Software Engineering

Software Metrics

3 Ba INF 2018-2019

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1 Practical

- Deadline: **December 16, 23u55**

2 Context

To control the quality of our product we need some measurable statistics which we can use to assess the quality. Using these metrics we are able to let programs automatically determine some possible issues in the code without having to manually check every line of code.

3 Assignment

1. Function Point Analysis
   (a) On Blackboard you can find an introduction to Function Point Analysis, read this document first.
   (b) Use the requirements from the Introduction to identify the following program characteristics:
   - External Inputs
   - External Outputs
   - Inquiries
   - External Interfaces
   - Logical Files

   fill out the information on slide 10.26 (Function Points) to calculate the Unadjusted Function Points (UFP). Multiply this number with the Complexity Factor (CF) (cfr slide 10.29). Next, the Adjusted Function Points (AFP) can be calculated by AFP = UFP * CF.

(c) What is the estimated amount of lines it should take to program the system (#LOC/AFP = 46 for Java).

2. Use the tool PMD (`http://pmd.sourceforge.net/eclipse/`) for Eclipse and CodeCity (`https://wettel.github.io/codecity.html`) to analyze our source code. First read the documentation and then apply it to the kassa project.

   (a) Use the returned reports to discuss some issues in the code.