



UNIVERSITÀ DEGLI STUDI DI TRENTO

Dipartimento di Ingegneria
e Scienza dell'Informazione

Distributed Systems 1

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A Few Questions

- How many of you...
 - are students in Computer Science vs Telecommunication Engineering?
 - are in the EIT program?
 - have good command of the Java language?

Instructors and Teaching Material

- ***Instructor***

Gian Pietro Picco (gianpietro.picco@unitn.it)

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Dip. di Ingegneria e Scienza dell'Informazione (DISI)

v. Sommarive 5, Povo tel. 0461 28 3953 (room 235, Povo 1)

***Office hours are upon appointment only,
to be set up via e-mail***

- ***Teaching assistant***

Davide Vecchia (davide.vecchia@unitn.it)

(room 248, Povo 1)

- ***Course Web site***

www.esse3.unitn.it

didatticaonline.unitn.it (Moodle)

lecture notes and other material, textbooks, tools, schedule, exams, ...

Administrivia

- Course schedule:

Monday ***14:30 – 16:30*** ***A108***

Tuesday ***9:30 – 11:30*** ***A208***

- Check Esse3/Moodle for changes, updates, and schedule
- Lectures and labs are both held in class
 - make sure to always have your laptop, properly configured
- The course is offered in English, therefore...
 - ... material, lectures, exams, **questions** are in English
 - However, don't let this stop you: if you have a question feel free to ask in Italian, and I will rephrase for the class
 - Please interrupt if you don't understand!!!
- Prerequisites:
 - Basic knowledge of computer networks, programming, computer architectures, concurrency

Getting a Grade: Written Exam & Project

- Written exam (**25 points**)
 - Goal: verify that the student has learned the material presented in class
 - Covers **all** the topics presented
 - Theory questions, exercises, no programming
- Project (**6 points**)
 - Goal: verify that the student is able to program
 - a small application or distributed algorithm ...
 - ... with a given technology
 - **Must** be implemented by a team of two people
 - ... but grades are individual, based on the discussion
 - Can be presented also outside exam sessions
 - In any case you need to agree a date with the instructors well in advance (e.g., 2 weeks)
- **Written exam and project discussion can take place in any order!**
 - Although it is obviously recommended to study the material before undertaking the project

Projects & Plagiarism

- Sometimes it happens that a student team turns in a project that is “very similar” to some other project already presented by other students
- You are strongly advised not to copy your project from or provide your project to others:
 - You are going to get caught, and **very easily** so
 - You are going to get in trouble
 - e.g., have a nice chat with the Director or even the Rector
 - You are going to spend more time and stress in “redoing” your project, than in trying to have it right in the first place
 - Last but not least, studying at the University is about **learning**, and not about learning how to cheat
- If you have problems with completing the project, come talk to the instructor
 - An incomplete project is likely to be evaluated more positively than a plagiarized one...

Textbooks

- The slides should be sufficient to prepare for the exam; however, if you want a textbook...
- Base textbook:
 - A.S. Tanenbaum, M. van Steen. *Distributed Systems: Principles & Paradigms*. Prentice Hall
 - A good, easy-to-read book about distributed systems at large
 - Covers several (but not all) topics presented
- In alternative (only for who really wants to see additional material):
 - G. Coulouris, J. Dollimore, T. Kindberg. *Distributed Systems: Concepts and Design*. Addison-Wesley
- Additional references (e.g., scientific papers) will be provided during the course

Why Distributed Systems 1?

- A Distributed Systems 2 course is also offered, with advanced topics
 - e.g., advanced fault-tolerance protocols, big data distributed processing, peer-to-peer systems, epidemic protocols, BitCoin, ...
- Distributed Systems 1 is a pre-requisite to attend Distributed Systems 2
- The instructor of Distributed Systems 2 is Prof. Alberto Montresor