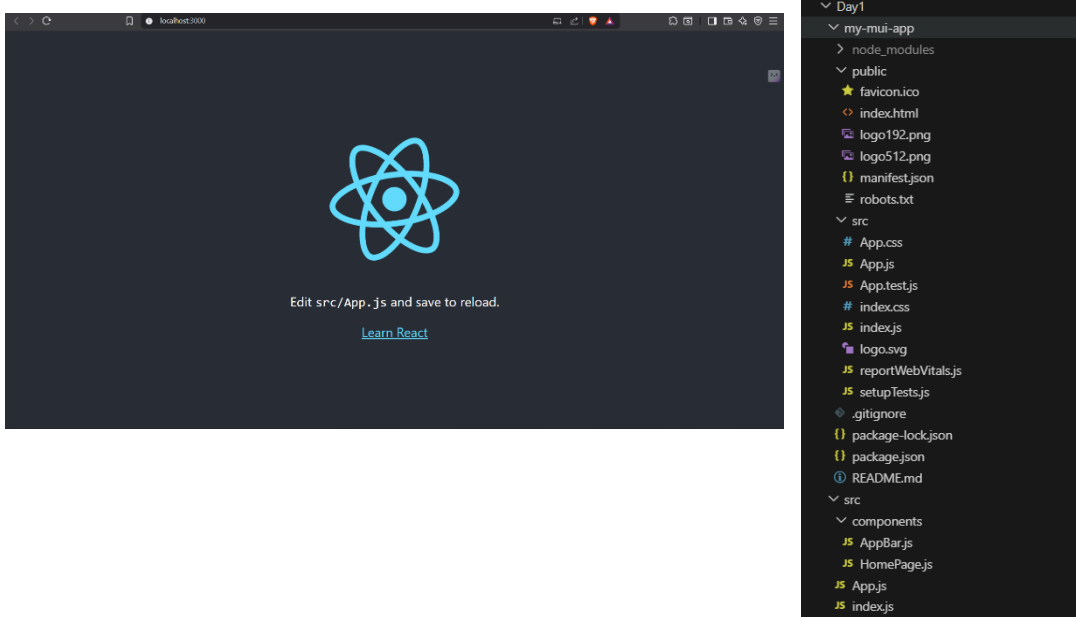# AeroAspire -SDE Intern Training

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Week2, Day 1-Sep 29

Task: Scaffold app; setup basic folder structure; create homepage with MUI Typography and AppBar

- The scaffold app meaning a basic foundation structure for the development of any project.
- Here it was to be built with react and vite.
- So the folder structure is as shown in the above picture
- Installed the frameworks for react app
- Here the my-mui-app contains all the node modules and components
- For this first I I created a react app named my-mui-app using the command:
    - npx create-react-app my-mui-app
- and then set the current directory to my-mui-app
- Installed the material ui and components and also the node modules using the command:
    - npm install @mui/material @emotion/react @emotion/styled
- The next step was to build a basic folder structure like this:

src/

    components/

        AppBar.js

        HomePage.js

    App.js

    index.js

- Then to start the react app at the localhost I used the command:

- o npm start
- to test the development server:
  - o npm test
- The basic code was provided in https://react.dev/learn and referred Gen ai sources.
- I am thinking of adding content for the home page to have it started.
- Once the local host is started I can save changes and check for result. Questions:
1. What files/folders does Vite produce and what is the build / dev flow?
   a. Vite on installing produces a basic file structure having a src folder and a public folder
   b. Vite gives a localhost that is a development server
   c. The build/dev flow is like:
      i. First install vite and set up a react app
      ii. Add files or folders under src folder and develop the project
      iii. Check local host server for live preview of the project
      iv. Assets are imported from public folder
2. What is bundling / hot reloading. How does Vite help speed up development?
   a. Bundling is a process which packages all the source files are converted to a format such that they are suitable for being deployed
   b. Vite does bundling to reduce execution time that is it produces a fast loading webpage
   c. Hot reloading means that when we save our code, the localhost automatically updates the browser with the changed code, without requiring to relaunch the full page.
   d. This provides immediate preview as we develop the project
   e. Vite is advantageous for development as a fast development server.
3. Describe how React components are structured: what parent/child relationship, what props?
   a. In react the ui is built from components and assets
   b. A particular component can be included in another component
   c. The component that includes another is considered the parent, and the included component is the child.
   d. Parent components can pass information to their children through the usage of props
   e. And also props are read only they cant be altered to do so we use event handlers
   f. The parent component lets the child access the properties.