

* → What is react and react uses ?

- React is an open-source JavaScript library used for building user interface (UIs), especillay for single-page application (SPAs) where you need a fast, interactive user experience.

* Key Characteristics of React

1. Component - Based Aracticture :

- UIs are made up of independent, reusable pieces called components.
- Each component has its own structure, login and style.

2. Virtual DOM :

- React uses a virtual DOM to efficiently update the UI.
- Instead of directly updating the real DOM, React updates the virtual one and syncs the changes.

* Why Use React ?

- It makes UI development faster and more efficient.
- Allows for code reusability via component
- Enhances performs using the Virtual DOM

• Has a large ecosystem and community support.

• Compatible with other libraries and frameworks (like Redux, Next.js)

* Uses of React

1) Single page application (SPAs)

2) Dynamic Web Applications

3) Reusable UI Components

4) Mobile App Development

5) E-commerce Sites

6) Interactive Dashboards & Admin Panels

7) Content Management System (CMS)