In ReactJS, render method is used to render something to the screen. This may include single or multiple elements. But since render requires a single root node inside it at a time, if there are more than one element, they must be put inside a single root element. Like shown in the example below:

class Columns extends React.Component {

render() {

return (

<div>

<h2>React JS Workshop </h2>

<p> Assignment 2</p>

</div>

)

}

}

Like in the above example the h2 and p elements must be wrapped around the div tag. In real world scenarios with very large or deep dom trees, this would consume more memory and would have a hit on the performance of the application.

Hence Fragments were introduced to be used instead of the extra div tag.

Example:

class Columns extends React.Component {

render() {

return (

<React.Fragment>

<h2>React JS Workshop </h2>

<p> Assignment 2</p>

</React.Fragment>

)

}

}

The benefit of using Fragment in the above example is that the performance is a little bit faster and also less memory is consumed.

It is also possible to use the shorthand for fragment and use <> & </> instead of React.Fragment like below:

class Columns extends React.Component {

render() {

return (

<>

<h2>React JS Workshop </h2>

<p> Assignment 2</p>

</>

)

}

}