What to add & Not to add as Dependencies

In the previous lecture, we explored useEffect() dependencies.

You learned, that you should add "everything" you use in the effect function as a dependency - i.e. all state variables and functions you use in there.

That is correct, but there are a **few exceptions** you should be aware of:

- You **DON'T need to add state updating functions** (as we did in the last lecture with **setFormIsValid**): React guarantees that those functions never change, hence you don't need to add them as dependencies (you could though)
- You also **DON'T need to add "built-in" APIs or functions** like **fetch()**, **localStorage** etc (functions and features built-into the browser and hence available globally): These browser APIs / global functions are not related to the React component render cycle and they also never change
- You also DON'T need to add variables or functions you might've defined
 OUTSIDE of your components (e.g. if you create a new helper function in a
 separate file): Such functions or variables also are not created inside of a
 component function and hence changing them won't affect your components
 (components won't be re-evaluated if such variables or functions change and viceversa)

So long story short: You must add all "things" you use in your effect function **if those** "things" could change because your component (or some parent component) rerendered. That's why variables or state defined in component functions, props or functions defined in component functions have to be added as dependencies!

Here's a made-up dummy example to further clarify the above-mentioned scenarios:

```
import { useEffect, useState } from 'react';
```

```
let myTimer;

const MyComponent = (props) => {
  const [timerIsActive, setTimerIsActive] = useState(false);

  const { timerDuration } = props; // using destructuring to pull out specific props values

  useEffect(() => {
    if (!timerIsActive) {
        setTimerIsActive(true);
        myTimer = setTimeout(() => {
            setTimerIsActive(false);
        }, timerDuration);
    }
  }, [timerIsActive, timerDuration]);
};
```

In this example:

- timerIsActive is **added as a dependency** because it's component state that may change when the component changes (e.g. because the state was updated)
- timerDuration is added as a dependency because it's a prop value of that component so it may change if a parent component changes that value (causing this MyComponent component to re-render as well)
- setTimerIsActive is NOT added as a dependency because it's that exception: State updating functions could be added but don't have to be added since React guarantees that the functions themselves never change
- myTimer is NOT added as a dependency because it's not a component-internal variable (i.e. not some state or a prop value) it's defined outside of the

component and changing it (no matter where) wouldn't cause the component to be re-evaluated

• setTimeout is **NOT** added as a dependency because it's a built-in API (built-into the browser) - it's independent from React and your components, it doesn't change