

## VALS Project One year after

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540054-LLP-L-2013-1-ES-ERASMUS-EKA



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## What is the VALS Project?

- Virtual Alliances for Learning Society (VALS Ref. 540054-LLP-L-2013-1-ES-ERASMUS-EKA)
- European project for building knowledge alliances between Universities and Companies across Europe with the aim of facing real business problems through an open innovation approach based on using and developing open software solutions
- Supported by
  - European Union. Lifelong Learning Programme (Sub-Programme Erasmus-Knowledge Alliances)
- Duration: November 2013 October 2015
- Total amount: 533.337€



#### http://virtualalliances.eu/

# VALS Consortium



- University of Salamanca / GRIAL, SIPPE (Spain)
- OpenDirective LLP (United Kingdom)
- RayCom B.V. (The Netherlands)
- University of Bolton (United Kingdom)
- University of Udine (Italy)
- University of Cyprus (Cyprus)
- Mindshock S.L. (Spain)
- Oxford University OSS Watch (United Kingdom)



# VALS procedures



- Knowledge alliances among the entities (both from Academic and Business)
- The most interesting VALS innovation is about the definition of a system of virtual placements for students in companies
  - Entrepreneurship skills promotion
  - Definition of new teaching / learning methods
- Development of the Semester of Code



## Semester of Code



Semester in which one the students have their placements in companies and foundations related to open software

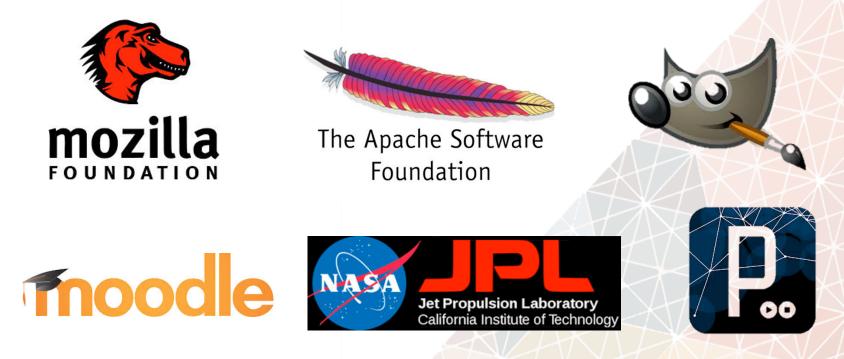
Virtual placements (telework)

Involved academic tutors (from the universities) and mentors (from the businesses)



# Some of the businesses involved in Semester of Code

#### http://vps.semesterofcode.com/projects/browse





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# Kinds of projects submitted to VALS

- Real problems of the participant companies and foundations
  - The student proposes an approach to solve the problem
  - The proposed approach will be implemented during the Semester of Code



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# How to participate as business?

I.Write a project proposal (based on a real business problem involving OSS) and including a mentor

2. Submit the project proposal to http:// vps.semesterofcode.com

3. Review the solution approaches uploaded by the students and select the best of them

4. Mentorize the development process



# How to participate as student?

I. Review the projects list in the Semester of Code website (http://vps.semesterofcode.com/)

2. Find an academic tutor from the University

3. Apply for the project (competition with other European students)

4. If the application is accepted, the student will develop it



# Semester of Code Timeline



- Two rounds for pilots
  - Between September November 2014. Process open for project proposals and students' application. Development of the solution between December 2014 – April 2015 (dates fixed between students and companies/ foundations)
  - 2. Between January March 2015. Process open for project proposals and students' application. Development of the solution between March August 2015 (dates fixed between students and companies/foundations)



#### Semester of Code Workflow: The real approach for the University of Salamanca (first round of pilots)

 In case of students involved in curricular practices, they shoud to notify to University (Service of Professional Insertion, Practices and Employment) between March and June of previous academic season

> The student decided to participate between September and November 2014

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The student reviews the proposals for foundations and corporations in http://vps.semesterofcode.com If they find one they like, they seek for an academic mentor and apply for it.

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• Students do the proposal with the academic mentor, and discussing it with other students if it is possible

#### 6

Delivering the project in Semester of Code and, if applicable, on their studies program as Final Thesis

• The University could recognize the experience as curricular or non curricular practices (depending each case).

