**Technical documentation of “Swimming-Project” project**

Project name: “Swimming-Project”.

2022-05-27

**Project overview**

The main purpose of this project is to create own web application on desired topic which has to include 4 main pages: landing, quiz, checkout and success pages. The application also has to have API logic where the developer shows that he knows how to handle fetch and post requests from and to the back-end. Built web application must meet these requirements:

* Quiz page must handle single and multiple options answers.
* Project must be written using TypeScript and Gatsby.
* Styling should be written with styled-components.
* State management should be handled with ‘Redux Toolkit” or “Redux Sagas”.
* Project must be mobile responsive.

**Software**

“Swimming-Project” application was built with:

* axios v0.27.2
* “React” v17.0.1;
* “React-redux” v8.01;
* “@reduxjs/toolkit“ v1.8.1;
* “Gatsby“ v4.13.0;
* “Styled-system“ v5.1.5;
* “Styled-Components“ v5.3.5;
* “Typescript” v4.6.3
* “redux-persist” v6.0.0

**Project Management**

Project source code is placed in GitHub:

<https://github.com/AugustasKl/Swimming-Project>.

The project API logic was handled using “mock API” services where fetch and post requests were performed.

**Fetch request:** <https://62810b691020d8520584bcbd.mockapi.io/data/>

**Post request:** <https://62810b691020d8520584bcbd.mockapi.io/answers/>

**Installation instructions**

* Clone a GIT Repository from https://github.com/AugustasKl/Swimming-Project.
* Run “npm install“
* Start application by writing a command “gatsby develop“

**Media queries**

Media queries were implemented for >1440px, 768px and 425px, 375px width screens.

**Testing**

**Unit Testing**

A couple of Unit tests were written in order to check and imitate if the project's functions would work properly. Also some Unit tests were written to check if the reducers return and update project’s state correctly.

**Technical Problems**

There weren’t any major technical issues during the development of this project. Only a few small technical difficulties were noticed while working with “Gatsby” framework (different “Gatsby” plugins packages would sometimes crash and wouldn’t work properly).

The solution to this problem would be to update “Gatsby” and “Gatsby’s” plugins’ packages to newest versions.

**Further work**

A few implementations will be added to this project:

1. Payment logic- flexible way to securely collect payment information.
2. Create E-Shop for swimming gear.
3. Create shopping cart functionality.
4. Add more media queries and make project fully responsive.

**Additional Information**

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