



EXPLORER

VIDEO 117

- node_modules
- public
- src
 - assets
 - App.css
 - App.jsx
 - index.css
 - main.jsx
 - .eslintrc.cjs
 - .gitignore
 - index.html
 - package-lock.json
 - package.json
 - README.md
 - vite.config.js

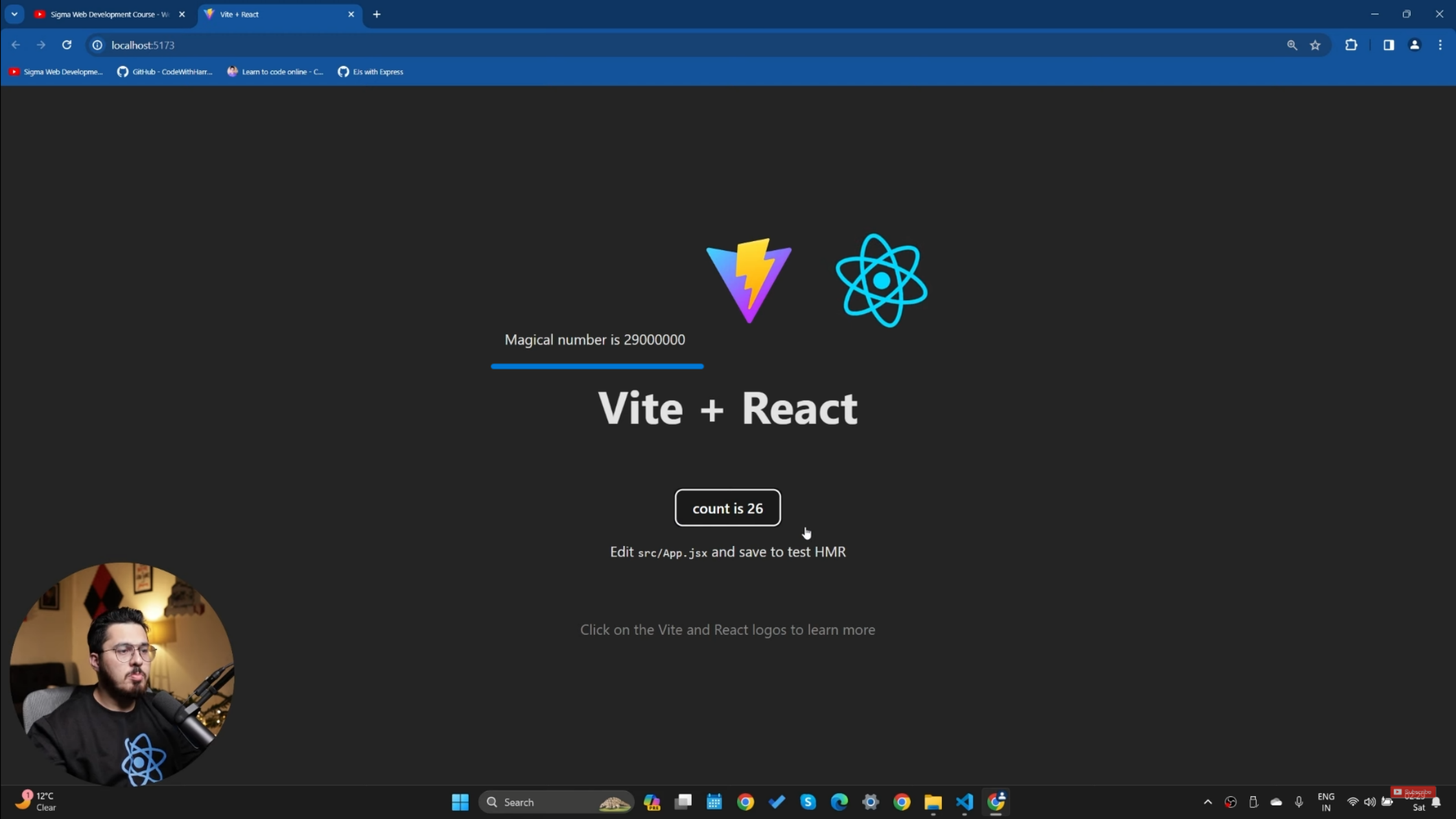
App.jsx

src > App.jsx > App

```
4 import './App.css'
5
6
7 const nums = new Array(30_000_000).fill(0).map((_, i) => {
8   return {
9     index: i,
10    isMagical: i === 29_000_000
11  }
12 })
13
14
15 function App() {
16   const [count, setCount] = useState(0)
17   const [numbers, setNumbers] = useState(nums)
18
19   const magical = numbers.find(item => item.isMagical === true) // Expensive Computation
20
21   return (
22     <>
23     <div>
24       <span>Magical number is {magical.index}</span>
25       <a href="https://vitejs.dev" target="_blank">
26         <img src={viteLogo} className="logo" alt="Vite logo" />
27       </a>
28       <a href="https://react.dev" target="_blank">
29         <img src={reactLogo} className="logo react" alt="React logo" />
```

