LEVEL 0 SUMMARY TEMPLATE

Instruction

This summary will be shared with L1, L2 and L3. Keep in mind that these levels do not have a full understanding of the subject. Try to write something easy to understand but not simplistic. Your summary should explain the main contribution of the paper with your own words. Furthermore, you can use simple examples, if necessary, to better explain the main ideas. Your grade will take into account the quality of your summary, the formal English language in which it has been written, and whether it helps the levels above in their own work.

Name of student:

DEVARIEUX Lucas

Name of your Level 1:

GONCALVES MELIM Maria Lolita

Source (e.g. scholars.google.com):

Cánovas Izquierdo, J. L., & Molina, J. G. (2009, June). A domain specific language for extracting models in software modernization. In *European Conference on Model Driven Architecture-Foundations and Applications* (pp. 82-97). Berlin, Heidelberg: Springer Berlin Heidelberg.

https://link.springer.com/chapter/10.1007/978-3-642-02674-4_7

Paper title:

A Domain Specific Language for Extracting Models in Software Modernization

Keywords specific to the paper:

- Domain-specific language (DSL)

- Software modernization
- Model extraction
- Model-driven architecture (MDA)
- Software engineering
- Legacy systems
- Code analysis
- Reverse engineering
- Model transformation
- Software migration

Summary of the main contributions:

- Context and Motivation:

The paper addresses the challenge of modernizing software systems, particularly those that are based on legacy technologies or outdated architectures. Software modernization aims to update these systems to meet current requirements and technological standards.

- Need for Model Extraction:

During the process of software modernization, it's often necessary to extract and analyze models from existing codebases. These models help in understanding the structure, behavior, and dependencies of the software system, which is crucial for making informed decisions during modernization efforts.

- Introduction of a Domain-Specific Language (DSL):

The authors propose a DSL specifically tailored for the extraction of models from existing software systems. DSLs are designed to address the needs of a particular domain or problem space, making them well-suited for tasks like model extraction in software modernization.

- Features and Capabilities of the DSL:

The paper likely discusses the features and capabilities of the DSL in detail. This may include the syntax and semantics of the language, its expressiveness, and how it facilitates the extraction of various types of models from software artifacts.

- Application and Case Studies:

The authors may provide examples or case studies demonstrating the application of the DSL in real-world software modernization projects. These examples help illustrate how the DSL can be used effectively to extract models and support decision-making processes.

- Evaluation and Discussion:

The paper likely evaluates the effectiveness and usability of the proposed DSL. This evaluation may include comparisons with existing approaches, discussions on the strengths and limitations of the DSL, and suggestions for future improvements or research directions.

The paper contributes to the field of software modernization by introducing a domain-specific language tailored for model extraction, which can enhance the efficiency and effectiveness of modernization efforts.