

# C++ Advanced

## Course Overview



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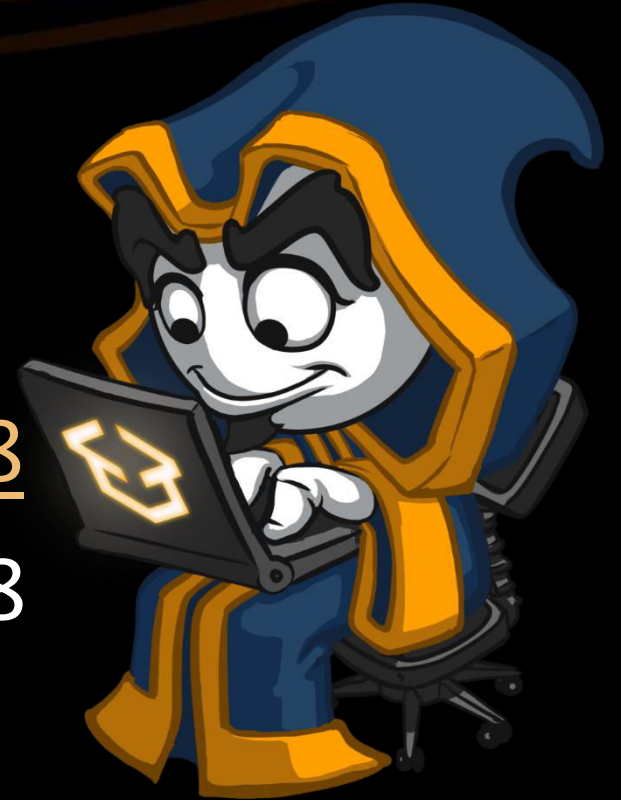
A guy that knows C++



- Teaches concepts specific to C++ and OOP in it
  - Focuses on the features, tools, and pitfalls of C++
  - Mostly the C++11 standard (later standards are not core changes)
- Introduces concepts with their usages and good practices
  - Gives basic code organization knowledge and skills
  - Does NOT focus on algorithms and programmatic thinking
  - Does NOT go into OOP design patterns or large-codebase design
- Requires understanding of functions, STL, Classes & Objects

# Curriculum (1/2)

1. C++ Pointers and References – 3 Sep 2018
2. Memory Management – 10 Sep 2018
3. Exercise – 17 Sep 2018
4. Advanced C++ Class Members – 26 Sep 2018
5. Code Organization & Templates – 1 Oct 2018
6. Exercise – 8 Oct 2018
7. Destructors, Copy-Assignment, Construction – 15 Oct 2018



# Curriculum (2/2)

8. C++ OOP – Inheritance and Polymorphism – 22 Oct 2018
9. C++ OOP – Pure Virtual Members – 29 Oct 2018
10. Exercise – 5 Nov 2018
11. Exam Preparation – 12 Nov 2018
12. Exam\* – 18 Nov 2018 (09:00 – 15:00)
13. "Retake" Exam\* – 2 Dec 2018 (09:00 – 15:00)

\* Can attend first, second, or both exams (to attend both you pay an additional tax)

# Homework

- 4-5 programming tasks per lecture, submitted to Judge system
  - Mostly cover lecture
  - Deadline: 1 day after next lecture (except for lecture 3)
- Test on each lecture with 10 short, single-choice questions
  - 20 minutes per test
  - Can be taken only once
  - Active from day after lecture to end of day before next lecture



# Exam

- 4 programming tasks covering the entire course, 6 hours
- Conducted on-site at SoftUni (no online exam)
- Solutions submitted to the Judge system
- Allowed to use ANY materials available
- NOT allowed to:
  - Communicate with anyone inside or outside the exam hall
  - Copy or discuss other students' solutions

# Course Results

- Exam(72) + Judge Homework(20) + Tests(8) = 100 Max points
- Getting a certificate – 65 points or more (grade 5.00)
- Passing the course – 30 points or more (grade 3.00)
- Other requirements:
  - Don't cheat on exams
  - Don't copy other students' homework
  - Be nice to fellow students 😊

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Questions?