Poznan University of Technology

Object Oriented Programming

Jakub Piotr Hamerliński

Agenda

- 01. About me
- o2. Topics
- o3. How to pass?
- o4. Sources
- 05. Contact and Q&A
- o6. Tasks
- 07. "Homework"

"Would I rather be feared or loved? Easy – both. I want people to be afraid of how much they love me."

Michael Scott



About me

About me

My name is Jakub Piotr Hamerliński, M.Eng. I'm a DevOps engineer passionate about cybersecurity and cryptography.

Pronouns: he/him/his.

My GitHub | My LinkedIn



Topics

Topics

- 01. Introduction
- 02. Git usage and open source
- o3. Language basics
- 04. Class, attribute
- o5. Method, object
- o6. Constructor
- 07. Interface
- o8. Exception
- og. Testing
- 10. Decorator
- 11. RAII
- 12. Other design patterns

How to pass?

How to pass?

- o1. Exercises during classes and work in the classroom + tests/quiz.
- o2. Project.
- o3. Extra points for open source contribution.

Lessons typically will start with topic introduction. Then students will perform small and simple tasks which will be reviewed and graded before end of class. After teacher's approval, students must commit their solution.

$$\mathbb{X}=0.5\times\mathbb{E}+0.5\times\mathbb{P}$$
 where \mathbb{E} means average from excercies, and \mathbb{P} means grade from the project

Each of the components of the grade must be positive.

How to pass? - Project

Project must obey all rules presented up to (including) Decorator design pattern. Student must prepare 5 min presentation (with slides) which will answer following questions:

- o1. What have you created?
- o2. Did you have any problems?
- o3. Did you learn anything new?
- o4. What could be improved?

Student proposes project's topic which must be accepted by teacher.

Students from groups 1, 2, and 3 will present their projects on 29th May. Deadline: 2023-05-28 23:59:59 Students from group 4 will present their projects on 30th May. Deadline: 2023-05-29 23:59:59

All code and presentation must be committed to your public repository to folder **project** before deadline.

Object Oriented Programming How to pass?

2 absences from classes allowed. Each subsequent one must be made up.

Sources

Object Oriented Programming Sources

Great books about OOP:

- o1. David West, Object Thinking, Microsoft Press, 2004
- 02. Yegor Bugayenko, Elegant Objects (Volume 1), CreateSpace, 2016
- 03. Yegor Bugayenko, Elegant Objects (Volume 2), CreateSpace, 2017

My slides (Work in progress): https://github.com/hamerlinski/slides-oop

Contact and Q&A

Object Oriented Programming Contact and Q&A

Please contact me using jakub.hamerlinski@cs.put.poznan.pl

Questions?

Tasks

Tasks

- o1. Create GitHub account (if you don't have it yet) and repository.
- o2. Fill form.

Task - GitHub account creation + repo

1.1 Create GitHub account using following guide: Create a GitHub account to use with Visual Studio
1.2 Create repository oop-put-course from the template using following guide:
Creating a repository from a template

Owner * hamerlinski •	Repository name / oop-put-course	
Great repository names are short and memorable. Need inspiration? How about cuddly-computing-machine? Description (optional)		
O _ Private	internet can see this repository. You choose who can commit. o can see and commit to this repository.	
Copy all branches from	35 n hamerlinski/oop-put-course-template and not just main.	
(i) You are creating a p	oublic repository in your personal account.	
Create repository fr	rom template	

Task - form

o2. Fill form: tinyurl.com/4wab33bw



"Homework"

"Homework"

Prepare for next lesson by reading and analyzing slides oo-cpp-basics available at https://github.com/hamerlinski/slides-oop/tree/feature/refactor-slides-for-bioinformatics/slides/oo-cpp-basics

Thank you

Feel free to reach me via LinkedIn

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