React
List and Item

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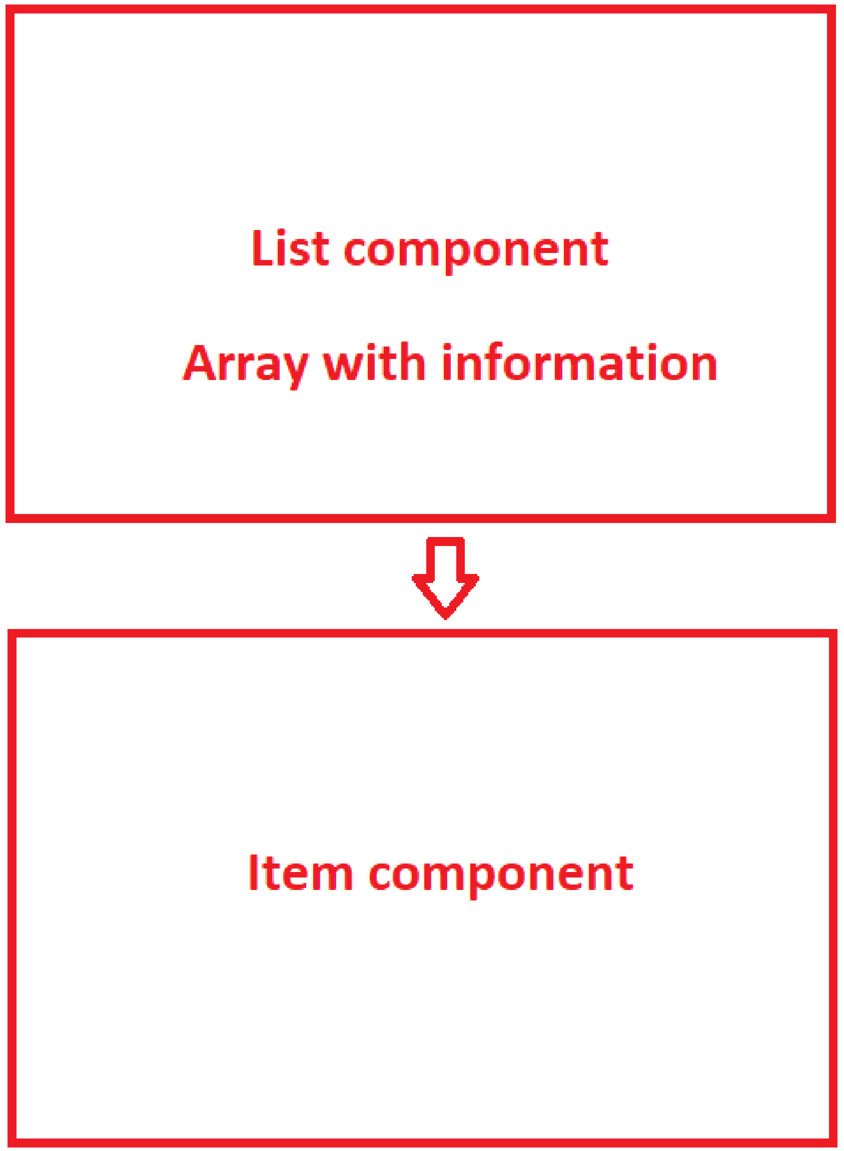
List and Item

- List and Item is about splitting the responsibility of an Item deciding what to show and how to show it, while the List generates x number of Item components.
- For example in a product page you will have a List component that has an array of objects. The List component uses a loop to generate x number of Items.



The List component

- Contains an array with information.
- Generates Item components
    - Typically with ES6 .map function
- Passes down props to the Item components

