

Good Morning :)

What is function App ? It is a root component that is created in the index.js

JSX = Java Script eXtension

A set of tags that look similar to the html tags

This is an object(React.JSX.Element) that is returned in REACT components

JSX ----->translated by **Babel** ----->actual HTML (is sent to the client)

To print variable values in JSX = use { } . Inside the curly brackets put anything that evaluates to a single value.

1. Add variable name { }
2. Add a function call { }
3. Add a mathematical expression { }

{ } = Interpolation Symbol

Using Props in React ---->

What are props ? Props are attributes given to the custom tags

Outer TAG/Component = Parent Tag

Inner TAG/Component = Child Tag

Outer Component can pass a PROP to the Inner Component/tag

1. how to pass a prop to functional component? How to receive it in the component ?
2. how to pass a prop to class component? How to receive it in the component ?

Ex1 = write a AddComponent that takes two numbers in PROPS . The component will show the addition .

Let AddComponent be a functional component .

-The function component is CALLED by the REACT container .If there are any props those are passed as

Parameters to the function by the REACT container .

Ex2 = write a FactorialComponent that takes one number in props . The component will show the factorial

Let the FactorialComponent be the class component.

- The class component object is created by the REACT container and the props are passed to the constructor

WHAT all data can be passed to the PROPS ?

1. Pass a number
2. Pass a string
3. Pass an array
4. Pass an object
5. Pass a boolean

6. Pass a function

Conditional Statement ----
`props.flag?"hi":"bye"`

<code>props.flag</code>	<code>?</code>	<code>"hi"</code>	<code>:</code>	<code>"bye"</code>
Condition that may evaluate to true or false	IF	IF true do this	Else	Do for else

JSX comment = `{/* all the tags to be commented */}`

1. Data can move from Parent Component to Child Component using **PROPS**
2. Data can move from Component to VIEW using **{ }**
3. Data can move from VIEW to Component using **event**

Ex1 = accept a value in textfield and onclick of button show the result in uppercase in console.log
Functional component

Ex2 = show 2 buttons colornames and weekdaynames , show color names or weekday names as per the button click on the console . For both buttons use the same handler .
Functional component

Ex3 = Write a **class** component that accepts a selected state from a dropdown list and shows its capital on the console

When we write a handler function for any event and that function will access the property of the class then ==> bind the handler to "this" explicitly

If you don't find and then try to access property of class from handler you will get "this" = undefined error

Data FLOW from VIEW to Component -----> process the data -----> show the changed data on VIEW again

Ex1 = Use functional component ----- accept a number from user in a textfield and show its square on a <p> tag

Problem

When the value of the variable changes ---- THE <p> is still showing initial value WHY ???
Because the page is NOT RERENDERED the modified value of the variable is not seen on the page !(though we can see the changed value in console log)

Solution

Use STATE !!!!

What is STATE in react ?

State is a special object that can have values and their setters(setProperty)

Whenever the setter is called - REACT gives a signal for RERENDERING to browser

In Functional Component ----- we use `useState()` **hook**