as state changes & page renders again bcoz of





Magical number is 29000000

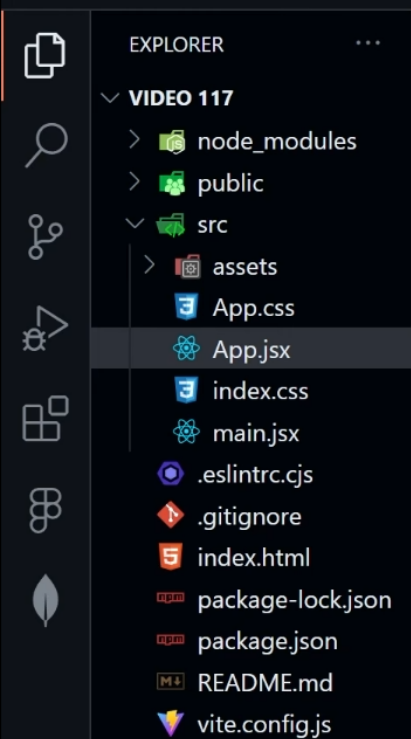
Vite + React

count is 26

Edit `src/App.jsx` and save to test HMR

Click on the Vite and React logos to learn more

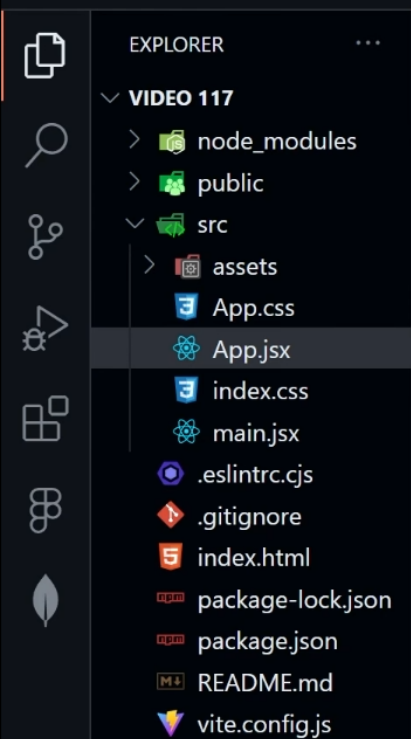




```
App.jsx x
src > App.jsx > ...
1 import { useState, useMemo } from 'react'
2 import reactLogo from './assets/react.svg'
3 import viteLogo from '/vite.svg'
4 import './App.css'
5
6
7 const nums = new Array(30_000_000).fill(0).map((_, i) => {
8   return {
9     index: i,
10    isMagical: i === 29_000_000
11  }
12 })
13
14
15 function App() {
16   const [count, setCount] = useState(0)
17   const [numbers, setNumbers] = useState(nums)
18
19   // const magical = numbers.find(item => item.isMagical === true) // Expensive Computation
20   const magical = useMemo(() => numbers.find(item => item.isMagical === true), [])
21
22   return (
23     <>
24     <div>
25       <span>Magical number is {magical.index}</span>
26       <a href="https://vitejs.dev" target="_blank">
27         <img src={viteLogo} className="logo" alt="Vite logo" />
28       </a>
29       <a href="https://react.dev" target="_blank">
30         <img src={reactLogo} className="logo react" alt="React logo" />
31       </a>
32     </div>
33     <h1>Vite + React</h1>
34     <div className="card">
35       <button onClick={() => setCount((count) => count + 1)}>
```

