

# React JS

## What is React JS?

React JS is a JavaScript library used for building User Interfaces (UIs).

**Not a Framework:** React JS is not a Framework

## Purpose of React JS

To create a User Interface by combining multiple UI components.

## React + Other Libraries:

For complete front-end applications, React is often used alongside other libraries for tasks like:

- Routing
- Data Management
- Styling
- Network/API calls

## Library vs. Framework:

- **Library:** A collection of functions, objects and classes (e.g., React JS).
- **Framework:** A collection of libraries with a predefined structure and set of rules.

## Why Use React to create UI

### 1. HTML:

- Creating UI is easy in HTML
- We cannot re-use the UI in HTML
- We cannot create Dynamic UI in HTML

### 2. JavaScript Complexity:

- Creating UI is complex in JS
- We can re-use the UI in JS
- We can create Dynamic UI in JS but it is complex process

### 3. React:

Creating UI is easy in React like HTML

We can re-use the UI in React like JS

We can create Dynamic UI in simple and easy way

## Interview questions

1. What is React?
2. Is React a framework or a library? Explain the difference.
3. What is the primary purpose of React?
4. Why do developers prefer using React for creating UIs?
5. What are some limitations of using plain HTML and JavaScript for building UIs? How does React address these limitations?

## Assignment

1. Task 1: Create a Navbar using HTML and CSS.
2. Task 2: Create a Navbar using JavaScript.