**HTML**

* What is HTML? What is it used for?
  + What does HTML tag syntax look like?
* Element vs Attribute
  + Examples of Elements and Attributes?
* What is the DOCTYPE declaration?
* Know the general syntax for Tables and Ordered/Unordered Lists
* Know the following HTML input types
  + Text field
    - Password
    - Number
  + Radio Buttons
  + Checkboxes
  + Submit button
* Know these form-specific elements/attributes
  + Label
  + Name
  + Value
  + Placeholder

**CSS**

* What is CSS? What is it used for?
* Where can I put it? (3 ways)
  + Know syntax for CSS in all three ways.
  + Which of the three ways is considered best practice?
* Know the Box Model: content, padding, border, margin
* Know some properties that can be styled. For instance:
  + Border width
  + Border style
  + (all the box model properties)
  + Color options
  + Background options
  + Font options
* Selectors:
  + ID
  + Class
  + Element
  + Sibling
  + Examples of others would be nice (Universal?)
* What is Responsive Web Design?
  + How does flexbox contribute to RWD?
  + How does the CSS grid contribute to RWD?
* Be able to describe CSS animations, variables, and media queries.

**JavaScript**

* What is it/Where do we use it?
  + What does loosely typed mean?
  + What is ECMAScript?
* Control flow statements
* Objects and how to manipulate them
* Data Types? How do they differ from Java?
  + What are template literals?
* 3 Ways to declare a variable
* What operators does JS have? == vs ===?
* Type Coercion and why it’s useful
  + Know about JSs implicit type coercion
* Functions
  + Syntax for making
  + Anonymous function
  + Arrow function
  + Callback function
  + Closures
* Variable Scopes
  + What is hoisting? How does it work differently with var and let?
* What is the “this” keyword? What are the 3 contexts it can be used in?
* What is the DOM?
  + What will we be using it for?
  + How to get an element (DOM selection)
  + How to modify an element (DOM manipulation)
* Events:
  + What are events?
    - Be able to list some common events
  + EventListeners (what are they? Syntax?)

**JavaScript Fetch API:**

* What do we use it for?
* Parameters in a fetch request?
* Async & await?
* What are Promises?
* Fetch response methods - .text() vs .json()?
  + .then()
  + .catch()
  + .finally()

**React and TS Topics-----------------------------**

**React (Some topics pending removal)**

* What is an SPA? What are the pros/cons of using SPAs over multi page applications?
  + Some SPAs we use every day?
* What is React? How do we use it to create SPAs?
  + Why do we need NodeJS and npm to use React?
* What is a React Component? Why does Ben call them the building blocks of an SPA?
  + How do we render components in React?
    - What is TSX? Compare it to HTML?
    - ~~What is the virtual DOM?~~
  + Why do Components help us achieve the single responsibility principle?
  + What are the two types of Components in React? Which one do we use?
    - Know the Functional Component Hooks
  + How do we create nested components?
* What are props?
* What is state?
  + What does it mean when we say state is immutable?
  + What is lifting state?
  + What is destructuring?
  + Why use state over just declaring regular variables?
* Be able to describe React’s one way data flow between components.
* What is data binding? Syntax for data binding?
* What are lists and keys?
  + What does the .map() function do?
* What is routing? What do we achieve by creating routes for different components?
  + Syntax for establishing routes?
  + Ways to navigate between components?
* What are some ways to handle events in React?
* Know the architecture of React applications
  + Node\_modules?
  + Public?
  + Src?
  + App.tsx?
  + package.json? (might have to google this one if we don’t explicitly talk about it)
* How do we make HTTP calls in React?
  + Syntax?
* Misc stuff
  + Syntax/command to create a React application with typescript?
  + What does npm start do?
  + ~~What is a controlled component vs an uncontrolled component?~~
  + ~~What is jest? (high level overview)~~

**TypeScript (need to add a lot more topics here)**

* What is it? What is its relationship to JS? (TS is a \_\_\_ of JS)
* Major differences from JavaScript
  + Advantages/Disadvantages compared to JS?
  + What is transpilation?
  + Why is TS considered more OOP than JS?
* Know the syntax for Typescript entities in general
  + Classes
  + Interfaces
  + Functions
  + Variables
    - Know the different ways to declare them
      * Let? Const? As const?
    - Know the different data types
      * Definitiely know about:
        + Strings, numbers, booleans
        + Any
        + Unknown
        + Unions
        + Tuples
        + Enums (String and numeric)
  + Object topics
    - Generics
    - Casting
    - Decorators
    - Keyof
* What is a type guard? What situations would we use them in?
* TypeScript config overview
  + What file is used to configure our TS applications?
    - What are some examples of things this file lets us configure?
  + Know some compiler options, including:
    - Strict
    - Target
  + How does the tsc command work? What config file does it look for to determine compilation settings?