

Poznan University of Technology
Object Oriented Programming

Jakub Piotr Hamerliński

Object Oriented Programming

Agenda

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



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

Object Oriented Programming

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. RAIL
12. Other design patterns

How to pass?

Object Oriented Programming

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.

Object Oriented Programming

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.

Object Oriented Programming

How to pass?

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

Tasks

Object Oriented Programming

Tasks

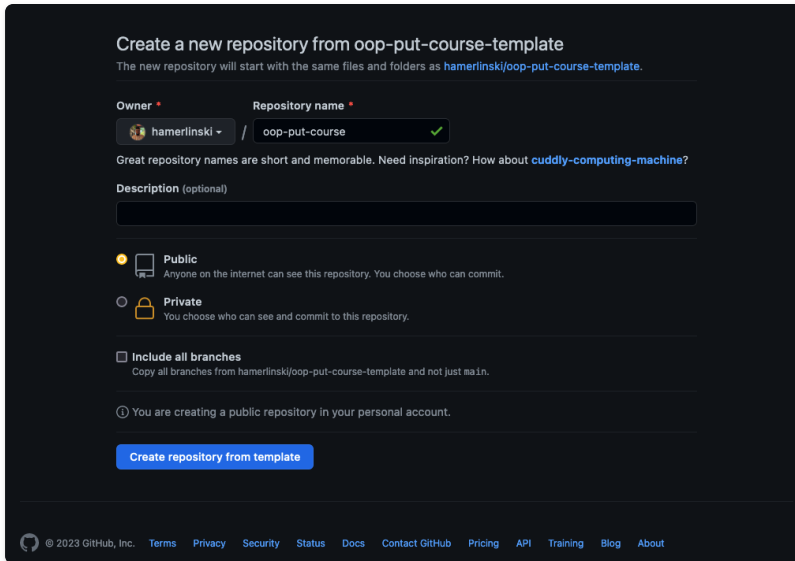
01. Create GitHub account (if you don't have it yet) and repository.
02. Fill form.

Object Oriented Programming

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](#)



The screenshot shows the GitHub interface for creating a new repository from a template. The title is 'Create a new repository from oop-put-course-template'. Below the title, it says 'The new repository will start with the same files and folders as hamerlinski/ooop-put-course-template.' The 'Owner' is set to 'hamerlinski' and the 'Repository name' is 'oop-put-course'. A note states 'Great repository names are short and memorable. Need inspiration? How about cuddly-computing-machine?'. There is a 'Description (optional)' field. The 'Public' option is selected, with a note 'Anyone on the internet can see this repository. You choose who can commit.' The 'Private' option is also visible, with a note 'You choose who can see and commit to this repository.' There is a checkbox for 'Include all branches' with a note 'Copy all branches from hamerlinski/ooop-put-course-template and not just main.' A note at the bottom says 'You are creating a public repository in your personal account.' A blue button 'Create repository from template' is at the bottom. The footer shows the GitHub logo, copyright notice, and links for Terms, Privacy, Security, Status, Docs, Contact GitHub, Pricing, API, Training, Blog, and About.

Create a new repository from oop-put-course-template

The new repository will start with the same files and folders as hamerlinski/ooop-put-course-template.

Owner ^{*} Repository name ^{*}

hamerlinski / oop-put-course ✓

Great repository names are short and memorable. Need inspiration? How about [cuddly-computing-machine?](#)

Description (optional)

☒ Public
Anyone on the internet can see this repository. You choose who can commit.

☐ Private
You choose who can see and commit to this repository.

☐ Include all branches
Copy all branches from hamerlinski/ooop-put-course-template and not just main.

① You are creating a public repository in your personal account.

Create repository from template

© 2023 GitHub, Inc. [Terms](#) [Privacy](#) [Security](#) [Status](#) [Docs](#) [Contact GitHub](#) [Pricing](#) [API](#) [Training](#) [Blog](#) [About](#)

Object Oriented Programming

Task - form

02. Fill form: tinyurl.com/4wab33bw



Sources

Object Oriented Programming

Sources

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

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](#)

Contact and Q&A

Object Oriented Programming

Contact and Q&A

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

Questions?

Thank you

Feel free to reach me via [LinkedIn](#)

Fin