

QUICK REVIEW

```
var germanCars = [
    { make: 'Mercedes Benz', model: 'GL450', year: 2007 },
    { make: 'Porsche', model: 'Panamera', year: 2010 },
    { make: 'BMW', model: 'X5', year: 2018 },
    { make: 'Audi', model: 'A6', year: 2016 }
]
for(car of germanCars) {
    template = `YR: /* year */ MK: /* make */ MODEL: /* model */`;
    console.log(template)
}
```

```
<div id="image-grid"></div>
```

```
var imgData = [
    {url: 'dogs.png', title: 'Cute dogs'},
    {url: 'cats.png', title: 'Cute cats'},
    {url: 'horse.jpg', title: 'Cute horses'},
    {url: 'rabbits.jpg', title: 'Cute rabbits'}
]
for(/* what goes here */ of imgData) {
    $(/* what goes here */)
        .append(`<img src=/* what goes here */ alt=/* and here */>`);
}
```

```
<div id="shopping-list">

</div>
```

```
const list = ['Wine', 'Dog Treats', 'Shampoo', 'Conditioner'];
let html = '';

for(/* what goes here */) {
    /* what goes here */
    `/* what goes here */ <button>Edit</button>`;
}

$('#shopping-list>ol')./* what goes here */(html);
```

```
.done {
  text-decoration: line-through;
}
```

```
    Finish final project
    Celebrate too much
    Regret celebrating too much the next day
```

```
$(/* what goes here */).click(function(){
   $(this)./* what goes here */
});
```

OBJECTIVES

- HTML form elements
- The contenteditable attribute
- HTML5 Validation
- Javascript & Forms 💖

FORM ELEMENTS

THE FORM ELEMENT

The form element has special powers. Any button inside it when clicked causes it to submit!

```
<form>
  /* form fields and labels go here */
  <button>Submit Me!</button>
</form>
```

INPUT ELEMENTS

```
<!-- No ending tag -->
<input type="text" name="modelname">
```

Input Types:

•	text	checkbox	color	time

- password button date url
- submit number month week
- reset email range datetime-local
- radio search tel

INPUT ATTRIBUTES

```
<!-- required here is the same as required="true" --> <input type="text" name="modelname" value="" required>
```

Attributes:

- name
- value
- readonly
- disabled
- maxlength

- placeholder: text displayed before focus
- required: form doesn't submit if empty
- autocomplete: browser may autocomplete
- autofocus: field is focused on page load
- form: form name the element belongs to
- pattern: a regular expression to match input
- novalidate: don't use browser validation

RADIO BUTTONS

```
<label><input type="radio" name="crust" value="reg" checked> Regular</label>
<label><input type="radio" name="crust" value="dd"> Sicilian</label>
<label><input type="radio" name="crust" value="thin"> Thin</label>
```

- Radio buttons are mutually exclusive options
- The name attribute tells the browser which elements are part of the same group.
- The value is what is returned when the element is checked



Wrap radio buttons in <label> tags. The labels are clickable, the cursor changes to an arrow, and the text is easier to style!

CHECKBOXES

<label><input type="checkbox" name="delivery"> Delivery?</label>

- Checkboxes are binary.
- Checkboxes can use a value, but it will return that value in Javascript whether the element is checked or not.



Wrap checkboxes in <label> tags. The labels are clickable, the cursor changes to an arrow, and the text is easier to style!

SELECT ELEMENT

- The value of the option **does not** need to match the value of the text that is displayed.
- Use the selected and disabled attribute to show an initial value.
- Use the multiple attribute to make the select allow multiple options to be selected.

RANGE ELEMENT

```
<input type="range" name="age" value="25" min="25" max="50" step="5">
```

- The **min** attribute is the starting value
- The max attribute is the ending value
- The value is the starting position and what is returned
- Value can be fluid (in integers) or "stepped" using the step attribute

TEXTAREA ELEMENT

<textarea rows="4" cols="50">Hey there!</textarea>

- The cols attribute is the visible width of the text control, in average character widths. If it is specified, it must be a positive integer. If it is not specified, the default value is 20.
- The rows attribute is the number of **visible text lines** for the control.
- Textarea element values retain any whitespace (spacing and returns).

