React Component Lifecycle & Lifecycle methods | Complete React Course in Hindi #34

Earlier, we refactored the code of the NewsMonkey application. In today's video, we will discuss the Component lifecycle Methods in React. But before that, we would refactor the little bit code of the NewsMonkey app. So without further ado let's begin.

Changing the Title Dynamically

At this point in time, the title in the NewsMonkey application is fixed. But we would like it to change, whenever the user is navigating between different News categories. To do so we would make the following changes in the Constructor:

Figure 1.1: Changing the title of the application

Here, we have used the category props, which is passed from app.js, and also a function to capitalize the first letter of the Title. Now, on selecting a specific category the title also changes accordingly.

Changing the Heading of Application dynamically

In a similar manner, we would be changing the heading of the NewsMonkey application as shown below:

```
<h1 className="text-center" style={{ margin: '35px 0px' }}>NewsMonkey - top {this.capitalizeF
```

Result: Thus, when the user navigates between the different categories then the 'heading' as well as the 'title' of the Application changes accordingly as shown below:

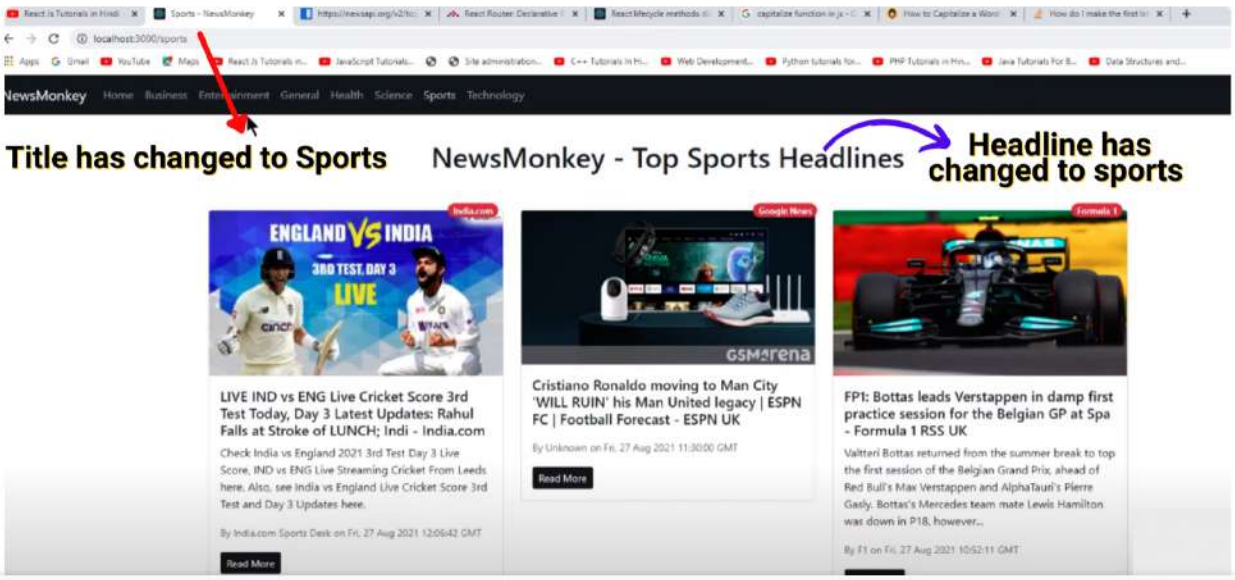

Figure 1.2: Title and heading are changing Dynamically

Hence, we have **successfully** changed the title and heading of the application dynamically.

React Component Lifecycle Method

Component LifeCycle: The series of events that happens from the mounting of a React Component to its unmounting.

Mounting: Birth of your component

Update: Growth of your component

Unmount: Death of your component

Here, we would discuss only the most important component lifecycle method. So, let's begin understanding component lifecycle methods.

Methods in React Component Lifecycle

- **render() Method:** It is used to render the HTML of the component in React. It is used to render the DOM while using the class-based component. Remember, Inside the Render method we cannot modify the state in React.
- **componentDidMount():** This method executes after the component output has been rendered to the DOM. We have already used this method in the NewsMonkey Application for fetching the Data from the API. You can also use setState, async, and await methods in ComponentDidMount().
- **componentDidUpdate():** This method is used to update the DOM in response to the prop or state changes. Remember that props are read-only. That's why here, 'changes in the prop' means that it can be received again in the component.
- **componentWillUnmount():** It is invoked just before the component is unmounted and destroyed. It is usually used to perform cleanups.

These are the four most commonly used React Component Lifecycle methods.

React Lifecycle methods diagram by wojtekmaj.pl

You can access the interactive diagram which explains the lifecycle method of React by clicking here. Here's how the diagram looks like:

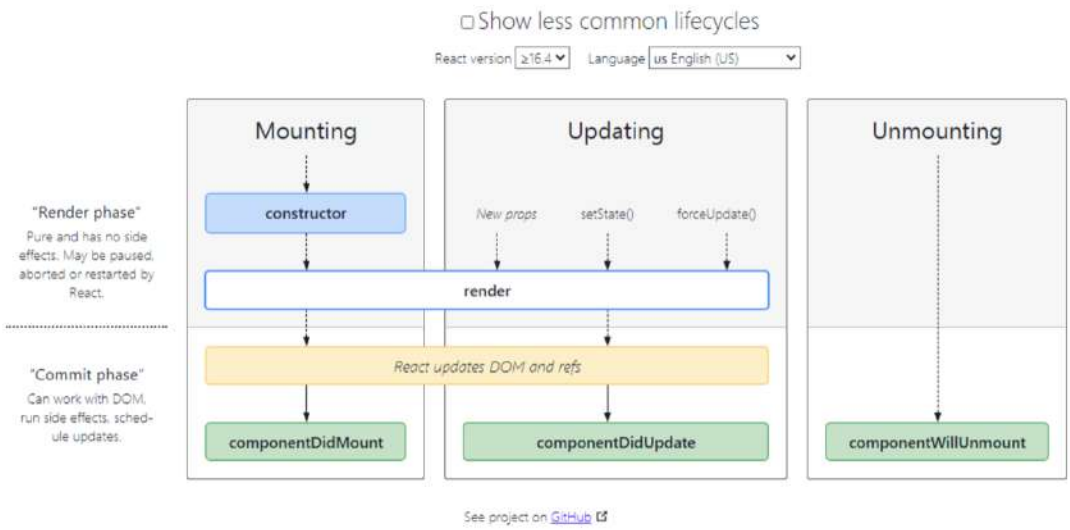

Figure 1.3: React Lifecycle Methods Diagram

Here's the sequence of the methods that will run while Mounting, Unmounting, Updating the React component.

While Mounting

In this case, the 'Constructor' runs first after that the 'render' lifecycle method is invoked. After that, React will update the DOM and finally, the ComponentDidMount will be executed.

While Updating

The three possible ways in which one can update the React component are:

1. New props
2. Using setState
3. Using forceupdate()

After updating the component, the render method will be executed at the start. After that react updates the "DOM and references" and in the end, the componentDidUpdate method will be run.

While Unmounting

At the time of unmounting, only the componentWillUnmount method will be executed and the component will be unmounted.