

JavaScript Challenges

1. Check in at slido.com #SI539-3-26
2. Please use the chat feature to ask questions during lecture, but don't hesitate to interrupt me as well.
3. If you have coding questions, the code must be hosted to Github



Objective of the Challenges

- Challenge 1: Identify element to listen to, element to modify, and use Boolean expr
- Challenge 2: C1 + set + get values
- Challenge 3: C2 + Boolean operators + halt execution
- Challenge 4: C4 + more complex Boolean
- Challenge 5: Multiple listeners + more complex set and get



Review – DOM Elements

- How do you retrieve an element or elements?
 - `document.querySelector(" ")`
 - `document.querySelectorAll(" ")`



Review – DOM Values

- How do you set/retrieve a value associated with an element?
 - `element.textContent = "Hi!";`
 - `myVariable = element.textContent;`
 - `element.innerHTML = "<p>Hi</p>";`
 - `myVariable = element.innerHTML;`
- What is the type of `myVariable` in each case?



Review – DOM Styles and Attributes

- How do you set/retrieve the style or attributes associated with an element?
 - `element.style.display="none";`
 - `element.style.color="red";`
 - `myVariable = element.src`
 - `myVariable = element.attr`



Challenge approach

- Identify element(s) that need(s) listener
 - What is the id/tag?
 - What kind of listener can it have?
 - What kind of state does it have?
- Are there other elements that need to be accessed?
 - Find the id(s)/tag(s)
 - What properties do I need to access/change?



Challenge 1

- Demo
- Resource: Do a search for “html5 checkbox attributes”
 - https://www.w3schools.com/jsref/dom_obj_checkbox.asp
- Survey: [Slido – Challenge1](#)



Challenge 2

- Demo
- Resource: Do a search for “html5 textarea attributes”
 - https://www.w3schools.com/tags/tag_textarea.asp
- Survey: [Slido – Challenge2](#)



Challenge 3

- Demo
- Resource: Do a search for “html5 radio button attributes”
 - https://www.w3schools.com/jsref/prop_radio_checked.asp
- Survey: Slido - Challenge3



Challenge 4

- Demo
- Survey: [Slido – Challenge4](#)



Challenge 5

- Demo
- How do we select all of the images?
`document.querySelectorAll("img");`
- What happens if I move the js link to the head of the html?



Mouse/Focus Events

- Mousemove, mouseenter, mouseover
 - https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_event_mouseenter_mouseover
 - (This plays into your homework!!)
- Focus/blur
 - https://www.w3schools.com/jsref/obj_focusevent.asp



Review (Again)

- When you add a listener to an element, that element is accessed via the keyword `this`
- In this challenge you need to access the alt text and the src.
`myVariable = element.src`



Overloading operators

- An operator is overloaded when it does different things depending upon the operands.
- **+** will do addition when given numbers, it will do concatenation when given strings.
- Survey: [Slido – Challenge 5](#)



Acknowledgements

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