Linnéuniversitetet
Linnaeus University

Degree Project Proposal
Department of Computer Science

Thesis Topic	**Defining Implementation Processes For a Methodolgy**
Degree level	Bachelor/Master
Company	None
Description	Autonomic Software Product Lines Engineering (ASPLe) is a novel methodology that provides process support to design and develop product lines of self-adaptive systems with systematic reuse. It is comprised of three main processes: 1) ASPL Domain Engineering, 2) Specialization, and 3) Integration. Each of these processes is further composed of four subprocesses namely 1) requirements engineering, 2) design, 3) implementation, and 4) testing subprocesses. First two of these four subprocesses have been already defined, while the last two processes need to be defined. This thesis focuses on the implementation process and requires work to define, apply, and evaluate the implementation process in association with the other ASPLe processes.
Tasks	The degree project involves following major tasks: • Extending the ASPLe methodology by defining Implementation subprocesses • Identify and compare programming languages, tools, and techniques, which are suitable for the development of SASS • Demonstrate and evaluate the defined subprocesses by implementing example systems using the ASPLe methodology
Requirements	• 4DV610, Adaptive Software Systems or knowledge of SASS • Strong programming skills in Java or any other language that supports development of dynamic software systems.
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