

The program is a practical part of the bachelor thesis “Development of methods of an automated documentation process of a source code using UML”.

### Abstract

Nowadays the IT projects become bigger and more complicated, which requires more support and maintenance. The source code is constantly being altered due to the changing of the technical specification, caused by diverse reasons of modernization and implication. Moreover, the new member of the team has to have some time on source code understanding. All these actions demand the knowledge of the current source code. Usually there is the technical documentation for the project, which describes the functions, methods, classes and so forth. Having this tool, the time for comprehension of the project is decreasing. Nevertheless, the creation of the full and informative documentation claims some spends, but it is more efficient and useful. Eventually, the possession of the technical documentation is economically profitable for the companies.

The visual designing is one of the methods, which may help to present the information in a more effective and attractive way for the humans. The time to operate the information may be reduced. It was decided to accelerate the process of the documentation via inserting the UML diagrams, including UML class diagrams with the opportunity to edit and combine them with the source code of the project.

Eventually the program with the possible user interface has been made for the creation and editing the UML class diagram, that contains the data about the project and comments for the source code. The current solution is the “bridge” between source code and documentation and simplifies the process of commenting. Now it is not necessary to remember or search for the commands of the documenting at the source code and try to keep the style. The dashboard of the solution has the diagram, where the user may write the description of each class, method, attributes and other elements of the code. The employee needs to think and implement only the content and not the formatting.

One of the advantages is the usage of the program on the phase of designing the project. The template of source code with already written comments can be created automatically.

The programming language: C++, IDE: QT Creator, libraries for the 2D graphics.