REACT.JS:

INTRODUCTION:

- React (known as react.js) is a free and open-source front-end JavaScript library for building user interfaces based on components.

- It is maintained by Meta and a community of individual developers and companies.

- React can be used as a base in the development of single-page, mobile, or server-rendered applications with frameworks like Next.js

- ReactJS provides minimal and solid feature set to kick-start a web application.

- It can be used to develop small applications as well as big, complex applications.

- The main objective of ReactJS is to develop User Interfaces (UI) that improves the speed of the apps. It uses virtual DOM (JavaScript object), which improves the performance of the app. The JavaScript virtual DOM is faster than the regular DOM.

- In React, you develop your applications by creating reusable components that you can think of as independent Lego blocks. These components are individual pieces of a final interface, which, when assembled, form the application's entire user interface.

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HISTORY:

- React was created by Jordan Walke, a software engineer at Meta, who released an early prototype of React called "FaxJS".

- He was influenced by XHP, an HTML component library for PHP. It was first deployed on Facebook's News Feed in 2011 and later on Instagram in 2012.

LIST OF REACT LIBRARIES:

- React router
- Create-react-app
- Ant-design
- Tailwind UI
- Semantic UI react
- React bootstrap
- Fabric react
- Styled components
- React DnD
- Onsen UI
- Rebass
- Material UI
- React-motion
- React spinner

ADVANTAGES:

- It is composable.
- It is declarative.
- Write once, and learn anywhere.
- It is simple.
- SEO friendly.
- Fast, efficient, and easy to learn.

- It guarantees stable code.
- It is backed by a strong community.

LIMITATIONS:

- ReactJS components are difficult to reuse in complex interactive web projects.
- ReactJS's Virtual DOM algorithm is time-consuming and imprecise.
- ReactJS's HTML templates are neither complete nor powerful.
- ReactJS requires complicated asynchronous programming while communicating with the server.

APPLICATIONS:

- Instagram
- Facebook
- Yahoo
- Myntra
- Netflix
- Dropbox
- Vivaldi
- Khan academy