



Università di Udine

DIEG – Dipartimento di Ingegneria Elettrica, Gestionale e Meccanica  
Laboratorio di Ingegneria Gestionale



virtual alliances for learning society



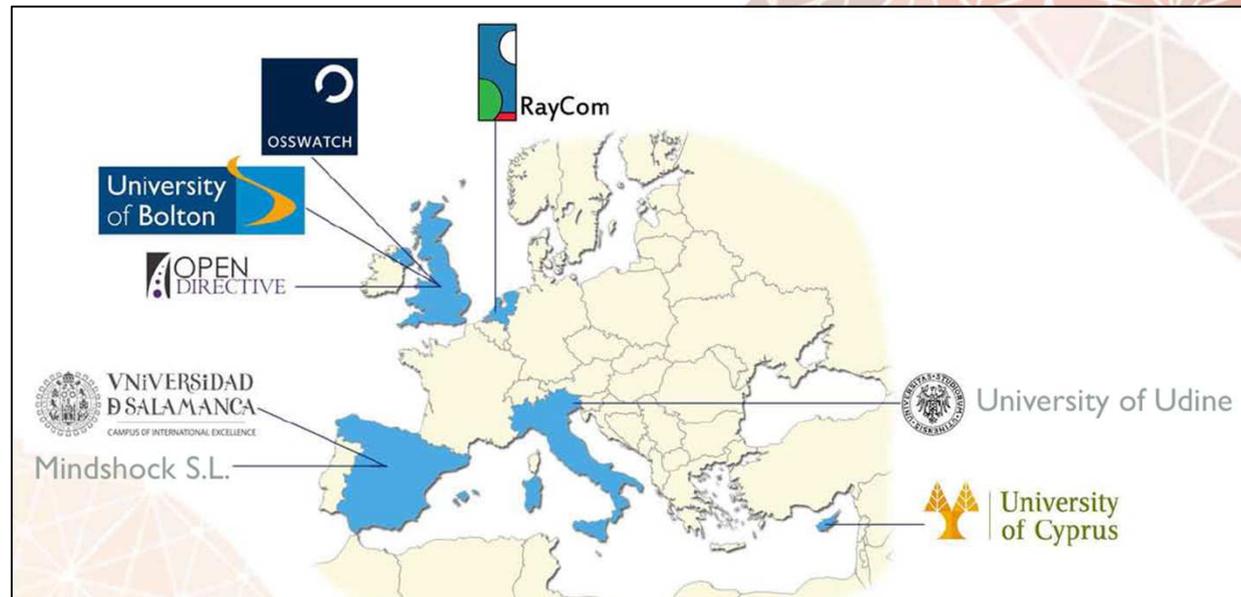
Lifelong  
Learning  
Programme

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

# VALS – Virtual Alliances for Learning Society



- VALS è un progetto finanziato dal programma Erasmus+ iniziato a ottobre 2013, che vede coinvolti nella sua realizzazione partner accademici e non, appartenenti a diversi stati europei.



# Come nasce VALS? (1/2)



- VALS nasce dalla necessità di migliorare il rapporto tra il mondo accademico e quello aziendale, in particolare prendendo in considerazione le esperienze di **tirocinio**, che rappresentano per gli studenti un primo e importante approccio al mondo del lavoro.
- Parte dalla considerazione che spesso il problema dei tirocini, e in generale della mobilità degli studenti nelle aziende, sta negli **alti costi** che essi comportano.

# Come nasce VALS? (2/2)



- Da qui nasce la proposta di VALS, che consiste nell'avvio di **tirocini virtuali**.
- Grazie all'utilizzo di una **piattaforma web**, gli attori del mondo aziendale possono organizzare e seguire i tirocini senza bisogno della presenza fisica dello studente.
- Il progetto è basato sui principi dell'**open innovation**

# Open Innovation (1/2)



L'**Open Innovation** è un paradigma che afferma che le imprese possano e debbano fare ricorso ad idee esterne, così come a quelle interne, ed accedere con percorsi interni ed esterni ai mercati se vogliono progredire nelle loro competenze tecnologiche.

(Liberamente tradotto da Henry Chesbrough, 2006)

# Open Innovation (2/2)



- L'innovazione è uno dei più importanti fattori critici per acquisire **vantaggio competitivo**. Per questo le aziende che non applicano l'Open Innovation tendono a tenere alte le barriere verso l'esterno.
- Il cambiamento dei mercati e dei modelli economici ha impatto anche sulle modalità di effettuare la R&S: la conoscenza è diffusa, ed è perciò necessario condividerla e cercarla anche **all'esterno** dell'azienda.

