

fewd_lab_9

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https://github.com/flotr18/fewd_lab_9

Question 3

React is a Front JS Framework that is Open source which means the source code is freely available and can be modified. It's maintained by Facebook and the community of web developers

It's used to design user interfaces and presents the feature the rendering of data through a virtual DOM and modify parts of the page.

Question 4

The virtual DOM is one of the greatest React's features. Its purpose is to render a virtual representation of the DOM. Every time there are properties' changes, the virtual DOM gets updated instead of the real DOM.

When changing an element, the common DOM will re-render the element itself but its parents too, while the virtual one will only re-render the needed parts which would be specified through an algorithm that calculates that must be reloaded.

Question 5

JSX is an extension to the JS language syntax. It allows the developers to create React components by using a familiar syntax from HTML. However, components can be written in Pure JavaScript.

Question 6

On the html, we have to write a div element with a id which will specify targeted element's rendering.

There are two ways of creating React components:

- Functional components
- Class components

When using “Functional components”, we return JSX inside a function, the name of the function will be our component's name. Then, we use the ReactDOM.render to return JSX.

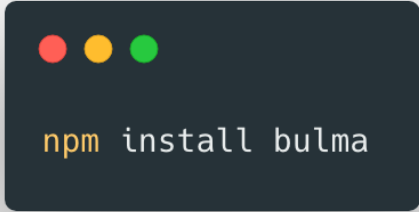
Class components are more used for complex user interactions such as forms or animations. It's an extension from React. Component class. Then, we use the render method to return JSX.

```
function FuncCompo() {  
  return <h1>Hello I am a functional component</h1>;  
  // Return JSX  
}  
  
class ClassCompo extends React.Component {  
  render() {  
    return <h1>Hello I am a class component</h1>;  
    // Return JSX  
  }  
}  
  
const el1 = <FuncCompo />; // Call the Component  
ReactDOM.render(  
  el1,  
  document.getElementById('root') // Specify the ID  
)  
  
const el2 = <ClassCompo />; // Call the Component  
ReactDOM.render(  
  el2,  
  document.getElementById('demo') // Specify the ID  
)
```

Question 7

To download and install packages, we can use a Software Library which is a registry where developers can store and share code-packages. The default one is npm (over 800 000 code packages)

By example, to install Bulma, a CSS framework, we do the following command:

A dark-themed terminal window with three colored window control buttons (red, yellow, green) in the top-left corner. The text `npm install bulma` is displayed in a monospaced font, with `npm` in orange and the rest in white.

```
npm install bulma
```