**Opdracht 3**

* Alle informatie over programmeren is op het internet te vinden, ik ga zelf meestal naar W3School of stack overflow, in dit geval kunnen we ook gebruik maken van React.org
* Het info wat ik op de tutorial krijg ga ik zelf proberen om het beter te snappen.
* Voor de juiste tutorial en documentatie maak ik gebruik van deze websites:

<Https://reactjs.org/tutorial/tutorial.html>

<https://reactjs.org/>

* **JSX**

JSX stands **for JavaScript XML**. It is simply a syntax extension of JavaScript. It allows us to directly write HTML in React (within JavaScript code). It is easy to create a template using JSX in React, but it is not a simple template language instead it comes with the full power of JavaScript.

* **Virtual DOM**

The virtual DOM (VDOM) is **a programming concept where an ideal, or “virtual”, representation of a UI is kept in memory and synced with** the “real” DOM by a library such as ReactDOM. This process is called reconciliation. ... They may also be considered a part of “virtual DOM” implementation in React.

* **Class**

A class component is **a more featured way to define a React component**. It also acts like a function that receives props, but that function also considers a private internal state as additional input that controls the returned JSX.

* **Constructor**

The constructor is **a method that's automatically called during the creation of an object from a class**. ... Simply put, the constructor aids in constructing things. In React, the constructor is no different. It can be used to bind event handlers to the component and/or initializing the local state of the component.

* **Extends**

A class component must include the extends React.Component statement. This statement creates an inheritance to React.Component, and gives your component access to React.Component's functions.

The component also requires a render() method, this method returns HTML.

* **Class-Function**

A functional component is just a plain JavaScript function that accepts props **as an argument and returns a React element**. A class component requires you to extend from React. Component and create a render function which returns a React element. There is no render method used in functional components.

* **Arrow-Function**

In short, with arrow functions there are no binding of this. In regular functions the this keyword represented the object that called the function, which could be the window, the document, a button or whatever. With arrow functions, the this keyword **always represents the object that defined the** arrow function.

* **Functional**

A Functional component is **a function that takes props and returns JSX**. **They do not have** state or lifecycle methods. Functional components are easier to read, debug, and test. They offer performance benefits, decreased coupling, and greater reusability.

* **Class**

React class based components are the **bread and butter** of most modern web apps built in ReactJS. These components are simple classes (made up of multiple functions that add functionality to the application). All class based components are child classes for the Component class of ReactJS.

* **UI**

A UI toolkit for React websites and apps, themeable and composed of individually packaged components. Grommet The most advanced open source UX framework for enterprise applications. Halogen: A collection of highly customizable loading spinner animations with React.

* **Props**

It is **an object which stores the value of attributes of a tag and work similar to the HTML attributes**. It gives a way to pass data from one component to other components. It is similar to function arguments. Props are passed to the component in the same way as arguments passed in a function.

* **State**

State is **a plain JavaScript object used by React to represent an information about the component's current situation**. It's managed in the component (just like any variable declared in a function).

* **Render()**

React renders HTML to the web page by using a function called render(). The purpose of the function is to **display the specified HTML code** inside the specified HTML element. In the render() method, we can read props and state and return our JSX code to the root component of our app.