

Shop system technical specification

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1 Abstract

This document contains the technical specification of a large-scale enterprise store system. The specification consists of a detailed discussion of the system architecture, highlighting its layers, nodes, modules, and main components. Each system module is thoroughly presented, including a description of its tasks and the technological requirements for implementation. Besides, the document presents the dependencies occurring between the modules and precisely specifies the ways and types of communication occurring in the system. Additionally, specification contains details about external interfaces. Finally, this document provides an approximation of the planned appearance of the application through detailed mockups of both the mobile and web versions. These mockups offer a visual representation of the user interface and user experience, illustrating the design, layout, and functionality that users can expect.

2 System architecture

The system consists of a backend built with a microservices architecture and two client applications: web and mobile. The backend is developed using the Node.js runtime and TypeScript language, but thanks to the microservices architecture, it is possible to use different languages and runtimes for future development as well. The web application is created using the React library, while the mobile app is implemented with React Native. This approach leverages the similarities between React and React Native, simplifying the development process and ensuring a consistent user experience across both platforms.

Figure 1: Overview diagram of the Store system architecture

