

# Abstract

One of the most important questions at the relational database theory is the problem of the request optimization. The main goal of the solving this problem is increase of the productivity improvement of the current requests to the database. This is a subject of the graduation work.

There is the different methods of the request optimization are considered and implemented. Using these methods there were created database elements which works faster than originals. There were provided the analysis of the performed technical solutions.

The project contains 145pages, in the numbers of 112 body text pages, 63 picture pages and 13 table pages.

There is the main theoretical data concerning the optimization of the relational database in the chapter 1.

The analysis of the Firebird and PostgreSQL DBMS is done in the chapter 2.

The practical implementation of the requests optimization was performed in the chapter 3.

The value analysis was made in the chapter 4.

In the chapter 5 there were reviewed the basic production factors, which influenced on the productivity of the engineer-programmer's work such as hygiene and sanitary conditions specifications, fire safety and etc.

The applications contain the source code of the developed programs and stored procedures on Perl, SQL, PL/pgSQL.