Object Oriented Programming

MEEC - 2016/17

Lecturers

- Lectures and labs (responsible)
  Alexandra Carvalho
  email: alexandra.carvalho@tecnico.ulisboa.pt
  homepage: **http://www.lx.it.pt/~asmc/**

Evaluation method

- **Final exam** [8 points out of 20]

- **UML/Java project** [7 points out of 20]
  - Team project in groups of 3 students.
  - With oral discussion.
  - UML – 1.5 point; Java – 5.5 points.

- **Problems** [5 points out of 20]
  - 2 laboratory evaluations, both done individually in a laboratory.
  - Each evaluation takes 60 minutes.
  - 1st lab evaluation – 2 points; 2nd lab evaluation – 3 points.

There are no minimum mark requirements!

Important dates

April	3 – 7	1st Laboratory evaluation Project assignment
May	13	Project report
May	15 – 19	2nd Laboratory evaluation
May	22 – 2	Project oral discussion
June	23, 9h	1st Exam
July	4, 18h30	2nd Exam

Program

1. OO history and background.
2. UML modelling: classes, objects, methods, inheritance, associations, interfaces, packages and exceptions.
3. Java programming: classes, objects, methods, inheritance, associations, interfaces, packages, exceptions, containers, comparators, iterators, input/output and graphical programming with Swing.
4. SAX and DOM tools for XML analysis.
5. HTML, Java applets and JavaScript.

Bibliography

- **Recommended Bibliography**
  - Grady Booch, James Rumbaugh, Ivar Jacobson
    The Unified Modeling Language User Guide
  - Ken Arnold, James Gosling
    The Java Programming Language
- **Optional Bibliography**
  - Martin Fowler, Kendall Scott
    UML Destilled: A Brief Guide to the Standard Object Modeling Language
  - Bruce Eckel
    Thinking in Java

Tools

- **[Java] Java SE JDK (last version)**
  http://www.oracle.com/technetwork/java/javase/downloads/index.html

- **[Java IDE] Eclipse, for Java developers (last version)**
  http://www.eclipse.org/downloads/eclipse-packages

- **[UML modelling] Visual Paradigm (with IST license)**
  https://delta.ist.utl.pt/software/visual_paradigm.php

Alternative tools (for UML modelling or Java IDE) can be found in the laboratories' section, in OOP web page!