**React Basics**

* React is all about components :- resuable piece of code
* Normal js based on Imperative approach
* SPA approach - it loads at all the page

1. package.json ->depencies listed hoti hain

actual react libray is created by the react and react-dom

1. index.js -> jab page load hoga this is the first file that will run  
    entry point of the js like the main fuction is c++
2. uske liya ek root elements banay jo ki display hoga with the help of render function ()  
   render(./App.js) or render(./App.jsx)

index.js -> index.html -> root div ->react root -> render -> app component -> App.js -> render HTML

* JSX -> javascript xml code hain
* Npm start cmd -> it converts the react written code into equivalent html js code which is understandlbe by browser

Date @29 April

Created React Basics application

* To use the function in javascript we have to **export** in the file and **import** in the other file

# **Components**

* To make modular code create different compoents in the file structure
* Always use the Camel Case to name the file
* Agar koi compoenent create kiya toh use files hongi .js & .css toh unko import se link kardo ab usko agar use karna hain in the app.js toh   
  **export default Item karo;**

**Import Item from ‘src’**

* Ab components ko reusabe banana hain so that we can use them efficiently so we use  **Props**

# **Props:**

* Custom value pass hoti hain in app.js ab app.js mein custom name se props pass karo and jahawhoh written hain Item.css use props ki value {props.name} se set kardo
* Ab ek json try kiya for the file dummy data create kiya now there are lot of ways to use that response but which one to choose
* Ab agar us custom tag mein txt ko visible karna hain it is done using **Props.children**
* Agar pure component ko card mein dala toh props.children ke through access karna hoga
* Ab agar parent element ko color white kiya and child ko color black kiya toh by default html mein black aata  
  lekin yaha white aayega toh uske liye **props.className** use karna hain

# Event Handling

* It is done using props -> jo bhi event handling hogi name starts with **ON**
* It is good to set handler at the last of function name
* Vanilla onclick is based on the imperative approach but this is direct onclick function used to handle the events
* Agar () de diya toh automatic function call chali jayegi

# States

* Ab react mein ui paintin karne ke liye state use karna hota hain
* Import {useState}
* Hw -> setTitl Immediate or scheduled:- schedule karti hain date immediate chage nahi huyi thi  
   state ->const is used ???
* React mein object ki previous state bhi bata sakte hain

Parent -🡪 child se communication through props

Child -> parent se communication through props function

# Ui pe reflect karne ke liye hum use karte hian states

* Stateske liye hook suse hote hain hooks are the utility function which take input as a value to initialize the function and returns two thigs
* Ek array [ variabl value , function required to change the value of the function
* Har ke prop ko handler function se map karna hota hain
* Multiple states handling ?? same performance
* Lifting up :-

Child apna object parent ko dede and usko parent ko dena hain ab child ne function call kiya with input parameter as a object toh parent access karlega

**React Basics – III Counter App**

* Pehle toh tailwind react stater pack install karliya  
  plan with love ka project hain data diya hain array meinhumne app.js se start kiya compoenent mein break kiya tours ka ab isme data ko populare karna hain toh uske liye map function use karenge
* Map function mein pass kiya tour and return kardiy card ko also usme pure object ki copy pass kardi {…tour}
* Similary price ,and name ko access kar liya
* Description ka case alaga hain as usme read more ka option hain toh ab hume 200 substr pass karni hogi
* Ab read more ko targe karte hain using hook also we have to target show less option

**React Class 4 : use Effect hook**

* It is a change but dusre component pe ho raha hain outside the componenet being rendered

It leads to side effect term that is somethin is effected

* This hook handles the side effects
* Whenever we are chaning values in the ui then the value gets updated Jab jab ui rerender hoga ye hook run hoga and hum value print hoke milegi   
  agar sirf pehle render pe karna hain to isme sirf ek empty array ko pass kar diya jo dependency list darshata hain usko
* Varation 1 :- runs on every rendering
* Varation 2 : runs only on first render
* Variatin 3 : on first render + jab text change hoga tab run hoga
* Varaition : 4 agar har ek render pe event listner add kiya toh kya bohot sare eventlistener add ho jayenge ab yese toh bohto sare listeners ho jayngen and this is not a good pratice -> so we have to also remove the listeners yaha phele removing ki line execute ho rahi hain then add listener ki   
  for use state always return ke andar ka code pehle run hota hain

1. **Class Based components :-**3 importantn lifecycle methods  
   1.Components did mount  
   2.components did update  
   3.compoenent did unmount