**Objectives**

• **Define SPA and its benefits:**  
A Single-Page Application (SPA) is a web app that loads a single HTML page and updates content without refreshing the whole page.  
**Benefits:** Faster user experience, smooth navigation, and less data usage.

• **Define React and identify its working:**  
React is a JavaScript library used to build user interfaces. It helps build UI using components. React updates and shows only the parts of the page that need changes, making it fast and efficient. It uses DOM.

• **Identify the differences between SPA and MPA:**  
SPA(Single-Page Application) loads one page and updates content without reloading and all.  
MPA (Multi-Page Application) loads a new page from the server each time you click something.  
SPA = Faster and smooth  
MPA = Better for large apps with many pages

• **Explain Pros & Cons of Single-Page Application:**  
**Pros:**

* Fast and smooth experience
* Less load on the server
* Better for mobile apps

**Cons:**

* Not great for SEO (search engine ranking)
* Can take longer to load the first time
* Needs more browser-side code

• **Explain about React:**  
React helps build modern web apps. It breaks the UI into small parts called components. Which are very important, they are very useful so in which enhances the code reusability. React updates only what changes, not the whole page, making apps fast.

• **Define virtual DOM:**  
The Virtual DOM is a copy of the actual DOM. React uses it to see what changed and only updates those parts. This makes the app faster.

• **Explain Features of React:**

* Uses components to build UI
* Fast with virtual DOM
* One-way data flow
* Reusable code
* Works well with other libraries