Course Organisation
LINGI 2255

2017–2018

Prof. Kim Mens

moodleucl.uclouvain.be

Course: LINGI2255

LINGI2255
Software Development Project

- 1st semester
- 6 ECTS
- 30h + 30h
- Master: INFO2M, SINF2M,SINF2M1
- Language: English

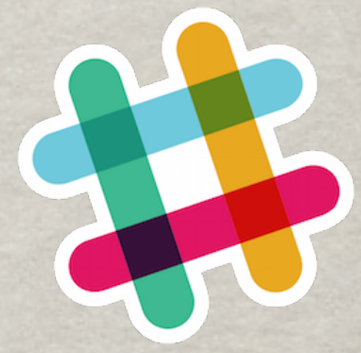
LINGI2255
Software Development Project

- Course website: (will open soon)

  - https://moodleucl.uclouvain.be/course/view.php?id=7599

  - official course announcements, deadlines and deliverables

- Slack:



  - We'll use Slack as our communication medium

  - Slack is a messaging app for development teams

  - https://lingi2255project.slack.com

LINGI2255
Software Development Project

- Teacher:
  - Kim Mens — kim.mens@uclouvain.be
- Assistants:
  - Michaël Saint-Guillain — michael.saint@uclouvain.be
  - Benoît Duhoux — benoit.duhoux@uclouvain.be
  - John Aoga — john.aoga@uclouvain.be
  - Xavier Gillard — xavier.gillard@uclouvain.be
  - Quang Minh Ha — quang.ha@uclouvain.be

LINGI2255
Software Development Project

- This project consists of the **development of a realistic application**, representative of a typical industrial software system, under semi-professional working conditions.

- The topic of the software system to be constructed is **proposed by a non-profit organisation** who participates in the organisation and evaluation of this course.

- The project will be carried out by **teams of 6 to 8 students**, each supervised by an assistant.

- **Communication** among team and with client is **crucial**.

LINGI2255
Software Development Project

Client:

- Non-profit organisation : Eureduka
- Product : https://www.oscar.education
- **Laurent Fourny** laurent.fourny@oscar.education
- Maher Chemseddine maher.chemseddine@masi.henallux.be
- **Robin Descamps** robin.descamps@student.uclouvain.be

Software Development Project 2017-18

Tentative Project Schedule (Courses)

week	course activity
1	Course introduction by teacher
	Presentation of case by client
	Technical presentation by client
2	*no course (legal holiday)*
3	Introduction to requirements phase
	Q&A session with client
4	Planning and architecture
5	Feedback on requirements documents from client
6	*Permanence and feedback with client*
7	*no course (legal holiday)*
8	show 1st prototype to client
9	*no course session planned (yet)*
10	*Permanence and feedback with client*
11	show 2nd prototype to client
12	*Permanence and feedback with client*
13	*Permanence and feedback with client*
14	Demo and defence of final product

Tentative Project Schedule (Sessions with client)

week	course activity
1	Course introduction by teacher
	Presentation of case by client
	Technical presentation by client
2	*no course (legal holiday)*
3	Introduction to requirements phase
	Q&A session with client
4	Planning and architecture
5	Feedback on requirements documents from client
6	*Permanence and feedback with client*
7	*no course (legal holiday)*
8	show 1st prototype to client
9	*no course session planned (yet)*
10	*Permanence and feedback with client*
11	show 2nd prototype to client
12	*Permanence and feedback with client*
13	*Permanence and feedback with client*
14	Demo and defence of final product

Project Phases

Project split in several **phases** of ~2 weeks

- **Phase 0** : **Getting acquainted** with case and technology (2 weeks)
- **Phase 1** : **Requirements** analysis (2 weeks)
- **Phase 2** : **Design** (2 weeks)
- **Phase 3** : **Implementation** of first prototype (2 weeks)
- **Integration** **Merge** and integrate prototypes (1 week)
- **Phase 4** : **Implementation** of second prototype (2 weeks)
- **Integration** **Merge** and integrate prototypes (1 week)
- **Phase 5** : **Reporting** and project defence (2 weeks)

Expected Deliverables

- Project split in several **phases** of ~2 weeks
  - **Phase 0** : Database model
  - **Phase 1** : Requirements documents (10 pages)
  - **Phase 2** : Design documents
  - **Phase 3** : First prototype
  - **Integration** Prototype integrated and merged with others
  - **Phase 4** : Second prototype (2 weeks)
  - **Integration** Prototype integrated and merged with others
  - **Phase 5** : Final reports, manuals, presentation, …

Project Schedule (deadlines)

	W	phase	deliverable		deadline	
0	1-2	getting acquainted	**database model**		end W2	
1	3-4	requirements	**requirements document**		end W4	10%
2	5	design	**design documents**		end W6	5%
3	6-7	first prototype	**1st working prototype**		end W7	20%
I	8	integration	**prototype integrated**		end W8	
2	9	design	**design documents**		end W9	5%
4	9-1	second prototype	**2nd working prototype**		end W10	20%
I	12	integration	**prototype integrated**		end W11	
5	12	reporting	**documentation**		end W12	15%
	13	final product	**user manual**	**code, tests**	end W13	
	14	demo & presentation	**project**		W14	25%

Project Evaluation

Continuous evaluation:

- Intermediate prototypes : **40%** (20% each)
- Intermediate documents : **20%** (requirements and design documents)
- Final reports and documentation : **15%**
- Presentation and demonstration of the final product : **25%**
  - delivered system, documentation, tests, presentation, demonstration, internal product quality, product usability, team organisation, client appreciation, …

