

Network Programming

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Course Introduction

Goals

- Be familiar with the principles of networking
 - Routing, protocols...
- Write networked programs
- Do the project
 - and (hopefully!), pass the exam

Content

- Concepts in Networking
- Socket programmings
- Mini Labwork

Format

- 4 ECTS = 40 hours
- Lecture / Practical work : 24h / 16h
- Prerequisites: C Programming
- Environment: Linux/Mac (Windows is NOT used)
- Assessment:
 - Project / Final Exam

Policy

- Collaborations!
 - During exercises
 - Not in the project
 - Nor in the final exam
- **All** students finish, we move to the next exercise

Labwork

- Several C Programs
 - Understand what you learnt
 - Show your ability to apply it to new problems
- Compilable on Linux/Mac
- Don't copy paste. I have checker tools ☺
- Should be well organized and well written

I will, in fact, claim that the difference between a bad programmer and a good one is whether he considers his code or his data structures more important.

Bad programmers worry about the code. Good programmers worry about data structures and their relationships.

- Linus Torvalds

Labwork

- Git : Version Control System
- Github
 - Initial repository and instruction
 - <https://github.com/SonTG/netprog2020>

	COMMENT	DATE
○	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
○	ENABLED CONFIG FILE PARSING	9 HOURS AGO
○	MISC BUGFIXES	5 HOURS AGO
○	CODE ADDITIONS/EDITS	4 HOURS AGO
○	MORE CODE	4 HOURS AGO
○	HERE HAVE CODE	4 HOURS AGO
○	AAAAAAA	3 HOURS AGO
○	ADKFJSLKDFJSDKLFJ	3 HOURS AGO
○	MY HANDS ARE TYPING WORDS	2 HOURS AGO
○	HAAAAAAAANDS	2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT MESSAGES GET LESS AND LESS INFORMATIVE.

Don't be lazy with your commit messages

Exams

- 3 sheets of A4 documents are allowed
- No laptop / mobile phone / internet
- No discussion, of course

References

- Books

- Computer Networks: A Systems Approach, 5th edition, by Larry Peterson and Bruce Davie
- TCP/IP Sockets in C: Practical Guide for Programmers, 2nd edition, by Michael J. Donahoo and Kenneth L. Calvert