### Master Thesis

Master on Libre Software (URJC) http://master.libresoft.es

Gregorio Robles, Jesús M. González Barahona

grex@gsyc.urjc.es GSyC/LibreSoft, Universidad Rey Juan Carlos

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# **GSyC**

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http://master.libresoft.es

### Administrative data

- Both semesters, 12 ECTS credits
- Teachers:
  - Gregorio Robles (grex at gsyc.urjc.es)
  - Departamento de Sistemas Telemáticos y Computación (GSyC)
  - Room 110 Departamental III (Fuenlabrada campus)
- Moodle course (please, join it as soon as possible): http://docencia.etsit.urjc.es/moodle/course/view. php?id=134

## Goals of the Master Thesis

Primary Goal of the Master Thesis

# To apply the lessons and practices learned in this master to a real problem

Secondary goal

To do it in one academic year

# Recommended paths

#### Case study

- Specific software sector
- Large project
- Ecosystem

from several points of view.

#### Development

(Small) development of software program in a community-like fashion

We are open to ways to link master thesis and Practicum.

#### Points of view

Community and goals to be presented by student and approved by mentor. LaTeX template will be provided.

The case study should have several points of view:

- History
- Philosophy
- Main stakeholders and important people
- Legal aspects
- Organization and community
- Technical, process, etc.
- Business models
- Interviews



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# Example I: LMS and libre software

#### LMS: learning management systems

- History
- (Philosophy)
- Main stakeholders and important people
- Legal aspects
- Organization and community
- Study of solutions
- Technical, process, etc.
- Business models
- Interviews Study Royce Solkware
- Use of LMS
- Literature



# Example II: The MySQL Ecosystem

MySQL is far more than a software product...

- History
- (Philosophy)
- Main stakeholders and important people
- Legal aspects
- Organization and community
- Companies
- Technical, process, etc.
- Business models
- Interviews
- Literature



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## Development

- Master thesis in the "traditional" way
- Software and objectives to be presented by student and approved by mentor. LaTeX template will be provided.
- Mind the dates! Creating software is more time-consuming than one usually thinks
- May have some of the previous parts from the recommended path
- It is not only about programming! There should be at least efforts to gain a community around the software
- Integration in an already existing project is possible
- Interactions with the community have to be documented

## Personal path

- We are open to other ideas
- Mind the dates!
- May have some of the previous parts from the recommended path
- Could be research on some topic
- Has to be presented by the student and approved by mentor.
   LaTeX template will be provided.

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#### **Evaluation**

- The output of the master thesis will be:
  - A report (mandatory): in LATEX, with a free license
  - A software (optional): with a free license, a repository, some website and other community-development tools
  - A video presentation (mandatory): up to 6 minutes, with a free license
- All this will be evaluated by a committee (lecturers and external expert)
- All materials will be published and publicized in the master website

# Looking for excellence!

The master thesis supposes the best opportunity for master students to show their acquired knowledge and abilities during the master

- Award to the best master thesis of the year (to be given in the graduation gala)
- If it is software, to be presented look at the "Concurso Universitario de Software Libre"
- Submission to scientific workshops and conferences is encouraged (and well seen)

#### Calendar

- 14444.10: Today
- 01.11: Deadline for proposals
- 15.11: Deadline for assignments
- June 2012: Defense
  - Important: A student has to have all other master subjects passed in order to defense his thesis!
- Other dates for the defense: November 2012, March 2013

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## Some references

- Master Thesis Moodle Course http://docencia.etsit.urjc.es/moodle/course/view. php?id=134
- Desarrollo de Proyectos de Software Libre (chapter 5)
   http://ocw.uoc.edu/
   informatica-tecnologia-y-multimedia/
   desarrollo-de-proyectos-de-software-libre/Course\_
   listing
- Introduction to libre software (book)
   http://curso-sobre.berlios.de/introsobre
- Concurso Universitario de Software Libre http://www.concursosoftwarelibre.org/