# COURSE INTRODUCTION

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# Aims and objectives

- Students can
  - Design and build networking applications
- Network Application?
  - An application running on one host providing communication to another application running on a different host
- Design network application?
  - Depends on your applications' requirements and your own ideas
  - Architect: client-server or peer-to-peer
  - Transport protocol: TCP or UDP?
  - Design application protocol
    - a set of conventions governing the treatment and especially the formatting of data in an electronic communications system
    - How hosts installed network apps communicate each other.
    - Message exchange

# Language and environment

- C programming
  - Why using C? We have convenient languages such as Java, Python, C#, etc.
  - Answer: you need to understand the "truth" inside blackboxes. That's why you need 4-5 years in HUST, not 1-2 years in other IT centers.
- Environment: Linux
  - Ubuntu
  - Fedora
  - CentOS

# Schedules

- We have 15 weeks as a normal course
- The lecturer will introduce and/or demonstrate 6-7 weeks (not consecutive)
  - Each week, there will be weekly exercises and assignments need to be submitted on TEAM
  - Code similarity will be checked by lecturers
- Students form groups to do their own projects (2-3 students each project)
  - Each group needs to propose their project
  - There are 5-6 weeks that
    - The lecturer check the project design and progress, and help students to revise their original ideas if needed.
    - Each group will present their ideas/ project progress to the class 2-3 times (slides)
- Project presentation (last 3-4 weeks). Each group need to
  - Present the final result to the whole class (typytically using slides)
  - Demonstrate their network applications
  - Answer questions from the lecturers and other students
- Each group need to submit printed project report after project presentation

# Course assessment

- Progress (50%)
  - Assignments (Exercises)
  - Project progress including group presentations and lecturer's check
  - Attendance
- Final examination (50%)
  - Final presentation
  - Report

# QUESTIONS ?