#### 5

Students performs the project between December 2014- June 2015 (dates fixed with the Company / Foundation

• Also the students fix the deliverables, and other requisites of the project

#### 3

If their proposal is accepted, they fix delivery dates and other details with the Company / Foundation

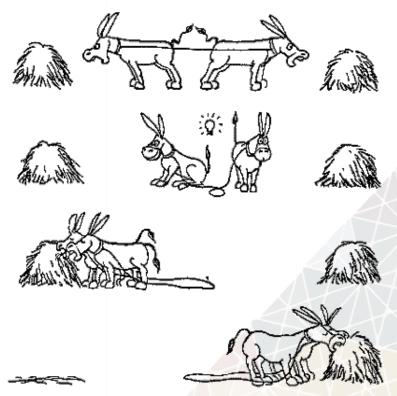
Students may propose an adaptation of the project has been assigned to TFG (Final Degree Thesis) or TFM (Final MsC Thesis)

• The Department of Computer and Automatics of the University of Salamanca would approve it or

 The students at the University of Salamanca, usually could do practices in the second semester of the academic season. The Service of Professional Insertion. Practices and Employment (SIPPE) fix an agreement about SoC between Student and the Foundation / Company. Also the SIPPE, the Faculty of Sciences and the Department of Computer and Automatics ensures the internal burocratic issues. If the student doesn't get a project from SoC, the University would find another way to do practices (in a local company, etc)



• VALS presents an open innovation initiative with a *win-win* approach







- Students
  - Professional experience in the real business context
  - Contacts in the software industry that can facilitate the start of their professional career
  - Personal experience due to operate in an international context
  - Academic rewards





- University
  - New methods for teaching and assessment
  - Long-term Knowledge Alliances with the industry in an international context
  - Possibility of importing successful practices from Business to the University
  - Offering real innovative possibilities to students with a great cost / benefit ratio in a crisis





- Business
  - Find talent directly in Universities
  - Knowledge Alliance with the Universities
  - Possibility of transfer knowledge from the University to the Company





- Society
  - Reduction of the gap between University and Business
  - Better professional qualification obtained under equal opportunities in a time of crisis



### Discussion What exactly does VALS intend to achieve



- VALS pursues a knowledge alliance between HE institutions and Companies that allows students have placements related to real projects in business all around Europe using telework practices, that's mean without to expend money to travel and subsist
- Main target groups
  - Informatics students (university level)
  - Open source related companies and foundations
  - Universities



### Discussion What exactly does VALS intend to achieve



- Main activities
  - Workflow definition for the placements management
  - Setting up a platform for workflow support
  - Contacting with companies to offer virtual placements
  - Contacting with universities to be involved in VALS
  - Disseminating VALS procedures to the students to engage them



## Discussion Issues and challenges



- Administrative processes in the universities are very strict, especially regarding schedules, and are not shared by all the universities all over Europe
- Schedules and workload in companies are not always compatible with universities ones and students' planning
  - Ad hoc adapting and making more flexible the administrative processes in the universities (it depends on each university and the people involved in)
  - Defining a two-round piloting procedure (inside the VALS scope)



## Discussion Issues and challenges

- University tutors engagement
  - Personal relationships
  - Altruistic behaviours



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## Discussion Issues and challenges



- Students engagement
  - They need time to include VALS activities with their own plans (short term plans are not usually compliant with the most of the students' reality)
  - The VALS benefits must include academic rewards (credits recognition for the placements, reusing the work done for their final degree works, and so on)
  - The fear of English communication, workload, effort done in the proposal definition and other different excuses
    - Presentation several of the project including open placement definitions in the platform
    - Flexibilizing the administrative procedures in the universities
    - Taking into account all the possible and available academic rewards
    - Involving more universities



## Discussion Effective results



- A workflow definition for an open innovation process regarding virtual placement
- Two sites for project dissemination
   <u>http://virtualalliances.eu/ http://semesterofcode.com/</u>
- A platform for virtual placement management <u>http://vps.semesterofcode.com</u>



#### Institutes

| Name:  |          |
|--|----------|
| Institute  | <b>*</b> |
| Frederick University (Cyprus)                              |          |
| Open University of Cyprus                                  |          |
| Universitat Politècnica de Catalunya - BarcelonaTech (UPC) |          |
| Université Paris 8   |          |
| University of Cyprus (Cyprus)                              |          |
| University of León (Spain)                                 |          |
| University of Salamanca (Spain)                            |          |
| University of Udine  |          |
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#### Organisations

#### Name:

| Organisation                                   | More information                          |  |  |  |  |
|--|---|--|--|--|--|
| 52°North                                       | http://52north.org/ &                     |  |  |  |  |
| Alion  | https://github.com/PhantomYdn/Orienteer & |  |  |  |  |
| Apache Airavata                                | http://airavata.apache.org/ &             |  |  |  |  |
| Apertium                                       | http://www.apertium.org &                 |  |  |  |  |
| Audaspace                                      | https://github.com/neXyon/audaspace &     |  |  |  |  |
| BEAM Community                                 | http://beamcommunity.github.io &          |  |  |  |  |
| Belgian Neuroinformatics Node                  | http://www.neuroinformatics.be/ &         |  |  |  |  |
| Bio4j  | http://www.bio4j.com &                    |  |  |  |  |
| Boost C++ Libraries                            | http://www.boost.org/ &                   |  |  |  |  |
| BRL-CAD  | http://bricad.org &                       |  |  |  |  |
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#### Projects

