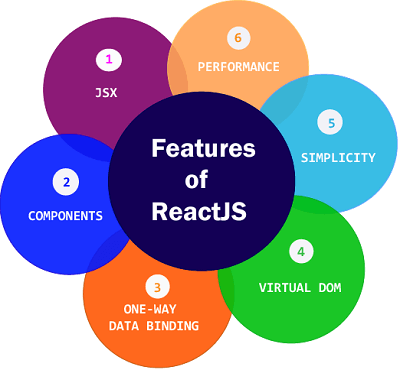
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| **ch5.ReactJS Features** | **Date: 22-02-2022** |

**Topics**

React Features



**React Features**

Features of ReactJS are as following:

1. **JSX**

* JSX stands for JavaScript XML.
* It is a JavaScript syntax extension.
* It’s an XML or HTML like syntax used by ReactJS.
* This syntax is processed into JavaScript calls of React Framework.
* It extends the ES6 so that HTML like text can co-exist with JavaScript react code.
* **Note**: It is not necessary to use JSX, but it is recommended to use in ReactJS.

1. **Components**

* ReactJS application is made up of single or multiple components, and each component has its own logic and controls.
* These components can be reusable which help you to maintain the code when working on larger scale projects.

1. **One-way Data Binding**

* ReactJS is designed in such a manner that follows unidirectional data flow or one-way data binding.
* The benefits of one-way data binding give you better control throughout the application.
* If the data flow is in another direction, then it requires additional features. It is because components are supposed to be immutable and the data within them cannot be changed.
* Flux is a pattern that helps to keep your data unidirectional. This makes the application more flexible that leads to increase efficiency.

1. **Virtual DOM**

* A virtual DOM object is a representation of the original DOM object.
* It works like a one-way data binding. Whenever any modifications happen in the web application, the entire UI is re-rendered in virtual DOM representation.
* Then it checks the difference between the previous DOM representation and new DOM. Once it has done, the real DOM will update only the things that have actually changed.
* This makes the application faster, and there is no wastage of memory.

1. **Simplicity**

* ReactJS uses JSX file which makes the application simple and to code as well as understand.
* ReactJS is a component-based approach which makes the code reusable as your need. This makes it simple to use and learn.

1. **Performance**

* ReactJS is known to be a great performer. This feature makes it much better than other frameworks out there today.
* The reason behind this is that it manages a virtual DOM. The DOM is a cross-platform and programming API which deals with HTML, XML or XHTML. The DOM exists entirely in memory.
* Due to this, when we create a component, we did not write directly to the DOM. Instead, we are writing virtual components that will turn into the DOM leading to smoother and faster performance.