The Item component

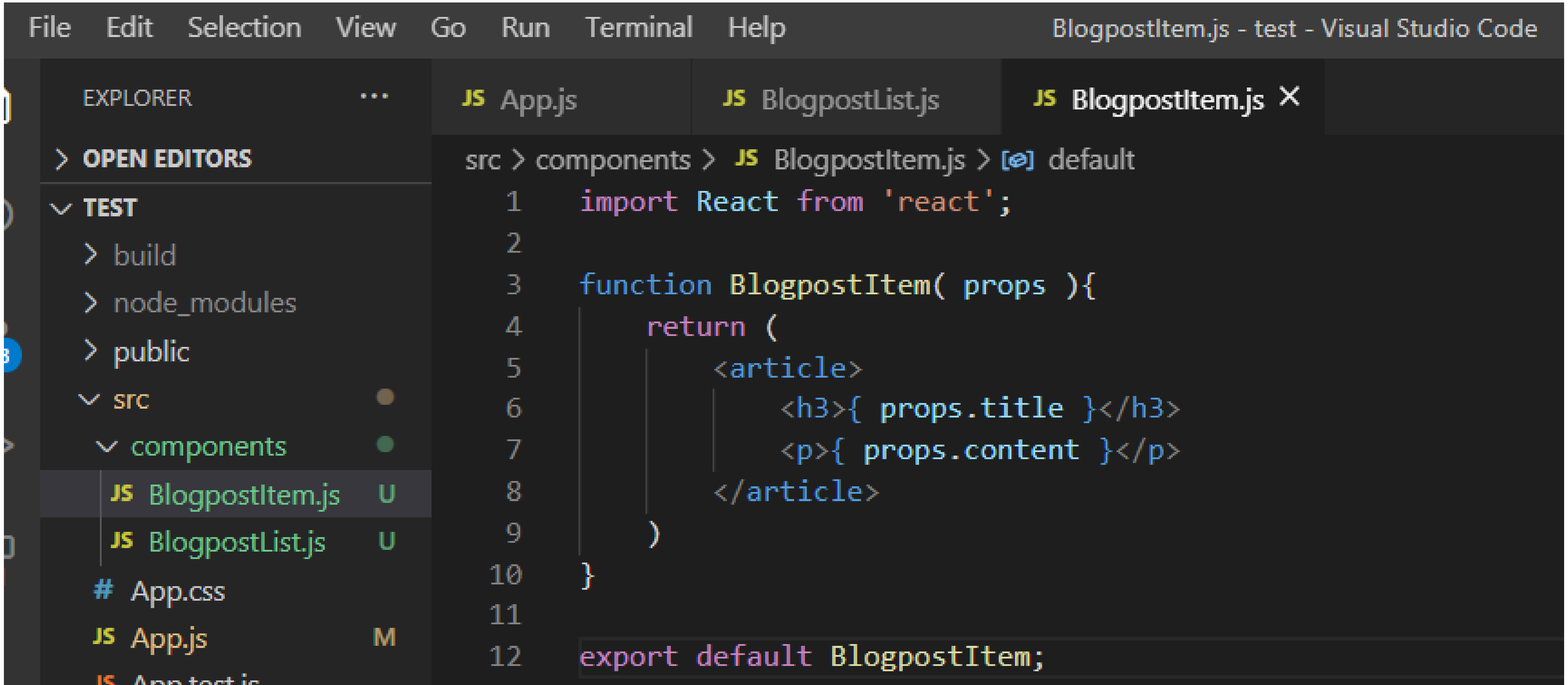
- The Item component is a component which is to be shown on the webpage.
- It will receive props from its List parent component

Key

- When generating Item components in the List component you will need to give each Item component a unique Key.
- The unique Key is for enabling React in knowing exactly which Item component on the page to update when necessary

