


useRef

What is useRef?

- 👉 useRef allows us to access DOM elements.
- 👉 for creating mutable variables which will not re-render the component.

default value



```
const variableName = useRef(initialValue);
```

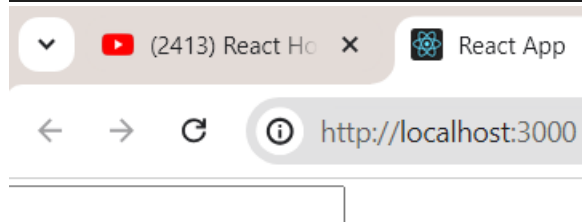
1)how it makes not re-render

```
import './App.css';
import React, { useEffect, useState } from 'react';

function App() {
  const [name, setName] = useState('');
  const [count, setCount] = useState(0);

  useEffect(() => {
    setCount((prev) => prev + 1);
  });
  return (
    <div>
      <input type="text" onChange={e => setName(e.target.value)} />
      <h2>Name : {name}</h2>
      <h2>Renders : {count}</h2>
    </div>
  );
}

export default App;
```



Name :

Renders : 1684040

here page is rendering infinite many times → to make render when we use it we have to add → **useRef()**

To use **useRef value** we write **current**

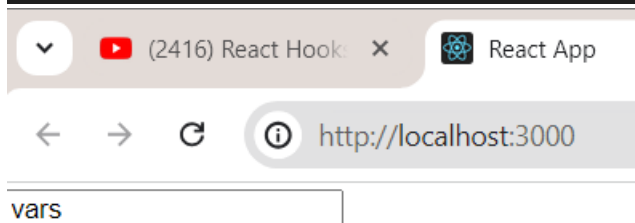
```
import './App.css';
import React, { useRef, useState, useEffect } from "react";

function App() {
  const [name, setName] = useState("");
  const count = useRef(0);

  useEffect(() => {
    count.current = count.current + 1;
  });

  return (
    <div>
      <input type="text" onChange={(e) => setName(e.target.value)} />
      <h2>Name : {name}</h2>
      <h2>Renders : {count.current}</h2>
    </div>
  );
}

export default App;
```



Name : vars

Renders : 5

now we can see that when we are writing or using
at that time only it re-rendering

2) Accessing DOM elements

In code we used `ref={}` which means access easily

```
import './App.css';
import React, { useRef } from 'react';

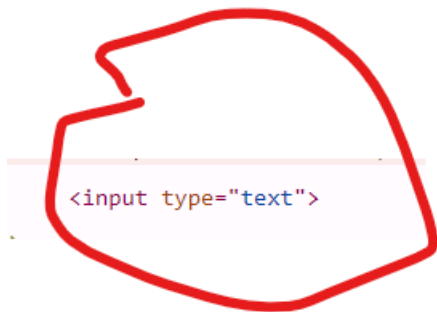
function App() {
  const inputEle = useRef();
  const handleClick = () => {
    console.log(inputEle.current);
  };

  return (
    <div>
      <input type="text" ref={inputEle} />
      <button onClick={handleClick}>CLICK HERE</button>
    </div>
  );
}

export default App;
```

here we have selected **input element** by using **`ref={}`** without using any type of `getElementById` or `getElementsByClassName`

we can see by console it



inspite → in console

Now we make changes like adding color , style , height and width to input box using ref() →

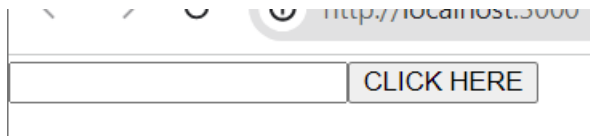
```
App.js / App / handleClick
import './App.css';
import React, { useRef } from 'react';

function App() {
  const inputEle = useRef();
  const handleClick = () => {
    inputEle.current.style.width = "300px";
  };

  return (
    <div>
      <input type="text" ref={inputEle} />
      <button onClick={handleClick}>CLICK HERE</button>
    </div>
  );
}

export default App;
```

before clicking → CLICK ME



After clicking → CLICK ME → width will increase to 300px

