useReducer Hook

# What is useReducer hook?

* A more advanced and complex way of **MANAGING state**
* Works with a **REDUCER** function
* Usually we use reducer when there is some **COMPLEX**  state to manage

## Syntax

* Const [count, dispatch] = useReducer(reducer, initialValue)
  + Count – initial State
  + Dispatch – function to update the state
    - Dispatching an ACTION
  + reducer – the reducer function
  + initialValue – initialValue

### Reducer function

* function declared outside of the Component
* function reducer(currState, action){
  + return currState + action
  + }
  + takes 2 arguments
    - currentState
    - action
* The **ACTION** param will be passed as an object that has the action and the value
  + **OBJECT -** {type: ‘’, payload:’’}
* A screen shot of a computer code

  Description automatically generated

## The big advanced of useReducer is that we are managinig all states inside a singe function

A screen shot of a computer program

Description automatically generated- and the only thing we are doing is to **DISPATCH Actions**

## Advantages of useReducer

1. Alternative way of setting and managing state
   1. Used for complex state and related pieces of state

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Description automatically generated

1. Stores related pieces of state in a **SINGLE state** object
2. useReducer uses the **Reducer function**
   1. decouples the STATE LOGIC from the component
   2. contains all the state updates
3. Reducer is a **PURE** function
   1. State is **Immutable** so we are using the same {…state} operator
4. Dispatch
   1. We use the **DISPATCH** to trigger a state update instead of setState