Code example: Item

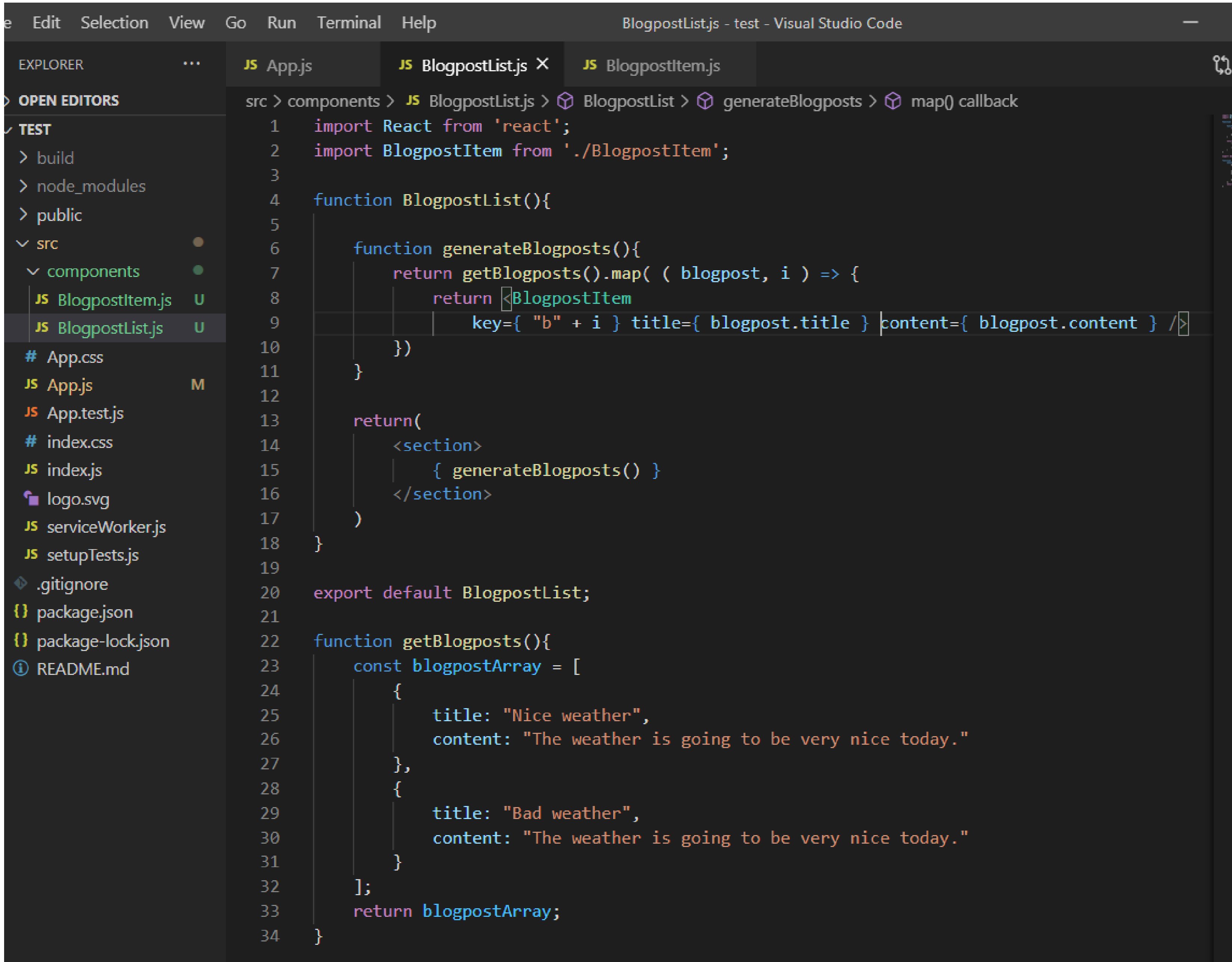
- The item is created for receiving props from List component.



```
import React from 'react';

function BlogpostItem( props ){
    return (
        <article>
            <h3>{ props.title }</h3>
            <p>{ props.content }</p>
        </article>
    )
}

export default BlogpostItem;
```

