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https://github.com/aleksa0809/Business-from-scratch/tree/proof_of_concept

PROOF OF CONCEPT

This projects demonstrates the following skills:

- controlling development process with GIT tools (previous version saved on the separate branch);

- installing of React environment (react-scripts);

- building and live development of React project;

- adding external packages to the project (bootstrap, react-toastify, react-router-dom);

- creating custom react components (showcase, basket, card, navbar, left menu, context, welcome, loader);

- conditional rendering (the showcase component);

- using State (the basket-counter component);

- working with local storage (the basket component);

- creating documentation.

Details of creating the project are described in README.md and app.md documents.

Documentation

What is important to keep in mind when creating web applications with React

Creating application with React needs preparation of software environment. The program NodeJS must be installed. Some additional modules must be installed with yarn or npm commands: webpack, Babel and so on. A programmer can simplify the installation by using ready templates (react-scripts).

While developing a programmer can use the command yarn start. It runs live server that reflects all changes in edited files in real time and shows them in browser.

When the developing is done ready application can be built as static files with command yarn build.

These files are placed into special directory, then they can be deployed on remote server side. It is important to remember that React is not a server framework, it helps to create frontend applications, not backend.

More over the React is not connected css framework, it can be used with any appearance: bootstrap, Bulma, Uikit.

Use of the framework / library in addition to React

In the application some additional software is used: react-router-dom, react-toastify.

React-router-dom creates routers that help to show needed content in the central part of page: greeting, basket, database search and so on. It reacts on clicking on special links that are placed on left side of the page.

React-toastify shows signals for user, they appear as colourful areas that inform about errors or successful actions.

What is important to keep in mind when using local data in React

React can use local storage of browser in standard way. It is important to remember that local storage keeps items as simple strings, not objects. To converting strings to objects a programmer should use JSON library or similar tools.

Reflection

Controlling source code of the project the GIT is used. This system keep the version of code and gives a programmer the ability of switching between different branches and commits. So, there is an ability to return to any saved state of development.

The library react-toastify is used in this project, it gives users additional convenience: they can see changes of basket state that is invisible when they see the showcase. The limitation of using it connected with versioning of the library: there is no guarantee in the future its functionality will remain the same.

For compilation JSX code the react-scripts package is used. The advantage of such a method is simplicity of installing. The disadvantage is difficulty to customize: to setup app.html instead of index.html, a programmer must execute a special command (yarn eject).