

# Frontend Basics

## 1) Install React from vitejs

```
https://vitejs.dev/guide/
```

- They provide instructions, follow the prompts

```
cd $project_name  
npm install  
npm run dev
```

- (This is all given)

## 2) Pick a styling library for CSS

- Material UI
- Mantine
- Tailwind CSS

Install on your local machine

```
npm install @mui/material @emotion/react @emotion/styled
```

- <https://mui.com/material-ui/getting-started/installation/>

## 3) Build a basic frontend

```
## File Arrangemenet  
|-> src  
| -> components  
| -> MainPage.jsx
```

```
| -> RecipePage.jsx
| -> MusicRecommender.jsx
| -> helper_pages
|   | -> PageHeader.jsx
|   | -> PageFooter.jsx
| -> main.jsx
```

- Hooks in react, such as `useEffect`
  - <https://legacy.reactjs.org/docs/hooks-intro.html>
  - <https://react.dev/reference/react>
- Ideally I log into your website
- I do oauth
- See your main page
- Click something which takes me to your recipe page
- Based on the ingredients you pick and your recipe theme, pick a song
  - have a component to select ingredients

#### 4) Call APIs via axios:

```
https://rapidapi.com/blog/axios-react-api-tutorial/
```

## Part 1:

- Send one person of your team to the table next to you and ask them to walk you through their project
  - Exchange your thoughts
  - Give 2 points on what can be improved or done better?

- Give 2 points on what their project has that stands out - from a technical perspective not aesthetics
- How can you improve YOUR architecture from theirs
- Discussion should be purely about the coding style, task allocation, utilization of REST?
  - Ask questions like - how is their backend structured?
  - Why is this API call happening

## Part 2

- React Walk through and frontend
  - calling APIs in react
  - Styling your frontend