing the browser/viewing it on a different device won't have an effect on the page



Here's my

"Well for our northern friend, Dame Isabel 'Proceed, Senor.'

"A moment! Pardon!" cried another of the express to you, sir sailor, that we have by no present Lima for distant Venice in your cor you know the proverb all along this coast—churches more plentiful than billiard-tables Venice; I have been there; the holy city of the Your cup! Thanks: here I refill; now, you po

FLUID LAYOUT

- Uses relative widths (percentages)
- No media queries

Here's my awesome header

"Well for our northern friend, Dame Isabella's Inquisition wanes in Lima,' laughed Don Sebastian. 'Proceed, Senor.'

"'A moment! Pardon!' cried another of the company. 'In the name of all us Limeese, I but desire to express to you, sir sailor, that we have by no means overlooked your delicacy in not substituting present Lima for distant Venice in your corrupt comparison. Oh! do not bow and look surprised; you know the proverb all along this coast—"Corrupt as Lima." It but bears out your saying, too; churches more plentiful than billiard-tables, and for ever open—and "Corrupt as Lima." So, too, Venice; I have been there; the holy city of the blessed evangelist, St. Mark!—St. Dominic, purge it! Your cup! Thanks: here I refill; now, you pour out again.'

Here's my awesome header

"Well for our northern friend, Dame Isabella's Inquisition wanes in Lima,' laughed Don Sebastian. 'Proceed, Senor.'

"A moment! Pardon! cried another of the company. In the name of all us Limeese, I but desire to express to you, sir sailor, that we have by no means overlooked your delicacy in not substituting present Lima for distant Venice in your corrupt comparison. Oh! do not bow and look surprised; you know the proverb all along this coast-"Corrupt as Lima." It but bears out your saying, too; churches more plentiful than billiard-tables, and for ever open-and "Corrupt as Lima." So, too, Venice; I have been there; the holy city of the blessed evangelist, St. Mark!-St. Dominic, purge it! Your cup! Thanks: here I refill; now, you pour out again.'

RESPONSIVE LAYOUT

- Uses relative widths (built on a fluid grid)
- Use media queries to control design and content as it scales down or up with the browser or device







MAX-WIDTH — A HELPFUL TOOL FOR LAYOUT

Max width

No max width



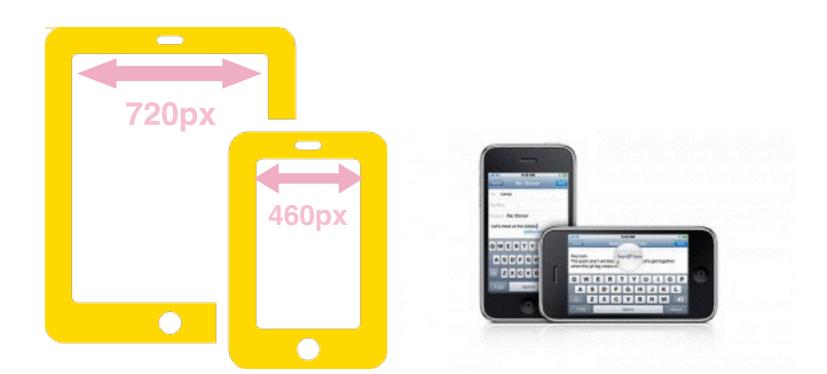
RESPONSIVE — MEDIA QUERIES

RESPONSIVE DESIGN



MEDIA QUERIES

• Media queries allow us to target CSS rules based on screen size, device orientation, display density, etc.





