Javascript basic functions for HTML

- document.createElement()
- document.getElementById()
- document.appendChild()

React Introduction (React is a Library)

■ Namaste React (Episode 01 Inception)

Create element using

React.createElement("tag name", { attributes dictionary } , "children")
React.createElement("h1", { id: "heading" } , "Hello from React")

- createElement does not return an HTML element.
- createElement returns a React Element (Javascript object)
- The object returned has a field: props
- props are children that go inside the tag.

React needs root for rendering and DOM manipulation.

ReactDOM.createRoot(document.getElementById("root"))

To render inside root, use .render() function

root.render(whatever you want to render)

Converts ReactElement (Javascript obj) => HTMLElement (in DOM)

root.render() replaces the entire content of root with passed content.

Only affects the root. Other elements are untouched.

Note: Most costly operation in browser: <u>DOM Manipulation</u>

React comes with philosophy of manipulating DOM using Javascript.

Order of script tag matters? Yes

- Basic Principle: HTML documents are parsed from top to bottom.
- Implication: Scripts are loaded and executed in the order they appear in the HTML document.
- **Example:** If script1.js is placed before script2.js, script1.js will be loaded and executed first.
- Issue: Some scripts depend on others to function correctly.
- **Consequence:** If a dependent script is loaded before its dependency, it may result in errors.
- **Best Practice:** Place dependent scripts after their dependencies to ensure correct functionality.

Add script tag in <head>? No.

- Reason: By default, script tags block HTML parsing while they load and execute.
 Delay page rendering.
- **Solution:** Place scripts at the <u>bottom of the <body> tag</u> to improve page load times.

<u>Jsx</u>

JSX is syntactic sugar to create React Elements in simple way.