Poznan University of Technology
Object Oriented Programming

Jakub Piotr Hamerliński

Object Oriented Programming

Agenda

01. About me
02. Topics
03. How to pass?
04. Sources
05. Contact and Q&A
06. Tasks
07. "Homework"

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

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Topics

01. Introduction
02. Git usage and open source
03. Language basics
04. Class, attribute
05. Method, object
06. Constructor
07. Interface
08. Exception
09. Testing
10. Decorator
11. RAII
12. Other design patterns

How to pass?

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How to pass?

01. Exercises during classes and work in the classroom + tests/quiz.
02. Project.
03. 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.

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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:

01. What have you created?
02. Did you have any problems?
03. Did you learn anything new?
04. 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.

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How to pass?

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

Sources

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Sources

Great books about OOP:

01. 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

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Contact and Q&A

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

Questions?

Tasks

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Tasks

01. Create GitHub account (if you don’t have it yet) and repository.
02. Fill form.

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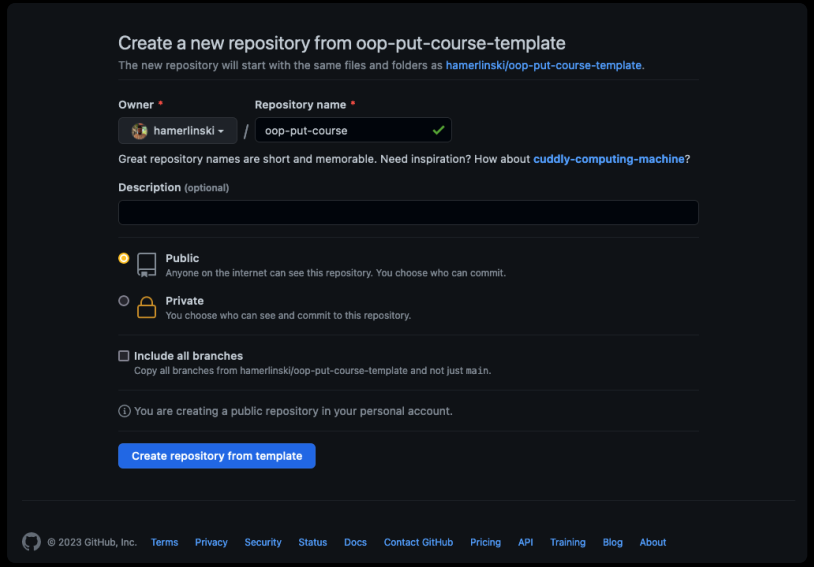
Task - GitHub account creation + repo

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



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Task - form

02. Fill form: tinyurl.com/4wab33bw

"Homework"

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"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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