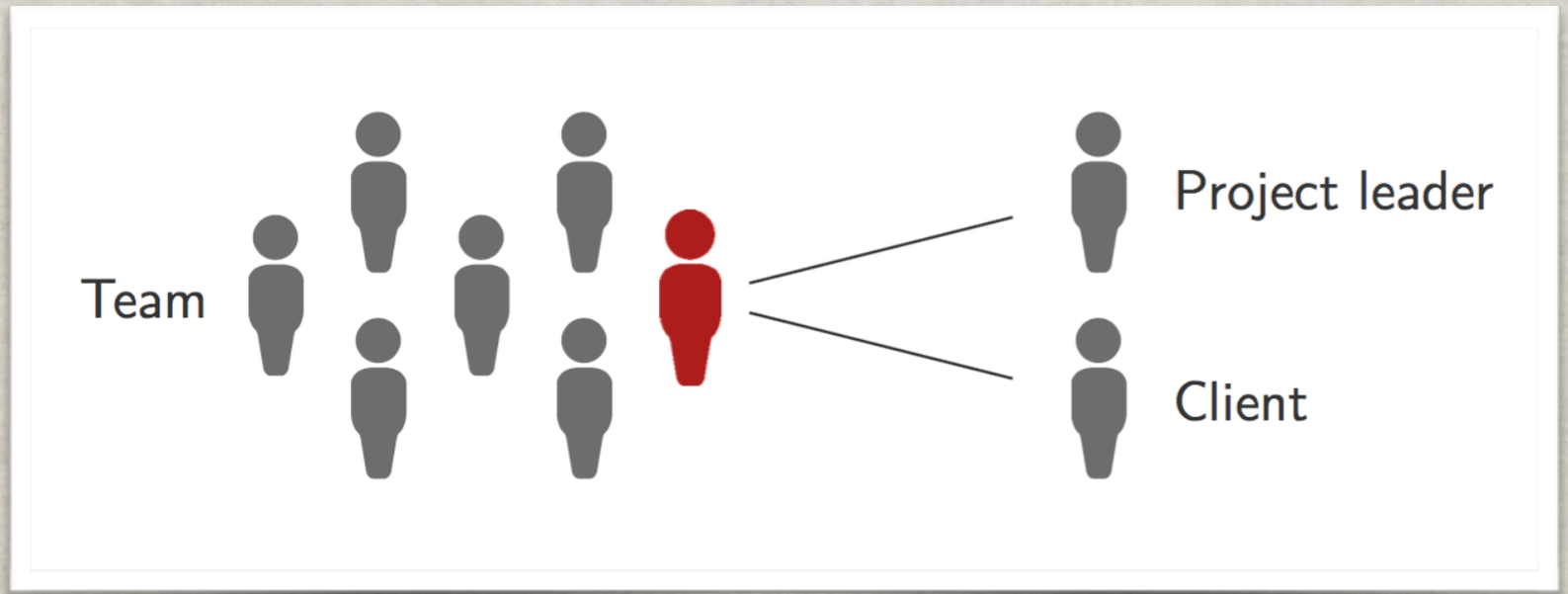
No possibility to do a second session for this course **!**

Points of Attention

- **Timing** 
  - Start early; work regularly; respect planning & deadlines
  - 75% of final grade is based on intermediate evaluation!
- **Team** 
  - Organise your team
  - Assign responsibilities
  - Distribute work among team members

Team Organisation

- **Teams** of 6-8 developers
  - assign one team member as (internal) **team manager**
- Teams overseen by a **project leader**
  - project leader = a (pair of) course assistant(s)



Team Organisation

- **Weekly meetings** with project leader (obligatory)
  - presenting progress and difficulties
  - assessing alternative options
  - distribution of work within team
  - feedback on intermediate and progress reports
  - monitoring of schedule

Team Organisation

- Role of (internal) project manager
  - Spokesperson for the team
  - Delegates responsibilities to team members
- Responsibilities to be mentioned in reports
  - And discussed with project leader during weekly meetings
- Don't exclude newcomers from your team (added in week 2)
  - managing unexpected situations is a skill to be learned, as well as working in heterogeneous teams

Project Defence

- In week 14 (just before the Christmas holidays)
  - dates and hours to be determined (could be an evening)
  - with the client, your project leader and the professor
    - presence of *all* team members is mandatory
- Two parts (40 minutes)
  - 15 minutes of demonstration
  - 25 minutes of presentation (including questions)

Getting Started...

- **Join Slack** (***now***) and start finding team members
- **Register to Moodle** (***Thursday or Friday***) and create teams of 5
  - at least two French-speaking members per team
  - deadline for initial team creation: Fri 22.08
    - up to 2 (exceptionally 3) extra members may be added by professor
    - Project leader (assistant) will be assigned to teams immediately after creation
    - Choose an internal team manager (student)
    - Team managers contact project leader to fix date for weekly team meeting
      - first meeting must be held **before** end of week 2

Next Steps...

- **Learn technology: Python, Django, GitHub, ...**
- **Download and install code base, development tools, versioning system.**
- Get to know your team.
- Discuss and **choose module to implement.**
- Make detailed ORM or ER model of the existing database.
- **Read case specification** and technical description (will be available this Friday)
- Team manager can contact client if things are unclear (email / Slack)
    - for questions or clarifications about case description
    - client will also be present in week 3 for Q&A session

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