

React Day 2

Thursday, February 3, 2022 9:48 AM

React --component based architecture for CLIENT SIDE based on JavaScript

One application ===== made up of many components integrated together

REACT container ---

Life cycle management of **component**

1. Create objects of the component
2. Dependency Injection
3. Invoke call back methods
4. Destroy the component

React Components --- Are of two types

1. Functional React Components
2. Class React Components

Spring Boot is server side---- we would get component object by getBean or Autowired , or we give callback methods and the METHODS are called --- the services are executed

React is client side -----> **RENDER THE HTML**

Primary task of a REACT Component is to RENDER HTML (part)

REACT uses a syntax ----- JSX --- Java Script eXtension

We write HTML not as a String , We write html as JSX data type

React has an inbuilt module Babel === translator

JSX ----->----**Babel**--->----HTML

E1 - App component as a function

App component as a class

Using a Component === we use it as a CUSTOM TAG <APP></APP>

export / import gives us **MODULARITY** !!!! Older way of using export/import was **require()** syntax , module.export

Whenever we write a component ---We must Export the component ? Why ? So that it can be Imported and made available to **another JS file**

| Export | Import |
|--|--|
| export default App | import App from './APP' |
| export default function App() { return } | import App from './APP' |
| How export default in one file === ONLY one | |
| For multiple exports we can use simple export {Little, Big, PI} OR export function Little() { return JSX } export const PI = 3.141592 | import {Little,Big,PI} from './APP' OR import * as somehandle from './APP' Use it as <somehandle.Little /> |
| Can we have default export and normal exports in one file = YES But one variable can be exported only once | import App, {Little } from './App' |

JSX =

1. JSX Expression MUST have one parent element !!!!
2. To see values of variables or expressions use { } in JSX
3. We can write variable name , property name , function , method call, expression --whatever evaluates to ONE single value

Ex1 -- write a react component that prints the table of 2 upto 100

```
2*1=2
2*2=4
...
2*100=200
```

TAGS will have attributes !!!!

| TAG OPENING | TAG BODY | TAG closing |
|-----------------------------|----------|-------------|
| <TAG id='id1' value='fff' > | | </TAG> |

CAN we add attributes to the CUSTOM TAGS created using React Components ? YES

Attributes of REACT components are called as PROPS

1. Class components have an inbuilt property that can be accessed as `this.props`
2. Function components get a parameter that holds the props values

//CALLER X(3) actual parameter

```
function X(a) formal parameter name
{
}
```