MEDIA QUERIES — FIRST METHOD

Create separate stylesheets for different devices

For example:

- Have one main stylesheet as the default stylesheet
- If the screen becomes too narrow, short, tall, wide, etc. we can detect that and load in an additional stylesheet

MEDIA QUERIES — SECOND METHOD

Use media queries directly in your CSS

```
@media screen and (max-width: 600px) {
   .box {
     width: 100%;
   }
}
```

*Usually goes at the end of stylesheet

MEDIA QUERIES — SYNTAX

MEDIA TYPES

- screen: color computer screen
- print: print preview mode
- all: suitable for all devices

```
Omedia screen {
    /* Styles for color computer screen */
}
```

```
@media print {
    /* All your print styles go here */
    #header, #footer, #nav { display: none !important; }
}
```

MEDIA FEATURES

- width: viewport width
- height: viewport height
- orientation: orientation of the viewport

```
@media screen and (max-width: 600px){

/* Styles for screens with a maximum width of 600px */
}
```

```
@media screen and (min-width: 600px){

/* Styles for screens with a minimum width of 600px */
}
```

MEDIA QUERIES — SYNTAX

LOGICAL OPERATORS

 and: can be used to combine multiple media features together, as well as combining media features with media types.

```
@media (min-width: 700px) and (orientation: landscape) { ... }
```

• comma-separated lists: behave like the logical operator or

```
@media (min-width: 700px), handheld and (orientation: landscape) { ... }
```

 not: applies to the whole media query and returns true if the media query would otherwise return false

```
@media not print { ... }
```

 only: prevents older browsers that do not support media queries with media features from applying the given styles

```
@media only screen and (min-width: 400px) { ... }
```

VIEWPORT META TAG — AN IMPORTANT NOTE!!

- The viewport meta tag controls how a webpage is displayed on a mobile device.
- Without the tag, mobile devices will assume you want the full desktop experience and will set the viewport width at 980px (iOS)

DEVICE-WIDTH

This tells the browser "My Website adapts to your width"

INITIAL-SCALE

Sets the initial zoom level and prevents default zooming

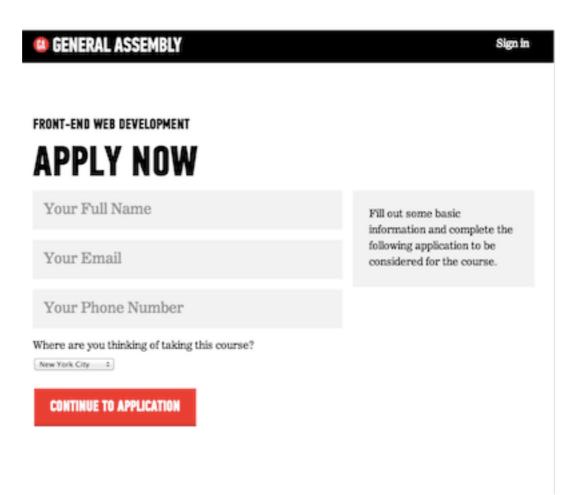
<meta name="viewport" content="width=device-width, initial-scale=1">