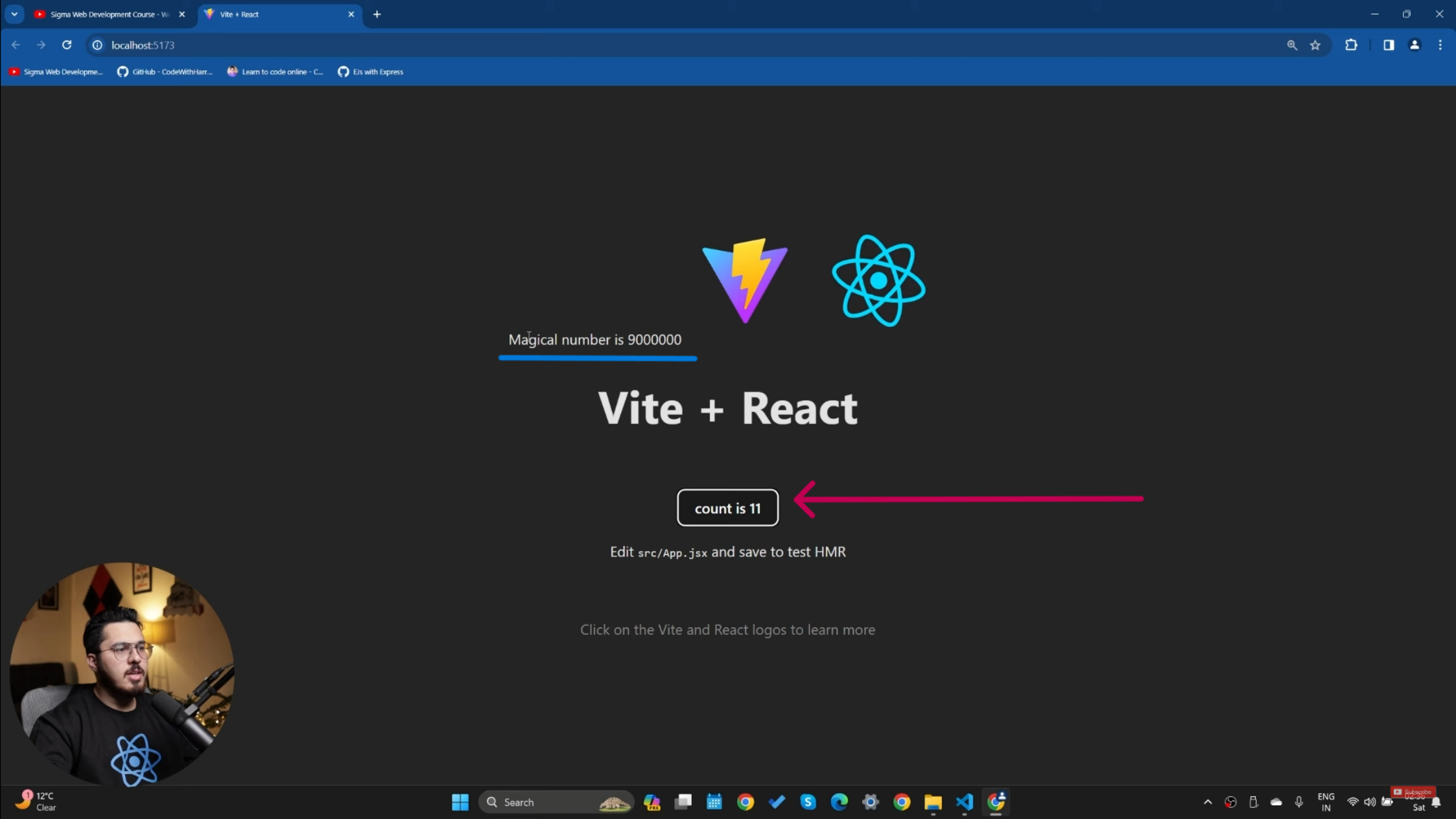
now b/w re-renders this
computation won't repeat
(memoized)





```
App.jsx
src > App.jsx > App > <function> > map() callback > isMagical
11 }
12 })
13
14
15 function App() {
16   const [count, setCount] = useState(0)
17   const [numbers, setNumbers] = useState(nums)
18
19   // const magical = numbers.find(item=>item.isMagical===true) // Expensive Computation
20   const magical = useMemo(() => numbers.find(item=>item.isMagical===true), [numbers])
21
22   return (
23     <>
24       <div>
25         <span>Magical number is {magical.index}</span>
26         <a href="https://vitejs.dev" target="_blank">
27           <img src={viteLogo} className="logo" alt="Vite logo" />
28         </a>
29         <a href="https://react.dev" target="_blank">
30           <img src={reactLogo} className="logo react" alt="React logo" />
31         </a>
32       </div>
33       <h1>Vite + React</h1>
34       <div className="card">
35         <button onClick={() => {
36           setCount((count) => count + 1);
37           if(count == 10){
38             setNumbers(new Array(10_000_000).fill(0).map( (_, i) => {
39               return {
40                 index: i,
41                 isMagical: i===9_000_000
42               }
43             })
44           }
45         })
```

dependancy array:
Re-calc magical
when [numbers] changed



Magical number is 9000000

Vite + React

count is 11



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Click on the Vite and React logos to learn more

