

1) useState in React

=> useState is React Hooks

=> Its functional Component

=> Store, update, Manage data and

re-render the UI whenever that data change

Uses :

=> Store Input Value

=> Control & Validate form data

=> User input data captured

2) Difference Between Controlled & Uncontrolled Component

Controlled

Input value from state

OnChange handle the changes

Easy to validate & Control

Uncontrolled

uses Ref to access value.

less validate Control

HTML form

closer to traditional html form

3) local storage:

- => Browser Web Storage API
- => Store data as key-value pairs
- => Even after page refresh or browser restart

4) JSON:

- => local storage can store only strings not object or array value, so user can convert the object and array in text or string format using stringify method.

5) HOC

- => Higher Order Component
- => Function takes component as input & returns a new enhanced component add extra logic & behaviour.

Uses:

- => Reuse common multiple across components.
- => Authentication & Protected Routes
- => Logging & Analytics
- => Conditional Rendering

- 6) React Router DOM:
- => Handle Navigation & Routing in react SPA Single page Application without reloading the page.
 - => Allows dynamic routing
 - => Manage navigation history

- 7) Use of Link tag:
- => Used for navigate without reloading the page.
 - => anchor tag causes a full page refresh.
 - => Navigation faster in link tag.

8) Three array method

- | map() | filter() | find() |
|------------------------------------------|--------------------------------------------|--------------------------------------------------|
| => Render list of components dynamically | => Remove or Select specific item of array | => Find a single item of an array |
| => Convert JSX array into JSX element | => Used for delete operation | => Used in edit, login validation or detail view |

9) Conditional Rendering block

=> Showing or hiding UI elements based on conditions.

=> Improve user experience

=> Control UI visibility

=> Avoid unnecessary rendering

10) useParams:

=> React Router hook

=> Read Read dynamic value from URL Path inside a Component.

=> Helps access those value like dynamic segments (ID or names).

Example:

/product /102

Route path = "/product/:id"

element = {<product />}

=> Mainly used in Product detailed page.

=> User Profile page & Fetch data based on ID.