# React Crash Course

**DATE 4 – 8 – 2025 DAY = MONDAY   
  
What is React?**React is a JavaScript Library / Framework for building user Interfaces. It was created by Facebook.  
  
Websites / UI are looked at in terms of component.  
  
React is currently the most popular out of the major front-end framework.  
  
**Why React?**

React allow user to build very dynamic and interactive websites and user interfaces.

Very Fast especially with the new compiler.  
  
There is a huge eco-system from next.js to react native  
  
Best Framework to learn to get a job.  
 **Components ?**Reusable piece of code that can be used to build element’s on the page.  
  
Allow us to break down complex UI’s, which make them easier to maintain & scale.  
  
Components can get Props passed in and can hold their own state  
  
 **State ?**State Represent the data that a component manages internally.  
  
This could be form input data, fetched data, UI-related data like if a modal is open/close  
  
There is also global state which related to the app as a whole and not a single component

**Hooks ?**Allow us to use state and other react features within functional components.

1. Use State
2. Use Effect
3. Use Ref
4. Use Reducer
5. Use Context, UseMemo, & Callback will be phased out in react 19

**JSX ?**An HTML like syntax within javascript (Components)

**SPA, SSR & SSG ?  
  
SINGLE PAGE APP –** Load a single HTML file and javascript loads the entire UI including routes.  
 **SERVER-SIDE RENDERED –** Servers sends fully rendered page to client. You can fetch data and load it as well.

**STATIC SITE GENERATION –** React generates static HTML files at built time. This are very fast **Vite ?**Vite is a super fast front-end toolkit that can be used for all kind of JS Project including react.

It is built on top of ESBuild, which is very fast js builder

Fast Development server with hot-reload

Installed with npm create vite@latest

**NOTEPAD**

Make a new folder --> mkdir -- > make Directory

cd --> Change Directory

D: -- is ham d folder ma aaye

npm create vite@latest (here come project name) react-course / react-project

select react

javascript

cd react-course

code . -->sa automatic go to vs code

if u want to change port go to vite.config.js after plugin write this server : {port : 3000 }

npm install

npm run dev

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Crash Course Start

First delete app.css

then clear app.jsx

then remove all things from index.css

then type in google vite react tailwind

install tailwind css with vite

npm install -D tailwindcss@3 postcss autoprefixer

npx tailwindcss init -p

make new bash then paste one by one both ---> tailwind.config.js create

then remove all from tailwind.config.js

and paste this

/\*\* @type {import('tailwindcss').Config} \*/

export default {

content: [

"./index.html",

"./src/\*\*/\*.{js,ts,jsx,tsx}",

],

theme: {

extend: {},

},

plugins: [],

}

now we can add font color

fontFamily: {

sans: ['Roboto', 'sans-serif']

},

gridTemplateColumns: {

'70/30' : '70% 28%',

},

we can change title

<Hero title = "React dev" subtitle = "match your skill"/>

& other side

const Home = (props )=>{

return(

<h1> dummy text heading</h1> // ya aye ga yha dynamic usko mita ka {props.title}

<p> dummy text para</p> // ya aye ga yha dynamic usko mita ka {props.subtitle}

)

}

second example iski

const Home = ({ title, subtitle })=>{

return(

<h1> dummy text heading</h1> // ya aye ga yha dynamic usko mita ka {title}

<p> dummy text para</p> // ya aye ga yha dynamic usko mita ka {subtitle}

)

}

iske elawa second example agr hero ma ham kuch na likhe

khali chor da to aisa kare ga

<Home />

const Home = ({ title = "Dummy heading", subtitle= "dummy text" })=>{

return(

<h1> dummy text heading</h1> // ya aye ga yha dynamic usko mita ka {title}

<p> dummy text para</p> // ya aye ga yha dynamic usko mita ka {subtitle}

)

}

font awesome

npm install --save @fortawesome/fontawesome-svg-core

npm install --save @fortawesome/free-brands-svg-icons