|                       | Project title  | Organisation 🔶                            | Tags 🔷   | Proposals | Status |
|-----------------------|--|---|--|-----------|--------|
| Sor                   | Translation in context   | XWiki                                     | xwiki,java,javascript,l10n                           | 0         | open   |
| 501                   | Transplant process to esil-vm  | radare2                                   | C,Esil,emulation,debugging,vm                        | 0         | open   |
| — [<br>(              | Unify File System Caches   | Haiku                                     | kernel, operating system,<br>caching, low level, C++ | 0         | open   |
| — (<br>— <sup>-</sup> | Update installer to build database from scratch using Yii's DBMS independent functions | LimeSurvey                                | php,mysql,postgres,mssql,yii                         | 0         | open   |
|                       | Update OpenKinect Library for Processing   | The Processing<br>Foundation              | kinect, java, processing                             | 0         | open   |
|                       | Use GPU for processing images in Krita<br>(openGL, openCL or CUDA)                     | Krita Project                             | c++, Qt, openCL, cuda,<br>openGL, GPU                | 0         | open   |
|                       | Use OpenGL for blending layers in Volumina   | Imonade: scientific software distribution | python, opengl, 3d, graphics                         | 0         | open   |
|                       | User defined indexes   | OpenCog                                   | C++, opencog, graph,<br>knowledgebase                | 0         | open   |
|                       | User Interface for the Distributed Release<br>Audit Tool (DRAT)                        | NASA Jet Propulsion<br>Laboratory         | map reduce oodt solr tika                            | 0         | open   |
| <br>**. L             | User Interface Improvements and Backend<br>Tidy Ups                                    | LimeSurvey                                | php,javascript,yii                                   | 0         | open   |

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## Discussion The partnership



- VALS partners represent more or less at 50% HE institutions and Companies
- Companies are in charge to involve OSS companies and foundations (and some of them propose placements)
- Universities are in charge to engage students and invite more universities
- The cooperation inside of the VALS partnership is fine, however balancing realities and rhythms of HE and companies is not easy, especially once others are involved in the Semester of Code process



## Discussion The future

- University managers like VALS proposal
- Companies rely on VALS ideas (62 at least)
- Students think that VALS is an amazing opportunity

### BUT

- University is slow in reaction
- Companies want having results immediately
- Students need to internalize VALS new opportunities



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## Discussion The future



- These kinds of innovative processes that involve both Academia and Business need time enough to settle
- The setting up procedures are especially hard
- However, the potential and the benefits of VALS will be easily a reality if we have the chance of going further of a couple of pilots and we establish a permanent flow of placements offering and application demand



## Some publications



- García-Peñalvo, F.J., Álvarez Navia, I., García Bermejo, J.R., Conde González, M.Á., García-Holgado, A., Zangrando, V., Seoane Pardo, A.M., Cruz-Benito, J., Lee, S., Elferink, R., Veenendaal, E., Zondergeld, S., Griffiths, D., Sharples, P., Sherlock, D., De Toni, A., Battistella, C., Tonizza, G., De Zan, G., Papadopoulos, G., Kapitsaki, G., Achilleos, A., Mettouris, C., Cheung, S., Guerrero, Z., He, E., Alier Forment, M., Mayol, E., Casany, M.J., Wilson, S., Wilson, R., & Johnson, M., (2013). VALS: Virtual Alliances for Learning Society. In F. J. García-Peñalvo, A. García-Holgado & J. Cruz-Benito (Eds.), *Proceedings of the TEEM' 13 Track on Knowledge Society Related Projects* (pp. 19-26). Salamanca, Spain: Grupo GRIAL. ISBN: 978-84-616-7041-3
- García-Peñalvo, F.J., Cruz-Benito, J., Griffiths, D., Sharples, P., Willson, S., Johnson, M., Papadopoulos, G.A., Achilleos, A.P., Alier, M., Galanis, N., Conde, M.Á., Pessot, E., Elferink, R., Veenendaal, E., & Lee, S. (2014). Developing win-win solutions for virtual placements in informatics: The VALS case. In F. J. García-Peñalvo (Ed.), Proceedings of the Second International Conference on Technological Ecosystem for Enhancing Multiculturality (TEEM'14) (pp. 733-738). New York, USA: ACM. DOI: <u>http://dx.doi.org/10.1145/2669711.2669982</u>. ISBN: 978-1-4503-2896-8
- García-Peñalvo, F. J., Cruz-Benito, J., Conde, M. Á., Griffiths, D. (2014) Virtual placements for informatics students in open source business across Europe. In 2014 IEEE Frontiers in Education Conference Proceedings (October 22-25, 2014 Madrid, Spain). (pp. 2551-2555) IEEE. ISBN: 978-1-4799-3921-3. IEEE Catalog Number: CFP14FIE-ART. USB version, IEEE Catalog Number: CFP14FIE-USB



## More info



- http://virtualalliances.eu/
- <u>http://semesterofcode.com/</u>
- <u>http://vps.semesterofcode.com</u>
- <u>http://grial.usal.es</u>

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