

Lab 4 - Deadline: Lab 5 (same groups of minimum 3)

Themes laboratory:

1. Design Patterns
2. Modelling
3. Team coordination, negotiation
4. Working with Github

Problem 1 [20 points]

On the theme set by the scientific coordinator of the project get started implementing basic classes: Only declarations attributes, methods and relationships between classes. Without methods implement and functionality! (All names will be in English). It will be mandatory that each member of the group to implement at least two design patterns as sources project to be put on Github. In determining the score will take into account the correct identification of elements, their relationship and complexity of results. **Do not forget** that you ask to do AOP, which will be presented to the next labs (Eclipse framework is recommended). *In certain situations, it is possible for design patterns to be included in the frameworks used (in such situations you should be aware of these design patterns and identify them correctly).*

One person from the team will coordinate the team and will know what the members have done and will make a short presentation of components made by them. Also, this person will establish and negotiate points that deserve each team member.

Bonus up to 4 points for those that capture as many designs' patterns.

Bonus up to 4 points for those who use AI to solve laboratory tasks. Specify how you used AI to solve the tasks (point the advantages/disadvantages of using AI in solving the tasks).

Problem 2 [15 points] – optional

Model one of the components using EMF or something else. (**All names will be in English**) For this you can use the methods presented at course in Eclipse modeling or other methods available for other platforms. This part of modeling is done in teams of 2 people. In determining the score will take into account the complexity of the models.

Optional problems and bonus points will not be considered in values Max_Grade_Lab or in Max_Grade_Project.

Links

GRASP: <https://edu.info.uaic.ro/ingineria-programarii/Scoala/2024/SE/Courses/SE05.pdf>

GOF (Creational Patterns): <https://edu.info.uaic.ro/ingineria-programarii/Scoala/2024/SE/Courses/SE06.pdf>

Advanced Software Engineering Techniques – Lab04

GOF (Structural Patterns): <https://edu.info.uaic.ro/ingineria-programarii/Scoala/2024/SE/Courses/SE07.pdf>

GOF (Behavioral Patterns): <https://edu.info.uaic.ro/ingineria-programarii/Scoala/2024/SE/Courses/SE08.pdf>