Functional programming

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What is this course about?

- Haskell
- Pure functions
- Lazy evaluation
- Wholemeal programming
- Using types to your advantage
- Functional abstractions
- λ-calculus
- Combinatory logic
- Compilation and execution of functional languages
- GHC internals

Organization

Structure

- 16 weeks, 2 classes per week
- 3 modules
  - Functional programming in Haskell (4 weeks)
  - Functional abstractions (8 weeks)
  - Functional models of computation (4 weeks)
- ~10 homework assignments (10 points each)

https://nsu-syspro.github.io/courses/haskell/

Organization

Grading

- Final grade is assigned either based on points for homework assignments
  - **A** — 8+ in each homework
  - **B** — 7+ in each homework
  - **C** — 6+ in each homework
- Or by passing final theory test comprising
  - 2 random questions from different modules
  - 1 practical exercise similar to tasks from homework assignments
- Students wishing to improve grade based on homework points may pass theory test instead
  - In that case their grade from theory test will be the final grade

Q&A