

TODO: React app

The app has been developed using the React framework with JavaScript. The app has 5 different components, these are the following: App, FrontPage, Navbar, Todo, and TodoList.

The component App is the component wrapping the whole application, this component is used in Index to render the app. App is using react-router-dom to make the app ready for expansion with multiple pages and easy navigation. Currently there is only the index element which is the FrontPage component. The App component also renders the Navbar component, which is the header in the top of the app. Here links can be inserted if multiple pages are made. The whole app is using Bootstrap, where Bootstrap is great for building responsive websites which will make the app mobile friendly from the beginning. In the app the lazy() function from React is used to import components when they are needed, if an import takes a long time, the Suspense component used in App will show "Loading..." until the component has been imported.

The FrontPage component is a very small component that only renders the TodoList of the app. The TodoList component is the largest component in the app. TodoList is responsible for managing the whole todo part of the app. This component renders the todos and has the methods for adding, deleting, and marking todos as complete. In TodoList I have used the useState() hook for the todos and completed todos as these are saved in an array. TodoList also uses the useRef() hook. The useRef is used to manipulate DOM elements directly in the app, this makes it possible for me to show and hide the completed todos with a button click. A completed todo can also be readded to the todolist again.

A todo is saved in the array as an object that has been stringified with the use of JSON.stringify(<TodoObject>). To get the information of the todo JSON.parse(<TodoElement>) which converts it back to an object.

The todos are showed in the app as the Todo component. This component is also a small component, used to only show the todos.