FORM DESIGN & INTERACTION

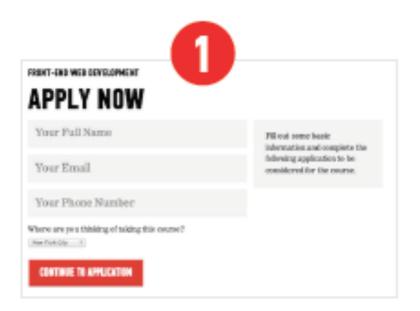
FORMS AND INPUTS

FORM BASICS

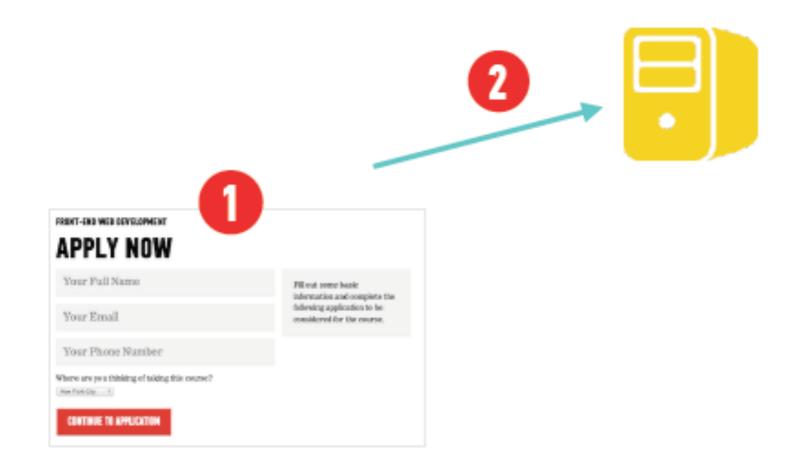
How we get data from users



1. The user fills out the form and presses the submit button



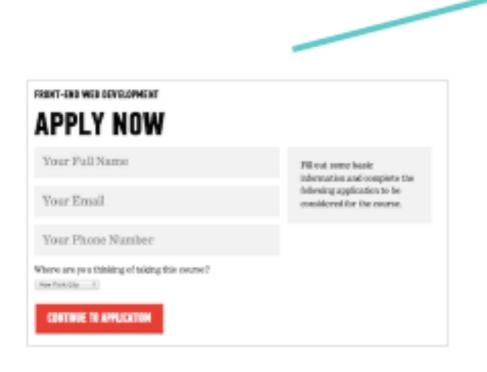
2. The name of each form field is sent to the server along with the value the user entered or selected



3. The server processes the data using a language such as PHP, C# or Java. It may also store the information in a database



4. The server creates a new page to send back to the browser based on the information received.







THANKS FOR YOUR APPLICATION SUBMISSION!

• Thursto for your application submission! To review your application status, you can go to your My applications you may need to create an account first. If you have any questions requesting your application, first tree to revise! on all chicago, admissions ligereralescendidy or call until +1 (87) 148-1685. Someone from our admissions from will be certiseling pseudontly!

Form controls live inside the <form element>

```
<form action="http://www.example.com/login.php" method="post">
  <!--Data collection elements go here-->
  </form>
```

Form attributes:

```
<form action="http://www.example.com/login.php" method="post">
  <!--Data collection elements go here-->
  </form>
```

Form attributes:

ACTION (REQUIRED) Where to send the data (URL) <form action="http://www.example.com/login.php" method="post"> <!--Data collection elements go here--> </form>

Form attributes:



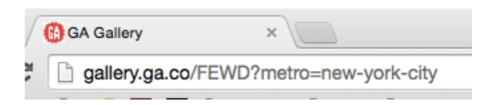
FORMS — METHODS

POST

- Data is not shown in URL
- Can contain sensitive data
- No size limitations
- Adds information to, or deletes info from a database

GET

- Short forms (such as search fields)
- Appended to URL in name/value pairs
- Never use for sensitive info!!!
- Useful for form submissions when user wants to bookmark results



FEWD

GETTING INFORMATION FROM USER

GETTING INFO — **INPUTS**

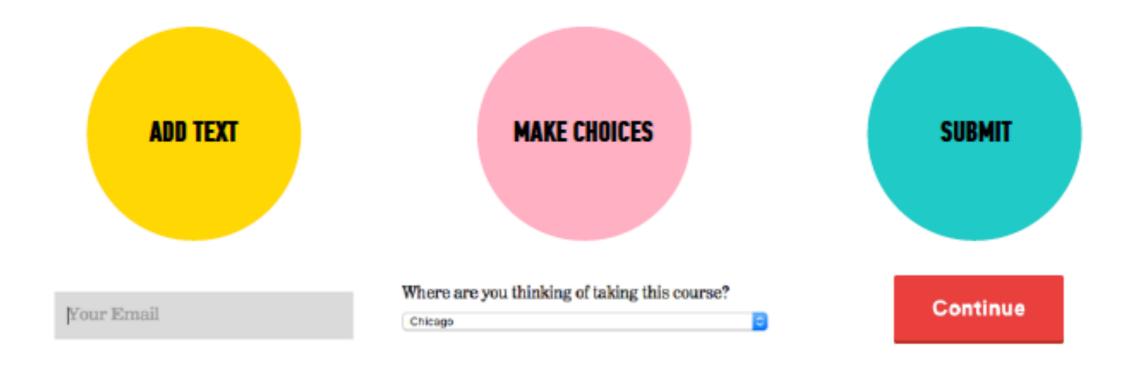
Place any inputs between <form></form> tags

Attributes:

- ▶ type text, submit, password, email, checkbox, button, radio, file, etc.
- name, value The name attribute is sent to the user along with the value the user selects.
- placeholder For text inputs hint for what user should enter in field

Note: For a complete spec see MDN

FORM



NAME/VALUE PAIRS

▶ Information is sent from the browser to the server using name/value pairs.

