# Logiciel Libre TP 1 — Project Presentation

#### Stefano Zacchiroli zack@pps.univ-paris-diderot.fr

Laboratoire PPS, Université Paris Diderot

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## Evaluation — reminder

#### 🕽 exam

- TD : +0/+1/+2 bonus on the exam grade
  - exercises
  - short essays on selected topics, including external speaker interventions
  - to be submitted via DidEL
- project (mandatory, not CC)

#### Final note

- Ie session : 50% exam + 50% project
- 2e session : 50% exam + 50% project

Relevant code contribution to a relevant, existing, Free Software project.

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- ... Free Software project

- work individually or in pairs (binômes)
- no exceptions granted for groups > 2

## Step 1 — find a project you're excited about

- any Free Software project you like
  - must be licensed under a FOSS license, i.e., a license that is both OSI<sup>1</sup> and FSF<sup>2</sup> approved

2. http://www.gnu.org/licenses/license-list.en.html

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- try to find a match between your skills and the technologies used by the project (prog. language, framework, tools, etc.)
- tip (*non* mandatory) : choose a project that maintains a list of "easy hacks", "bugs for newcomers", etc.
- I've collected a list at (link also on the course page) https://openhatch.org/wiki/Easy\_bugs\_for\_newcomers

### Example

Debian, Django, Fedora, GNOME, KDE, LibreOffice, Linux Kernel, Mediawiki, Mozilla, Mozilla, OpenMRS, OpenOffice, OpenStack, Python, Snowdrift, Ubuntu, VLC, ...

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## Step 2 — learn the basics of the project

- how to obtain the code (e.g., VCS) of the current development version of the project
- how to build (dependencies, build instruction, README, etc.)
- how to install on your machine
- how to run on your machine

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- look for introductory development documentation

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- how to install on your machine
- how to run on your machine
- look for introductory development documentation
- try to make a tiny teeny modification
  - e.g., change a label in a UI element, print a debug message at some point, ...
- compile, install, run ← verify that your change is in

## Step 3 — look at pending issues

- Bug Tracking System of the project
- list of "easy hacks" maintained by the project (see before)
- feature requests by users (tip : only consider those that have been acknowledged by developers)
- "roadmap" documents (more difficult)
- try to reproduce bugs : do they affect your build of the development version too?

choose a task

### Step 4 — agree with me on a task

 without preliminary agreement with me, your task will not constitute a valid project

## Step 5 — get the job done locally

#### • fix the bug / implement the missing feature / etc.

that's the easy part :-)

## Step 6 — get your changes accepted upstream

- produce a patch / pull request / whatever is customary for the project you've chosen
- inform the developers of your work, attaching your changes
- convince them that your code is good and worth being integrated ("upstream") as part of the project code
- this might require several iterations during which you improve your code
- remember : upstream developers have the last word, it's your responsibility to convince them

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- remember : upstream developers have the last word, it's your responsibility to convince them
- if you hit a wall, go back to steps 1 or 3 and pick another project/task
  - hence, better start well in advance!

## Interlude — exclusion criteria

- do not use the fact this a university assignment as argument to convince upstream developers
- it will not work
  - in fact : it will likely work against you
- and if I find evidence of it, e.g. :

*"pour le cours de Logiciel Libre de M. Zacchiroli je dois contribuer un patch à votre projet, pourriez vous m'aider s'ils vous plaît?"* 

your project grade will be 0

• your *code* should be convincing, not your status as a student

### Step 7 — write a report

Length : 10 pages max.

The structure of the report is up to you, but it must contain at least the following information :

- background : chosen project, reasons for that choice
- technicalities : short technical description of the chosen project (programming lang., frameworks, tool, etc.)
- background : chosen task, reasons for that choice
- technical description of your work : what have you done? how?
- references to *public* evidence of your work : commits, patches sent to Bug Tracking Systems, mailing list threads, etc.
- evidence of the fact your work has been integrated upstream
- discussion : difficulties encountered, feedback, etc.

- there will be dedicated TP sessions to work on the project
- I'm available throughout the full process (both during dedicated TPs and outside of them) to give you feedback, hints, and advice for your specific project



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Stefano Zacchiroli (Paris Diderot)

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