

# Software Engineering Project

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# Goals

## Project

- ▶ Realistic software development experience
- ▶ Produce finalized application, usable and maintainable
- ▶ More programming experience

## Software Engineering

- ▶ Problems: large code base, large team, long time
- ▶ Various “solutions”:  
    methodology, design, coding techniques, tools. . .
- ▶ Fundamental concepts as well as some practical techniques

# Organization

## Lectures

- ▶ Principles, methodology, tools
- ▶ Design, testing, rigorous software development
- ▶ Tutorials on git, testing tools, etc.

## Project

- ▶ Complete software project, from design to release & demo
- ▶ State-of-the-art development methodology
- ▶ Mandatory project meetings whenever no lecture

# Practical details

## Grading

- ▶ Individual grade based on exercises: git, testing, design, etc.
- ▶ Group grade for each project: final result (code, tests, documentation) but also methodology (quality of group meetings and commit history) and defense

## Website

For day-to-day organization, and course material, watch this space:

`http://www.lsv.fr/~baelde/gl`

(Lecture 1)

# Your project

## Projects

- ▶ Groups of 3–4 students ( $\pm 1$  if needed)
- ▶ Based on tools freely available on linux (C411 machines)
- ▶ Code repository (e.g. git) visible by instructors and students
- ▶ Code hosting platform (e.g. github) with issue tracker, discussions, wiki, continuous integration

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## Proposals

- ▶ Choose one of five proposals (still room for creativity)
- ▶ Development guided (and evaluated) by requirements:
  - ▶ general requirements on the course webpage;
  - ▶ specific requirements in each project proposal.
- ▶ Organisation in two phases: secret goals for second phase