Week 13: React, Webpack, Components & JSX- Research

Questions:

1. What are some competitors/alternatives to React? What makes them different? List at least 2.

2. What is React's virtual DOM, why is it important, and how does it work?

What are some competitors/alternatives to React? What makes them different?

In an excellent article by Insight by CREDENCYS, they listed, in their opinion, the top 11 Frameworks that compete with React JS. So, there is some confusion because React JS is not a framework but instead a JavaScript library. Now this is for extra points; what's the difference between a library and a framework? I had to ask because I was not really sure myself. Brandon Wozniewicz, or "Woz," in his article The Difference Between a Framework and a Library, says, "You'll often hear frameworks and libraries are described as opinionated and unopinionated." And the truth is that frameworks are opinionated; they like to control the flow.

Who are React JS competitors? Inferno JS is a JavaScript library, Preact, React-Lite, Backbone JS, Aurelia is a Framework, Ember JS, Riot JS, Mithril, Vue JS, Angular JS, and Cycle.js. These are a mixture of Javascript Libraries and Frameworks. Angular JS is the most popular of the Frameworks. Created by Google. Angular provides a rich environment for developers' tools and interacts with the Real DOM rather than a Virtual DOM like React.

What is React's virtual DOM, why is it important, and how does it work?

Ract's virtual DOM is a copy of the actual DOM; the virtual DOM is lightweight and very responsive compared to the actual DOM. Because the virtual DOM does not render graphical changes to the screen, it is updated in memory efficiently. It checks for changes between the two. Once the changes are identified, the virtual DOM only updates what has been changed in the actual DOM tree, thereby only rendering what has changed. Why is this important because it improves the performance of your application.

https://www.geeksforgeeks.org/reactjs-virtual-dom/#article-meta-div

https://www.geeksforgeeks.org/difference-between-virtual-dom-and-real-dom/