PSEUDO CLASSES

```
input[name="crust"]:checked {
   /* styles only the selected radio or checkbox */
}
```

```
$('input[name="crust"]:checked').val();
// Gets the value of the selected radio button
```

https://developer.mozilla.org/en-US/docs/Web/CSS/Pseudo-classes

JQUERY AND FORMS

- If using the form element you can listen for the **submit** event, but don't forget to cancel the event using event.preventDefault().
- To get the value of an element, use the
 .val() method.
- The exception is a checkbox: The .val()
 method it will be undefined if not checked.
 Use the .is(':checked') method to return
 true or false.



```
$('form').submit(function(e){
   e.preventDefault();
   let name = $('#name').val()

   console.log(name);
})
```

FORM BASICS

//codepen.io/jme11/embed/zMXvQe/?height=265&theme-id=default&default-tab=html,result&embed-version=2&editable=true

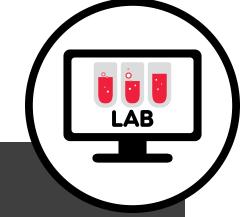
https://codepen.io/jmell/pen/zMXvQe

SPEECH SYNTHESIS

//codepen.io/jme11/embed/GBXWLJ/?height=265&theme-id=default&default-tab=html,result&embed-version=2&editable=true

https://codepen.io/jmell/pen/GBXWLJ

SPEECH SYNTHESIS SOLUTION



```
$('button').click(function(){ //listen for clicks on the button

// TERNARY OPERATOR: condition-to-check ? value-if-true : value-if-false;

// If the value of the input is not empty (which is falsy),

// set the variable to the value of the input, otherwise

// set the text variable to the noInputMsg variable

let text = $('input').val() ? $('input').val() : noInputMsg;

// Use the say function and give it the text in our text variable
say(text);

});
```

TEMPERATURE CONVERTER

//codepen.io/jme11/embed/vRMGYg/?height=265&theme-id=default&default-tab=html,result&embed-version=2&editable=true

https://codepen.io/jmell/pen/vRMGYg

TEMP COVERTER SOLUTION

```
$('button').click(function(){ //listen for clicks on the button
   // Store the value of the input with
    // the id of celsius in the val variable
    let val = $('#celsius').val();
    // Store the result of passing the val variable
    // to the converter function
    let converted = converter(val);
    // Update the div with the id of output with the result
    $('#output').text(converted + '°F');
});
```

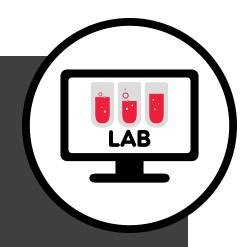
SHOW PASSWORD

//codepen.io/jme11/embed/XBXvqe/?height=265&theme-id=default&default-tab=html,result&embed-version=2&editable=true

https://codepen.io/jmell/pen/XBXvqe

PANELISTS SOLUTION

```
// listen for a change on the #show-password element
$('#show-password').change(function(){
 // The 'is' method returns true or false.
 // Set the displayPassword variable to true if
 // the #show-password checkbox is checked
 // and false if it is not checked.
 let displayPassword = $(this).is(':checked');
 // If the displayPassword variable is true...
 if(displayPassword) {
   // Set the type attribute on the #password input to text
    $('#password').attr('type','text');
  } else { // otherwise...
    // Set the type attribute on the #password input to password
    $('#password').attr('type','password');
});
```



CONTENTEDITABLE ATTRIBUTE

CONTENTEDITABLE ATTRIBUTE

```
<!-- Not a form element -->
<div contenteditable="true">Any text here can be edited!</div>
```

The contenteditable attribute can be added to any element that contains text!

GET ITS VALUE?

```
$('div').on('input', function(){
  console.log( $(this).text() );
});
```

- We already know how to do this with the .text() method!
- Listen for the input event here.
- We can listen for any kind of Javascript event using the jQuery .on() method. With this method, the first parameter is the event name.

CONTENTEDITABLE

//codepen.io/jme11/embed/YjOxLM/?height=265&theme-id=default&default-tab=html,result&embed-version=2&editable=true

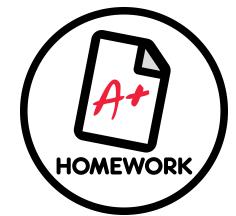
https://codepen.io/jmell/pen/YjOxLM

CONTENTEDITABLE SOLUTION

```
// listen for clicks on the button
$('button').click(function(){
 // Use the text method to get the
  // text inside the paragraph and
  // store it in the text variable.
 let text = $('p').text();
  // Log the value of the text variable
  console.log(text)
});
```

HOMEWORK

 There are two weeks to finish the Javascript for your final projects



- Make an appointment with me to review your project and course progress
 - Tues-Thurs: Day by Skype or on campus

EXIT SURVEYhttps://goo.gl/EB4XFw

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GO BUILD AWESOME THINGS!