

ABSTRACT

This thesis deals with comparison of major paradigms for application development, namely procedural, object oriented and functional paradigm.

First chapter consists of brief history of application development with emphasis on the paradigms being used.

Second chapter introduces main principles and constructs, which are these paradigms based on. For some of which, especially the more complicated ones, examples are included to facilitate easier understanding of the subject.

The thesis also contains analysis of existing projects, which are using described paradigms and model implementation of simple application using each of given paradigms.

This whole thesis focuses on comparison of the described paradigms and differences among used principles and constructs. The advantages and disadvantages of analyzed paradigms for different types of projects are discussed in chapter four.

Based on conclusions of this paper, it is best to use procedural paradigm for development of simple and small projects. For more complex projects of larger scale, it is better to use object-oriented paradigm. Functional paradigm could be used for any type of project, but it has higher requirements for the experience and level of abstraction of the developer who implements the project.

KEYWORDS

Paradigm, programming, application development, procedural, object oriented, functional