React :

A js framework to build UI which can respond very quickly

React has a virtual DOM

A DOM is the representation of a webpage or a webdocument in the form of a tree.

Where we can read , write in that document .

But React has an inbuilt DOM which is called as virtual DOM

SETUP and Live Server :

VITE is a liveserver for react framework .

Inorder to setup this inorder folder run the following commands and make sure Node.js is installed .

Commands to install vite :

node -v -> make sure weather node.js was installed or not

npm create vite@latest folder\_name -- --template react

✔ Need to install the following packages:

create-vite@latest

? Ok to proceed? (y)

Just press y and hit **Enter**.

cd folder\_name

npm install

npm run dev

you will get this Local: <http://localhost:5173/> this is your server

File structure :

Folder\_name /

├── node\_modules/ 📦 Installed packages

├── public/ 🌐 Public files (favicon, etc.)

│ └── vite.svg

├── src/ 💻 Source code (UI lives here)

│ ├── assets/ 🖼️ Images or static files

│ │ └── logo.png

│ ├── components/ 🧩 Reusable UI parts

│ │ ├── Header.jsx

│ │ └── Footer.jsx

│ ├── App.jsx 🏠 Main component

│ ├── main.jsx 🚪 Entry point (React starts here)

│ └── index.css 🎨 Global styles

├── .gitignore 🙈 Ignore files for Git

├── index.html 🧾 HTML file with <div id="root">

├── package.json 📜 Project dependencies and scripts

├── vite.config.js ⚙️ Vite configuration

├── README.md 📘 Project info

└── yarn.lock / package-lock.json 🔒 Dependency lock file

SRC a folder contains App.jsx (jsx means javascript containgng html code)

App.jsx is a file containg the entire logic for UI

Main.jsx was created which contains virtual Dom and we will change the “ root “

Which is located in html file in order to render the App.jsx

Means we simply include the html code of App.jsx into the html file

And displaying simultaneously

Index.html contains a basic html code as well as root , which we goona change later in main.jsx

And index.css a stylesheet for webpage

Packges.json contains all the required packges for running the react