Code example: List

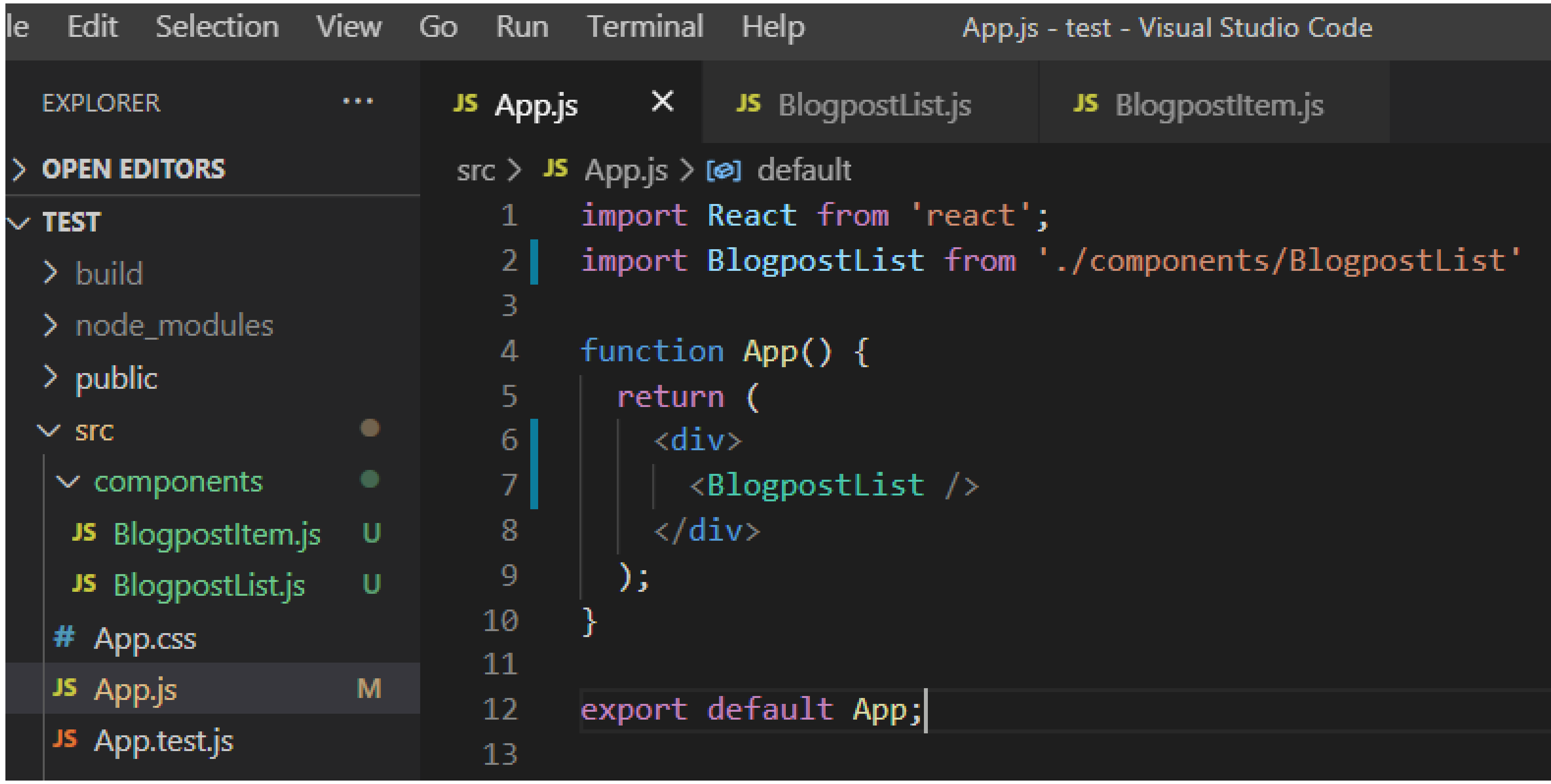
- The List component will need some data source. In this example a function cointaining an array of objects is called when generating Item components.
- This array may also be received from App or through an Ajax call.



```
import React from 'react';
import BlogpostItem from './BlogpostItem';

function BlogpostList(){

    function generateBlogposts(){
        return getBlogposts().map( ( blogpost, i ) => {
            return <BlogpostItem
                key={ "b" + i } title={ blogpost.title } content={ blogpost.content } />
        })
    }

    return(
        <section>
            { generateBlogposts() }
        </section>
    )
}

export default BlogpostList;

function getBlogposts(){
    const blogpostArray = [
        {
            title: "Nice weather",
            content: "The weather is going to be very nice today."
        },
        {
            title: "Bad weather",
            content: "The weather is going to be very nice today."
        }
    ];
    return blogpostArray;
}
```

Code example App

- The App (or other appropriate component) imports the List component.



```
import React from 'react';
import BlogpostList from './components/BlogpostList'

function App() {
  return (
    <div>
      <BlogpostList />
    </div>
  );
}

export default App;
```

Reference

- Explains separation of responsibility:
  - https://reactjs.org/docs/higher-order-components.html#use-hocs-for-cross-cutting-concerns