Good morning:))

```
React project --- node-modules, public src ====>React Container===>BUILD
                 |-----> 3 JS files and htmls --- polyfills.js , main.js,...
```

React Deployment ---

- 1. React project BUILD happens
- 2. React Build is copied in the server folder = DEPLOYMENT on the server
- 3. Request from browser http://localhost:3000
 - a. The React JS files and htmls land on the browser

Errors 2 types

- 1. Development and build time error --- seen on server side Terminal
- 2. After Request ----seen on browser console

- 1. JSX
 - View
 - { variable }
 - { function }
 - Conditional Rendering { flag ? Tag : "" } OR

{flag && Tag }

- List Rendering --- arr.map ()
- 2. Event Handling --- register a handler

--- event passing

--- without writing a function we can use the handler

Onclick = {(event) => {}}

- 3. PROPS --- passing data from parent to child child to parent
- 4. State function =useState class = this.state , this.setState Rerendering the components
- 5. Lifecycle of React Components ----

Who is the managing the lifecycle? React Container What is the meaning of managing life cycle?

- -- 1. create the component
- 2. invoke callbacks
- 3. manage props and state data
- 4. Manage Rerenderring

Component Created Component Updated Component Destroy

IF we want the container to notify us(Component) during different lifecycle activities ------How ???

--- CALLBACK function ---- Lifecycle Functions / methods

Class component --- life cycle functions

componentDidUpdate ---- notify that the props state of the component got changed

componetDidMount ---- notify that the component got mounted on the DOM tree

componentWillUnMount -- notify that the component is about to be UNMOUNTED

Function component ---- useEffect () HOOK is used for lifecycle notification

Ex 1 -- create a folder day3, write App2.js, add it to index.js
Write a class componet LifeCycleEx
Add it to App2.js

Observation --- componentDidMount and componentWillUnMount are called only
Once in the life cycle
componentDidUpdate() ---- n number of times

useEffect(callback, [])	This callback is called only on MOUNTING
useEffect(callback,[props.msg, flag])	This callback is called on updation Of specified props or state
useEffect(()=>{ return callbackX }, [])	callbackX is called just before unmounting The component

Asynchronous functions

1. Promises

Promise = something to be done in the future

Async functions ---

callback function will return LATER as compared to current flow of execution

ISSUE = where to handle the result of the Delayed Callback Function
 What can be the result of the Delayed Callback Function?
 Promise is PENDING = it is yet to be executed
 Promise is Successful ==>RESOLVES = there is function called as
 "then()

Promise Fails ===>REJECTS = there is function called as catch()

promise.then(callback that should be called WHEN promise RESOLVES)

Javascript Process ==

- 1. Program stack = highest priority
- 2. Heap
- 3. Callback Queue = 3rd highest priority
- 4. Job Queue --- Promises and the then and catch callbacks = 2nd highest priority

React AJAX Call

External Ajax library = axios
To get the library = npm install axios

Ex 3 --- AjaxEx functional component

Ex 4 - AjaxEx class component

When the page appears show all the firstnames in a dropdown list

Whenever a first



