**Day 1 :13 Jul. 24**

Design pattern : Design pattern is best practices or solution of repeating problem.

Separation of concern.

Loosely coupling etc.

Layer architecture application.

GOF

Creational design pattern

Structural design pattern

Behavioural design pattern.

Design pattern offer common platform for developer or programmer.

Using design pattern ensure that react best practise are applied.

Using these pattern we can achive

Code reusability, Maintainability, scalability. Etc

Hook design pattern.

Before React 16.x to create state full component we are/were class style components.

With help of react hook we can make functional style component as stateful components.

useState() : this hook provide use to create state variable in function components.

useEffect() : it is a type of hook which help to do side effect. Which take two parameter 1st function and array(dependencies).

useReducer(): this hook provide a build in way to use reducer pattern with a components. It takes two parameter 1st reducer and an initial state and return the current state and dispatch functions. This dispatch function is used to send the action to the reducer. Here reducer pure JavaScript function part of same file or different file. This function responsible to do the changes on state variable.

useReducer() this function takes 2 parameter 1st parameter reducer function name. reducer is pure java script function which takes two parameter 1 parameter state and 2nd parameter action. Base upon action it will some changes on state variable. 2nd parameter of useReducer is initial state. Return type of userReducer is array. 0 index position is state variable reference and 1 index position function name which help to send the action and payload to reducer functions.

Creating custom hook

Using custom hook we can achieve encapsulation. Using Custom hook we can do re-usability the code.

If we want to create custom hook name of the hook start with use prefix followed by name of the hook.

useXXX()