

Thanks to a document Michelle created, I had a nice way to think of how the different “parts” of React work together and their relationships:

- Components are independent pieces of code which can be reused. They remind me of OOP classes, where the “object” is HTML that is returned by the “render” function (like a constructor).
- App.js is the main wrapper component for our entire front-end’s web application, like a “main function” in a language like Java. It reminds me of an FSM in the sense that it renders certain components based on the route specified it should take (like a switch statement).
- A state can be changed by events happening in a component. Due to this, it is required that there is an event handler to update the state accordingly so that pages can render properly.
- Props are data that are used to render information, passed down from a parent component.
- For the finer details of the UI, I was introduced to Material-UI which simplifies the styling process due to having pre-set options available.

All the above culminated in me working on the Login class, which was a component. Referring to the Registration component as a template, I used Material-UI’s textfield to allow the user to input their email and password, and a button to submit the user’s credentials. For this submission, I learned to use React’s Fetch API, and interpret the values it returns by using promises. From what I understand, a promise is a wrapper around a value that may be unknown at its time of creation, so it provides a method for handling the value once it is known. I also implemented a render function, which redirects the user to a successful login page if their credentials matched what is in our database and prompts them to try again if their credentials were wrong.

While there is still so much I haven’t explored in React, I will certainly need to research more things as the project goes along. I am excited to learn more about using React since it will be useful for my PEY placement, and I feel like the information I’ve learned in the past week or so will be a decent foundation for moving forward and learning what is required to complete our project.