Career Services Assignment 9 – ReactJS Flash Cards

Points possible: 50

Category	Criteria	% of Grade
Completeness	All requirements of the assignment are complete.	100

Instructions: Research common ReactJS interview questions online and create 20 flash cards from the information you find. Study your flash cards regularly to better prepare for interviews. Fill out the table below with the information you put on each of your flash cards.

Front of Card	Back of Card
What is React?	React is an open-source front-end JavaScript library that is used for building user interfaces, especially for single-page applications
What are the major features of React?	It uses a VirtualDOM instead of RealDOM reducing costs, it supports server-side rendering. It follows unidirectional data flow or data binding and can use reusable/composable UI components to develop the view.
What is JSX?	JSX is a XML-like syntax used to create javascript and html components while using react to create single page applications.
What is the difference between Element and Component?	An Element is a plain object describing what you want to appear on the screen in terms of the DOM nodes or other components. Elements can contain other Elements in their props. Once creates it cannot be directly changed. A Component is a declared class of functional object which uses the props to return the
How to create components in React?	Components can be created 2 ways, via function components which are a simple function which takes in prop data objects and return react elements. The other is a class component which require a few more steps to return react components.

When to use a Class Component over a Function Component?	React 16.8 creates the functionality of hooks which make both fairly similar in us16.8eage. Older versions will require class components be used for lifecycle and states
What is state in React?	State of a component is an object that holds some information that may change over the lifetime of the component
What are props in React?	Props are inputs to components. They provide the data which are used to render the page information.
Why should we not update the state directly?	It will not re-render the component. It should be done in using a setState method which will force a re-render.
What is the purpose of callback function as an argument of setState()?	The callback function is invoked when setState finished and the component gets rendered.
What are synthetic events in React?	SyntheticEvent is a cross-browser wrapper around the browser's native event. Its API is same as the browser's native event, including stopPropagation() and preventDefault(), except the events work identically across all browsers.
What are inline conditional expressions?	They are either if statements or ternary expressions which are available from JS to conditionally render expressions.
What is "key" prop and what is the benefit of using it in arrays of elements?	A key is a unique identifier used in the lowest level of components and are used by react to identify which components are changed.
What is the use of refs?	Refs are created using either the React.createRef() method and attached to React elements via the ref attribute or you can also use ref callbacks approach regardless of React version.
What is Virtual DOM?	The Virtual DOM (VDOM) is an in-memory representation of Real DOM.
How Virtual DOM works?	Whenever any underlying data changes, the entire UI is re-rendered in Virtual DOM representation. Then the difference between the previous DOM representation and the new one is calculated. Once the calculations are done, the real DOM will be updated with only the things that have actually changed.

What is the difference between Shadow DOM and Virtual DOM?	The Shadow DOM is a browser technology designed primarily for scoping variables and CSS in web components. The Virtual DOM is a concept implemented by libraries in JavaScript on top of browser APIs.
What are controlled components?	A component that controls the input elements within the forms on subsequent user input is called Controlled Component, i.e, every state mutation will have an associated handler function.
What are uncontrolled components?	The Uncontrolled Components are the ones that store their own state internally, and you query the DOM using a ref to find its current value when you need it. This is a bit more like traditional HTML.
What are the different phases of component lifecycle?	Mounting: The component is ready to mount in the browser DOM. Updating: In this phase, the component gets updated in two ways, sending the new props and updating the state either from setState() or forceUpdate(). Unmounting: In this last phase, the component is not needed and gets unmounted from the browser DOM.