## **RESUME OF M.Sc. THESIS**

## Topic: Tool for database design and modeling CWD4ALL Graduate: Stefka Kanova, fak. Nº M-21191, subject "Applied Mathematics"

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The contemporary business applications use huge and complicated databases, which makes using tools for database modeling and design absolutely necessary. The goal of the present thesis is to investigate and to apply in real models one such tool - CWD4ALL.

In the elaboration data model is analyzed – submodels, which compose it, objects, which they include, relationships and transformations between them, as well as the steps in their development. The concept of Relational design is represented – an intermediate unit between Logical and Physical design. A method for modeling business functions of particular system is shown – via Process model.

Since almost every tool for data management and analysis represents metadata in different way, the support of widespread standard for metadata exchange such as Common Warehouse Metamodel (CWM), which will make the developed models portable in different platforms, is important. In the thesis the stage of support of CWM from CWD4ALL is analyzed.

At the end CWD4ALL is applied in two real models, by developing Logical, Relational, Multidimensional and Process model. As a result possible directions for development of the tool are defined in order to extend the supported functionality and to improve the visual interface.