## Midterm 2 Topics All slide sets from Responsive Design up through NodeJS

# Responsive Design

What are the pros/cons of native apps

#### Flexbox

- Discuss what a flexbox is and know the classes and properties used to implement a flexbox
- Describe the role of @media

### Grid

Look at a grid example and discuss what it will do.

## Bootstrap

- o Know the bootstrap rule of 12 for design.
- Know the two container classes for bootstrap and how they affect the display.
- o Know the basics of the col classes. Eg. What does "col-md-2" mean?
- Know how rows behave as device width changes.
- Know the bootstrap classes that can be applied to a table as mentioned in the slides.
- Know the bootstrap classes that can be mixed-in and applied to a table as mentioned in slides. This includes the semantic based color classes like btn-warning.
- Be able to use div elements in appropriate ways to hold content.
  Especially, but not limited to, the application in a list group or dropdown

## JavaScript

- Be able to discuss the characteristics of JavaScript.
- Discuss in depth the advantages and disadvantages of an interpreted untyped language.
- Be able to identify and give examples of inline, internal and external javascript. What are the advantages and disadvantages?
- Be able to describe the DOM.
- Discuss the difference between var/let/const
- Discuss map/reduce/filter and the relation to call back functions.

- Be able to discuss how JS stores numbers. Be able to discuss how + works with strings and numbers.
- Discuss the difference between synchronous and asynchronous code.
  Describe how a promise works and the use of .then .catch and .finally.
- Describe the sequencing of an AJAX request and the role that XMLHttpRequest plays. Compare AJAX, Axios and Fetch.
- Be able to look at JS and describe what it is doing.
- Storing values persistently
  - o Be able to discuss the use of cookies. What are the potential issues.
  - Discuss the use of localStorage and sessionStorage
- JS Code You should be prepared to write JS code
  - o Be able to set the onclick property of an element
  - Be able to use the document object to access and change the properties/css of an element.
  - Be able to create objects/arrays using literals. Be able to access/modify an object or an array.
  - Know the basic array methods.
  - Be able to iterate using for value of to access values in an array.
  - Be able to create an anonymous function and use it as the argument of another function.
  - Use the standard programming structures
  - Be able to use console.log
  - Be able to use alert/confirm/prompt
  - Be able to use Input/Label/Button elements in a form
  - Write code that uses localStorage
  - Write code that uses setTimeout