Research the differences between a React functional component and a class component. Give some reasons why a programmer would choose each of these.

A functional component is just plain JavaScript pure function that accepts props as an argument and returns a React element.

Reasons why a programmer would choose using a functional component:

* Functional Components are easy to use and are much more understandable .
* They do not hold the overhead of using the extra features.
* They provide the developer with reusable code segment using react hooks.
* 'this' keyword is not used in functional components.
* Easy testing process.

A class component requires you to extend from a React component and create a render function that returns a React element. There is no render method used in functional components.

Reasons why a programmer would choose using class components:

* Used in older versions of react when hooks were not implemented.
* Class components provide a great range of lifecycle to deal with component behavior.
* They provide logic and meaning of the component.
* Provide an easy way to manage the 'ref' commands.
* There exists overhead of managing and dealing with the lifecycle methods.

References:

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