**What is react?**

React is open-source javascript library released by facebook. Flovours of react are ReactJs(used to develop web apps development), React Native(used to develop hybrid android apps) and React Bootstrap(provide Rich UI for web and android applications).

We can develop using JSX(javascript and xml) and Typescript(programming language).

Jsx not support oops but typsscript support oops.

To understand typescript we have to know ES6.

Javascript is a scripting language developed by Netscape company. It is synchronous(execute line by line).

**Diffference between var, let and const:**

*Var :* we can reassign a value. Var is global scope. It means we can declare inside the loop and use outside the loop.

*Let:* we can re-assign a value. Let is blocked scope. It means we can define inside the loop but we cannot use outside the loop.

*Const:* once declare we cannot re-assign.

What is function and why function ?

Particluar b.method . used to reuse the business logic.

--named

Is a function in the code which we can call it when ever we required.

function(number){

-----

----

}

-- anonymous/arrows/callback/flat arrow

Is a function without name. they need to tied to a particular event or variable to run.

var number = function(number){

------

------

}

var number = () => {

-----

----

}

-- Rest parameters in functions

-- optional parameters

-- default parameters

-- IIFE(Immediate invokable functional Expressions)

**Object Destructuring:**

[How to Use Object Destructuring in JavaScript (dmitripavlutin.com)](https://dmitripavlutin.com/javascript-object-destructuring/#:~:text=How%20to%20Use%20Object%20Destructuring%20in%20JavaScript%201,a%20dynamic%20name%20property.%20...%20More%20items...%20)

JSON :

Javascript object notation. Json is used to transfer the data over the network. It is light weight and friendly compared to xml. It’s parsing is easy.

Callbacks in javascript:

Callbacks are used to call a function after executing another function.

Datastructures in javascript :

Map,

weakmap,

set,

weakest.

Why promises ?

They are used to asynchronous calls.The proper communication between producer and consumer is called promises.

Three states of promises :

1. Success
2. Failure
3. Pending

Event Bubbling and event capturing :

Array manuplation:

Map()

Filter()

Redure()

reduceRight()

some()

every()

Regular expressions:

Console.log( 10 == “10”) //true

True because == operator checks for the content it won’t think about datatype.

=== operator checks for content and datatype.

Left and right side content is 10 but don’t care about integer and string datatype.

1 == “one” //false

* 1. +0.2 == 0.3 //false
  2. + 0.2 === 0.3 //false

10 + “10” = 1010 //due to concatenation

10 – “10” = 0 // - / \*/ / operators convert string to the number

10 \* “10” = 100

“10” / 10 = 1

**What are lifecycle components? Explain the flow?**

First time when we refresh the page, it will execute componentWillMount(This will be executed only once before the initial render of the component) and componentDidMount(Executed only once after the initial render of the component).

When we update state, componentShouldUpdate() will be executed, if it returns true.

Then componentWillUpdate() will be executed then component will be rendered then componentDidUpdate() will be executed.

**How many types of states in ReactJS?**

5 types of states in reactJS

Logical State

Server State

Form State

Navigation State

Browser State

What is object destructing?

Arrow functions?

What are higher order components ?

Write a function ?

Hook for componentUnMount?

Why componentUnMount?

What is ES6?

Javascript DOM?

Document Object Model

**How reactJS work ?**

When a web page is loaded, the browser creates a DocumentObject Model of the page. The HTML DOM model is constructed as a tree of Objects: With the object model, JavaScript gets all the power it needs to create dynamic HTML

JavaScript can access and change all the elements of an HTML document.

DOM is a representation of html file but with different format. We are converting in such a way because javascript cannot understand the html elements but it can understand the object format.so that it can now use the object ot manuplate their attributes.

Virtual DOM is a representation of real DOM object.

Virtual DOM object has the same power and has properties and methods like the Real DOM Object.

But the difference is virtual DOM cannot decide what’s to be rendered on the screen.

Manuplating a virtual DOM is faster then Manuplating Real DOM.

When we do any change in the component, then virtual DOM has the same copy so it also gets updated then react compare the virtual DOM with virtual DOM Snapshot which was taken right before the update

When we do any change in the component, then every virtual DOM gets updated. Virtual DOM updates quickly than the Real DOM. Once the virtual DOM has updated then the react compare virtual DOM with the virtual DOM Snapshot that was taken right before the update. By comparing the new virtual DOM with the pre updated version. React figure out exactly which virtual DOM object have changed. This process is called Diffing. Once react knows which virtual DOM have changed then react updates those objects on the real DOM. React can update only the necessary part of the DOM.

This process is called as reconciliation.

Loading one component to another component without refreshing on routing is called Single Page Application.

What is pure component?

What is redux?

What is props drilling?

What is event driven handling?

What is uncontrolled components?

What is promises? Create own promises?

What is virtual dom?