

DEVELOPMENT OF REQUIREMENTS FOR THE INFORMATION SYSTEM FOR CONTROL OF PRODUCTS STORAGE IN THE REFRIGERATOR

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Buying products and cooking are integral components of daily existence. When constantly preparing food, each person interacts with the refrigerator. But people do not always remember well about products that have been in the refrigerator for a long time, because of which they spoil over time.

The creation of an information system (IS) to control food storage should help users structure and keep track of products in the refrigerator in a way that is convenient for them.

Functional requirements determine what IS should do. After analyzing the existing alternative solutions, it is possible to form the following functional requirements for the IS to be developed.

First, the user must have access to his refrigerator only after logging in. In the profile, the user can view licenses and the user manual. Second, within the app itself, the user can manage products, namely add, edit, delete, and view products. During the addition, the user can enter the data by hand or using the camera (bar code reading). Third, the user can manage his shopping list, namely, add and remove products from it. When the product runs out, it should be automatically added to the shopping list. At the same time, you can add products to the list when they are in the refrigerator (not expired). Finally, the service should automatically send push notifications that the product is expiring or has an expiration date, if any.

Non-functional requirements describe the general performance of systems. They are also known as attributes of quality. Non-functional requirements, not related to the functionality of the system, mostly determine how the system should perform. They include such categories as: use; security; reliability; productivity; presence; scale.

The following non-functional requirements were formulated for the IS under development.

1. Usability is the full convenience of using IS at any time.
2. Security – database security. None of the external systems allowed access to the data.
3. Reliability – database recovery time is no more than 12 hours. Moreover, the advantage is to use an object-relational database as a primary data store, for example, PostgreSQL, MySQL.
4. Productivity – the response time from the server to the user is no more than 0.5 - 1 second (use complex tasks as asynchronous shadow tasks so as not to force the user to wait).
5. Scalability – the ability to serve 1,000 users or more at a time.