Stream Programming

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Lecture Introduction — 26.02, 2017

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1 Acknowledgements

This lecture notes was made using notes provided by Adam Grygielski.

2 Overview

In this lecture we discussed contents of the lectures and scala programming language.

3 Contents

Class consists of lectures and laboratories. Grade is calculated using formula

$$Grade = 0.4 * Lecture + 0.6 * Lab$$

Topics of the lectures include:

- 1. Introduction to Scala (5 lectures)
- 2. Stream processing, stream architecture, Data Stream models
- 3. Sampling approaches to data streams
- 4. Frequency counter algorithms
- 5. Filtering streams
- 6. Stream databases
- 7. Application of stream processing

Literature As a suggested reading book "Programming in Scala" by M.Oderski, L.Spoon and B.Venners was suggested.

4 Scala

Some basic facts about Scala. The name comes as an abbreviation of "Scalable Language". It is a type-safe, multi paradigm language. It means it can be used as a functional language, as well as an object oriented one. Typical environments for Scala development are Eclipse or Intellij Idea.