**History of React**

* **Created by:** Facebook
* **Initial Release:** 2013
* **Original Purpose:** To improve Facebook's newsfeed performance
* **Current Usage:** Widely adopted for building user interfaces, particularly single-page applications

**What is React?**

* React is a JavaScript library for building user interfaces.
* It's used for creating reusable UI components.
* React is maintained by Facebook and is widely used in the industry.

**Key Features and Benefits**

* **Component-Based:** Build encapsulated components that manage their own state
* **Declarative:** Describe what you want, and React will handle the updates
* **Reusable Components:** Write once, use anywhere
* **Large Ecosystem:** Many libraries and tools available
* **JSX:** A syntax extension for JavaScript that allows you to write HTML-like code in your JavaScript files.
* **State:** The data that changes within a component.
* **Props:** Short for "properties", props are immutable values passed from a parent component to a child component.
* **Virtual DOM:** A lightweight in-memory representation of the real DOM, used for efficient rendering.

**Setting up a Development Environment**

1. **Node.js and npm:**
   1. **Download:** [Node.js Download](https://nodejs.org/)
   2. Ensure Node.js and npm are installed
2. Two method to create react app:
   1. **Create React App:**

Run command in terminal **npx create-react-app my-app**

Navigate to the project folder: **cd my-app**

**Start Development Server:**

Run **npm start**

Open http://localhost:3000 in a browser

**OR**

* 1. **Using Vite:**

Run **npm create vite@latest**

**Enter project name i.e my-app**

Navigate to the project folder: cd **my-app**

Install dependencies: **npm install**

**Start Development Server:**

Run **npm run dev**

Open http://localhost:5173 in a browser