IBM Accelerator
Talent Identification Program

Week 2: JavaScript, React, and Styling Pre-session Materials

# Requirements

All procedures listed for Week 1 are assumed completed for Week 2. Please see the following reference.

The following processes are required and/or useful for the development environment.

- Install Material UI
- Getting Started with GitHub
- Getting Started with GitHub and GitHub Classroom
- Git Cheat Sheet

#### **Pre-Session Notice**

In this session, we will be presenting application development with React, a popular frontend Web framework. While this is a widely used technology, it rests on the more important foundational components of the Web: HTML, CSS, and JS.

- HTML (HyperText Markup Language) defines the structure of a Web page
- CSS (Cascading Style Sheets) defines the style of a Web page
- JS (JavaScript) provides behavior to a Web page

While mastering these technologies takes many years, one can still make impactful websites at a novice level with only a browser and text editor. We will do our best to provide you with the most useful information. However, due to our time constraint, the material we cover will, of course, be incomplete. To that end, we recommend the following list of resources to help you better understand these concepts.

You are not required to go through these information sources, but they are strongly recommended to for supplemental learning and reference.

### (Required)

- Modern JavaScript Crash Course (Tutorial #1,2,4,5)
- Modern React Crash Course (Tutorial #1-14)

### (Recommended)

MDN (Mozilla Developer Network): This is the gold standard for both learning and reference materials concerning HTML, CSS, and JavaScript. From the makers of Firefox, and supported by an even broader community of developers and technologists, this site provides content useful to beginners and experts alike. A few useful pages include the following.

- Intro to Web Development
  - HTML
  - CSS
  - JavaScript
  - Accessibility
- Web Technology References Appendix

## HTML / CSS:

• HTML & CSS Crash Course

### React:

- Learn React JS in just 5 minutes
- React Material UI Tutorial
- Getting Started with React
- React and VS Code
- Material UI Quick Start

### Advanced JS:

- The Core
- Crockford on JS
- Event Loop

### JS Books:

- Eloquent JS (FREE)
- You Don't Know JS (FREE)
- JavaScript: The Good Parts (Old, but a seminal work)
- <u>How JavaScript Works</u> (Advanced, hobbyist material focused more on the inner workings of JS)