## Software Component Technology Group

## Semester Project Interaction with Ownership Graphs

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**Background:** The Software Component Technology group has developed the Universe type system. It is an extension to the Java type system that allows the programmer to perform aliasing and dependency control in a flexible way.

The goal of this semester project is the development of two programs. The project runs parallel to a master thesis, which generates (out of a normal Java program) an ownership graph and a file with the Universe type annotations for the Java program. The first program is used to merge the Universe annotations with a Java file. The second program should visualize the ownership graph and allow the user to interact with the ownership graph.

## The main parts of this project are:

- 1. Insertion of the annotation information into the original Java file resulting in a UTS Java file.
- 2. Visualization of the generated ownership graph with a focus on easy readability and flexible interaction.
- 3. Providing functionality for interaction and modification of the ownership graph e.g. removing or inserting annotations.

A written report and an oral presentation will complete the project.

## Contact Information

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