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Exercise 1

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1.1   Task: Develop a Metric for "Readability"

Develop a calculated, precise metric (cf. with lecture slides) for readability of code on method-level. The goal of the metric is to indicate how easy / fast it is to get the intent of a method.

a) Proceed systematically as presented in the lecture and write down your results in the provided metric proposal template.
b) How should the metric be interpreted?
c) Evaluate your metric by applying it to the example code and discuss the evaluation.

1.2. Task: Develop a Quality Model for Theses

Develop a quality model for bachelor- and master theses. Dimensions which should be included in the quality model are a) process and working behavior, b) thesis report and, c) source code artefacts.

a) Develop at least two characteristics for each dimension and explain each one of them in a few sentences.
b) Develop at least three sub-characteristics for each characteristic and explain each one of them in a few sentences. You don't need to specify any metrics!
c) Visualize your model in an appropriate form.
d) Propose an aggregation formula for the overall assessment based on the (sub-)characteristics of your quality model. The overall assessment should result in a grade from 1.0 to 5.0. Explain and justify your proposal.
e) Implement your Quality Model as a Spreadsheet (Excel/OpenOffice). We would like to ask you to use the templates provided in the L²P room for answering the
a) exercises.

Your results must be handed in as a single PDF file or as a compressed ZIP file containing all necessary files and data named „SQA2019_AssignmentX_GroupX.zip"; replace the X with your group identifier.
Your submission should be submitted via RWTH Moodle.