INPUTS — TEXT

*Can also carry a maxlength attribute to limit the number of characters the user may enter

LABELS

Information about the input field should be put in a <label> tag:

```
<label for="yourName">Name</label>
<input type="text" name="name" id="yourName">
```

To tie the two together:

```
<label for="yourName">Name</label>
<input type="text" name="name" id="yourName">
```

Note: Clicking the label text places the focus in the input field (great for radio buttons)

ACTIVITY



KEY OBJECTIVE

Identify input types, add styles to a form

TYPE OF EXERCISE

Individual/partner

TIMING

45 min

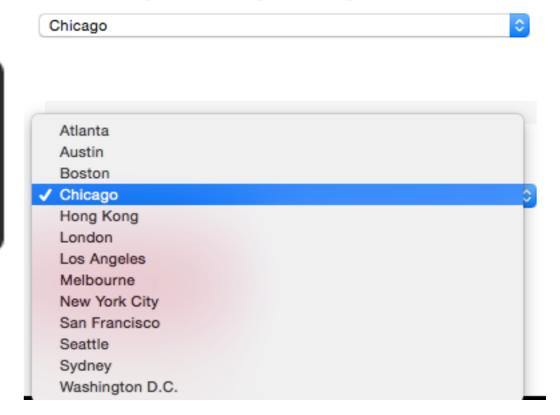
- 1. Review contact_form.png
- Write html for contact form
- 3. Style the form
- Optional: add responsive styles (see contact_form_responsive.png)
- 5. Super optional: Add validation (see later slides)

^{*} You will need to look up the textarea element

SELECT AND OPTION

```
<select name="referral">
  <option value="friend">Friend</option>
  <option value="instructor">Instructor</option>
  <option value="online">Online</option>
  </select>
```

Where are you thinking of taking this course?



CHECKBOXES AND RADIO BUTTONS

<input type="checkbox" name="store_credentials">

Remember me

RADIO BUTTONS

Radio buttons are grouped together by their name attribute

```
<input type="radio" name="color" value="red" label="Red">
<input type="radio" name="color" value="green" label="Green" checked="checked">
```



SUBMIT FORM

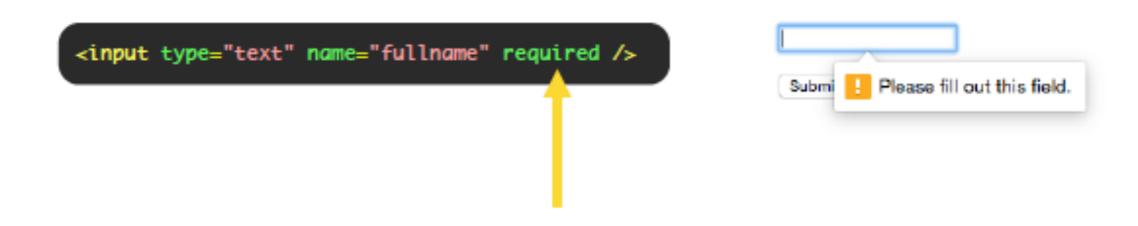
<input type="submit" value="Continue">

Continue

VALIDATION

VALIDATION

- ▶ You've probably seen forms on the web that give users messages if the form control has not been filled out correctly.
- ▶ Traditionally, validation has been performed using Javascript.
- ▶ HTML5 also introduced browser-based form validation.



