

Functional programming

Ivan Trepakov

NSU Sys.Pro

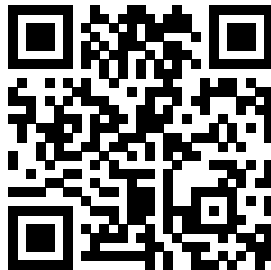
What is this course about?

- 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



Structure

- 16 weeks, 2 classes per week
- 3 modules
 - Functional programming in Haskell (6 weeks)
 - Functional abstractions (6 weeks)
 - Functional models of computation (4 weeks)
- ~10 homework assignments (10 points each)



<https://sys.pro/courses/haskell/>

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