



# React Notes

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## TSX / JSX

→ allows you to return html tags with javascript in them

→ you can create variables as html:

```
const name = <h1> Name </h1>
```

## Components

→ a javascript function that return some tsx/jsx

→ components can be called in other tsx files:

```
<Component/>
```

## Props

→ every react component will take props;

→ you can pass any type of data in props;

→ it's basically a parameter for components

→

# CSS in React

→ you give your html elements in your TSX's files  
className='my-class' and if you import './.../style.css'  
and you access those className via style.css

→ similar to average html + css

→ you can pass it with style.module.css

import styles from "./ style.module.css"

<h1 className={styles.name} > instead of <h1 className = 'name'>

# Conditional Rendering

```
return (  
  <div className='.'>  
    {var ≥ 18 ? <h1>...</h2> : <h1>...</h1> }  
  </div>  
)
```

# Lists

const names = ['Tudor', 'Rares', ...]

names.forEach - parse through all of the names

names.filter

names.map((name, key(basically the index) ) ⇒{  
 return <h2 key={key}> {name} </h2>  
});

names.reduce

you can do this even if your list has Objects and access the objects fields  
{obj.field}

# useState Hook

- it is used for telling react to re-render the page when smth happens to that var:

const [varName, setVarName] = useState(initialValueOfTheVar);

so whenever setVarName is called  $\Leftrightarrow$  varName is changed, react re-renders

- HOW TO CHANGE CSS w useState:
  - `<div style={{color: textColor}}>`  
`const [textColor, setTextColor] = useState("black");`  
`onClick = { ()  $\Rightarrow$  {`  
`setTextColor = "red"}} or have a handleClick for it`

## Component lifecycle

- mounting - start appearing
- updating - changing
- unmounting - stopped appearing

## useEffect Hook

- triggers for each lifecycle step
- `useEffect( ()  $\Rightarrow$  {`  
`//useEffect is called everytime the component state changes`  
`console.log("Component mounted~!");`  
  
`return ()  $\Rightarrow$  {`  
`console.log("This is called only when unmounted");`  
`}`  
`}, [ *here you can add the variable that changes or som shit*])`

## how to fetch data from an api

- you make a request, get the data and then display it to your website or whatever
- `fetch("api.url")` - uses to fetch data from API:
  - you grab the url from the api
  - `fetch()`  $\rightarrow$  json
  - `fetch().then((response)  $\Rightarrow$  response.json())`  
`.then( (data)  $\Rightarrow$  {`

```
    do smth with the data  
  })
```

## Axios library

- library to fetch data
- import Axios from "axios"
- `Axios.get("api.url").then( (response) ⇒ {`

```
  response.data → manipulate it  
})
```

- BETTER WAY