VALIDATION

- ▶ For more substantial validation, it is highly recommended that you use a validation library, such as Parsley.
- ▶ To add parsley validation:
 - 1. Add jQuery to your project
 - 2. Add the parsley.js file to your project after you've included jQuery

```
<script src="js/jquery-2.1.3.min.js"></script>
<script src="js/parsley.js"></script>
```

3. Add the data-parsely-validate attribute to your form tag

```
<input data-parsley-validate/>
```

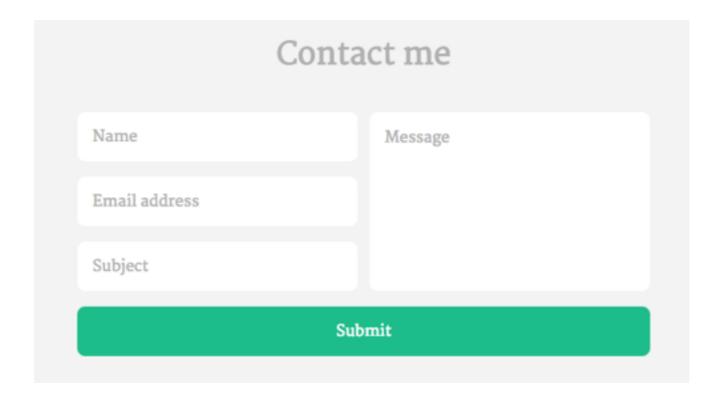
4. Add the required attribute to any fields you want to be required.

```
<input type="text" name="fullname" required />
```

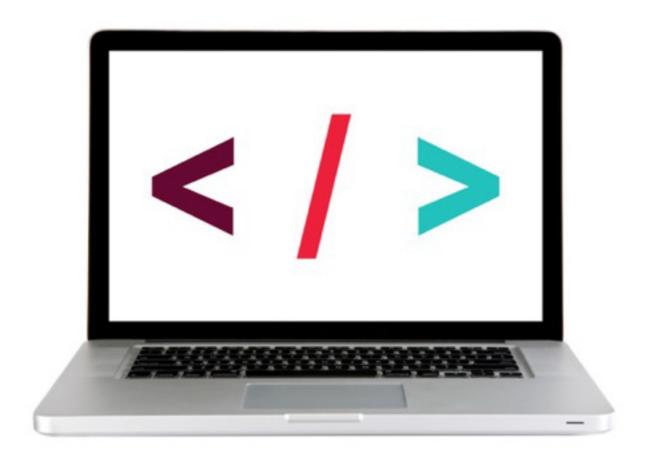
CONTACT FORM

BUILDING A FUNCTIONAL CONTACT FORM

- 1. I recommend FormSpree for contact forms that send you an email without having to use PHP.
- 2. Your site will need to be hosted on a server in order to test emails.



LET'S TAKE A CLOSER LOOK



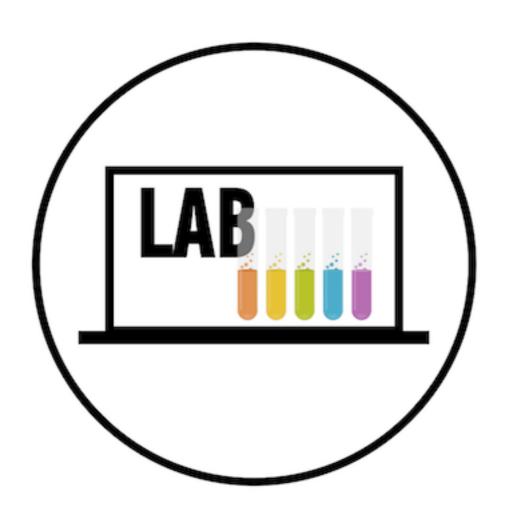
FEWD

LEARNING OBJECTIVES

- Be able to differentiate the different types of inputs and why/ where we would use each
- Explain how to group elements by name.

FEWD

LAB



HOMEWORK

HAVE CSS MOSTLY READY THIS SUNDAY

FEWD

EXIT TICKETS