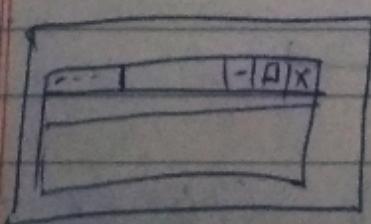


26/6/21 React - Routing Introduction →

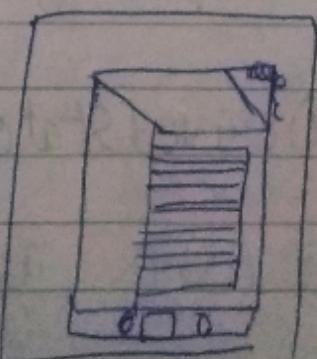
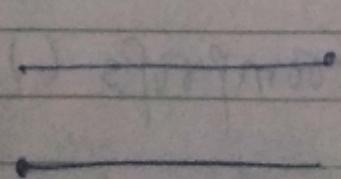
→ So, as we have seen before that if we visit a website, there is a different url for every page that we click on.

Ex → www.preabytes.com → index.html / home Page.
— " — / about → About Page
— " — / Contact → Contact Page.

So, what happens in case of multi-page applications is that →



Browser



Server

→ The browser will request the server whenever there will be a new URL entered.

Ex → If I do prepbytes.com it will send a request to server and index.html will be returned similarly if I do prepbytes.com/courses then courses.html page will be returned.]

→ Now, in case of single-page application

→ So, for the very first time when a website loads then the server will return us 'index.html' as in case of single-page applications we only have a 'single html file' and that is index.html.

→ So, now this index.html we go ahead and render the App Component which we have seen.

→ Now, as we only have one html file how the routing will happen.

→ [So, the routing happens internally.]

Note → The major difference between Multi Page & Single Page applications is that whenever we go ahead and hit a URL ~~reloading~~ occurs in case of multi-page

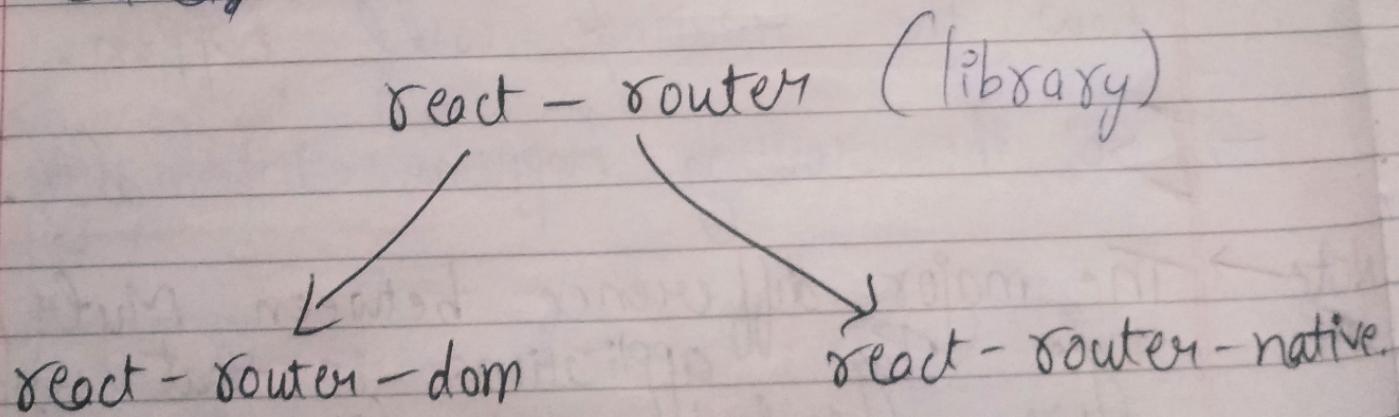
applications and in case of single page no reloading occurs.

Ex → Amazon.in is a multi page application whereas, prepbytes.com is a single page application.

→ So, now the question is how it is happening in the case of React?

→ React is not having any inbuilt-provision for routing and for that we use third-party library known as "React-Router".

So with the help of this react-router what we do is in the (App) Component only we add some routes and go ahead and say that for this particular route this component will be called.



- React-router is a library, that has core functionality of routing and, On the top of that we have react-router-dom library and react-router-native library.
- We use 'React-Router-dom' library if we are building websites, so basically it does the work of interacting with the dom.
- 'React-router-native' is used when we are majorly building mobile applications.
- So, when we go ahead and install react-router-dom, by default react-router gets installed as a dependency.

* Browser Router →

- In order to create route, we need to install react-router-dom.

Command → { npm install react-router-dom }

→ So, once installed the package, we will be using two major components which we have in "react-router-dom"

→ Two Components are →

- (1) BrowserRouter, And
- (2) Route.

→ So, in order to use these Components we will have to import them first →

App.js

import { BrowserRouter, Route } from 'react-router-dom'

→ So, the BrowserRouter Component will have all the routes inside it,

→ And makes sure that the url which is been hit if goes ahead and gives the UI of the Component as per the url.

→ And all routes are been placed inside the BrowserRouter tag component.

~~Ex →~~ function App ()

```
    return (  
        <BrowserRouter>  
            <Header />  
            <Route path = "/ " component = {Home} exact />  
            <Route path = "/about" component = {About} />  
            <Footer />  
        </BrowserRouter>  
    );  
};
```

Export default App;

→ So as per the example above, we have
<Header /> Component which will show
on every page no matter what route is been
hit, and same is with the <Footer />

→ We use 'exact' so that the url doesn't
get mixed or confused with the next route
Path we have as the compiler predicts
from top to bottom.