

Object Oriented Programming

Project assignment - Implementation of a simple object-oriented
program based on your own design

2023/24

Goals

- Design and implement a simple object program.
- Apply concepts presented during lectures.
- Formulate and implement interactions between objects of different classes.
- *You must earn at least five points out of a possible nine for the project to receive credit.*

1. You will create your own assignments (other than those from lectures), the project must include at least seven classes.
2. The project will include the design described in text form and supplemented by a UML class diagram (or other diagram illustrating the relationships between classes).
3. The project will contain compositions (hierarchies) of objects.
4. The project will incorporate and use overloaded methods.
5. The project will contain and use the class as an object.
6. The project will contain and use an inheritance hierarchy containing at least three classes.
7. Inheritance will include and use both extensions (of data and methods) and behavior change using late binding.
8. The inheritance hierarchy will contain a pure abstract class.
9. The project will use polymorphism (polymorphic assignment and polymorphic data structure).
10. When the project starts, at least a few dozen objects will be created, including objects of all declared classes (except abstract ones), and the results of the tasks performed by the objects will be presented in the console listing.