

React

javascript library for modernly
building user interface

-DOM (Document Object Model) is the tree structure that represent the components in the document tree.

-JSX; Javascript XML; Javascript in XML let us write html in js file that convert html tag into react elements (all react component must have closing tag! wrapping element eg. `<div><h1></h1></div>`).

-className not class ! ; class is reserved word in javascript generally when react render components the className will be replaced by class.

-props are properties of the element that can sent to the component function.

-camelCase = the first word is lowercase then the next word are uppercase.

-anonymous function; function that has no name `()=>{}`

- `<></>` a fragment that wrap the group of element without adding extra node in the DOM

-Hooks allow function components to access among other react feature.

-useState; keep track of the state of function components eg.state of tweets.

->"props drilling" sending the state to lower nested components while some component doesn't need it.

-useContext; the hook to manage the state globally by share the state to deeply nested element more convenient.(createContext,Context.Provider,useContext).

-localStorage (Cookies) store data in the user's browser.

-session the state of the user that store in the server side.

-useEffect; performing side effect to the state when changes, generally used in keep track to the data that have been fetched from the server, timers, updating the DOM.

-AJAX (asynchronous javascript and XML),fetch allow getting the data from the server.

-thenable is a callback function that help managing the data that replied from the server.

-callback hell is when we have a lot of nested thenable.

-promise is an object that represent the completion or the failure of the asynchronous event that contain (pending,fulfilled,rejected)

-async await solve callback hell by simply adding the await in front of the promise that operate like thenable.



Firebase

cloud database services for
managing the application
development

-Firebase provided authentication, database system, analytic system, etc.



relational SQL(Structured Query Language) database
that is static table structured database.



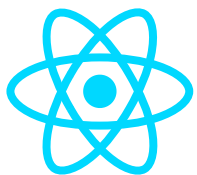
mongoDB

non-sql database that use JSON to store the data
but it's limit is it is a local host server that when
you shutdown the host devices the connection
also shutdown.



Firebase

non-sql database that also use JSON to store
the data but the database server are host in
the cloud, meaning the connection are
persistent and manipulate by the cloud
computing companies.



React Router DOM

React-Router-DOM allow react project to have multiple pages by routing to
the different path that display the different components.

```
<BrowserRouter>
<Routes>
<Route path="/" element={<Layout />} />
<Route index element={<Home />} />
<Route path="contact" element={<Contact />} />
<Route path="profile" element={<Profile />} />
<Route path="tweet" element={<Tweet />} />
<Route path="*" element={<Missing />} />
</Route>
</Routes>
</BrowserRouter>
```

<Link to="/"> button for navigation

<Outlet/> to display the child element

<Navigate to="/" /> JSX component to
navigate to the specific path

<Missing/> for the broken,unknown
link eg. 404 page