# Vals e l'open innovation



- Attraverso l'approccio basato sui principi dell'Open Innovation, VALS vuole promuovere **alleanze di conoscenza** tra gli studenti universitari e le aziende, facendoli lavorare in maniera congiunta per affrontare problemi reali, utilizzando il software Open Source come tecnologia abilitante.
- L'iniziativa prende spunto dal **Google Summer of Code**, cercando di portarlo all'interno del mondo universitario come pratica consolidata.

# Obiettivi



- Far interfacciare gli studenti con **reali** problemi di business;
- Generare consapevolezza delle opportunità date dalla **collaborazione** tra aziende e studenti;
- Sviluppare un sistema online per la gestione dei **tirocini virtuali**;
- Stabilire alleanze di lungo termine tra università e aziende per iniziare il **mainstreaming** del progetto.

# The Semester of Code (SoC)



- Semester of Code è il **programma pilota** del progetto VALS
- Permette agli studenti di informatica di affrontare problemi di business reali proposti dalle aziende, ottenendo allo stesso tempo un'**esperienza formativa** e dei crediti per il proprio corso di studi.

# Stakeholders



- **Università:** ha la possibilità di offrire nuove occasioni di formazione agli studenti utilizzando best practices del mondo aziendale;
- **Studenti:** esperienza professionale e contatti con le aziende, che potranno inserire nel loro curriculum o utilizzare come canale per entrare nel mondo del lavoro;
- **Aziende:** contatto con studenti potenzialmente coinvolgibili in azienda e risoluzione di problemi mediante l'Open Innovation.

# Ruoli



- Program Administrator
- Organization Administrator
- Mentor
- Institute administrator
- Supervisor
- Student



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Password \*

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## How Vals Semester of Code Works

1. **Write a so called 'Proposal' for a project currently offered by a mentoring open source organisation**
2. **Get selected to perform the project and perform the project according your proposal during the available weeks/months of the mentor**
3. **Achieve Ultimate Glory, a good notice on your CV and probably gain academic credit too**

VALS Semester of Code is a program that offers students the chance to write code for open source projects. We have worked with the open source community to identify and fund exciting projects for this academic year. Since this academic year we are less strict about a pan-European time schedule for all students. Projects should be done within the time slot the mentor has committed himself to be available (to a certain extend of course).

## News

### New students on board

We contacted the University of Ferrara and expect to welcome this new university to the Vals platform soon and hope that they will give extra students to enter here and do projects. We also heard that the university of Cyprus is in the middle of (preparation for) exams for their first semester. So more students from them are to be expected early next year. *(Posted: 25/11/2015)*

### Changed projects receive right status now

We were alarmed this week by an email saying that a project put to available mode, did not appear as it had the 'pending' state. This was a situation that did not happen before, but as approved projects are now being updated to be available for the next instance (this one), it indeed happens. A new version has been put online today that solves this issue and contains some other small improvements. *(Posted: 25/11/2015)*

### Another instance of Semester of Code

We decided to start a new instance of the Semester of Code offering students from now on until the end of the academic year a chance to participate in Semester of Code. Projects and organisations from the first year for which the participation of students ended last summer are transferred to a large extent to this round, as far as confirmed that the project is still available. The program will start the **15th of November**. *(Posted: 29/10/2015)*

# Come funziona?



## 1. Scelta del progetto

<http://vps1516.semesterofcode.com/>

- Linguaggi di programmazione come Java, C++, PHP, Javascript, C#;
- Linguaggi di formattazione web come HTML e CSS;
- Tecnologie per i database come MySQL e Postgres;
- Architetture di sistema, Service-Oriented Architectures and MVC;
- Mobile development per iOS e Android.



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## Projects

Tags:  Organisations:

All Organisations ▼

Status: NA ▼

Url	Project title	Organisation	Tags	Proposals	Status
←	'DDD' Day to Day Development: Real World Training	OpenMandriva Association	C++,Qt,Qt5,Linux,System,Installation,rpm,training	0	open
←	Add MuPDF support to cups-filters for a lightweight mobile printing stack	OpenPrinting	PDF, Printing, CUPS, MuPDF, cups-filters, mobile	0	open
←	Add printer output backends to MuPDF	OpenPrinting	MuPDF, PDF, Printing, PWG, Raster, graphics, driverless, mobile	0	open
←	Add write support for more filesystems	Haiku	C++, filesystem, driver	0	open
←	AmiCO - Minecraft	HomeDevice	python, javascript, node.js	0	open
←	AmiCO - Physics	HomeDevice	python, SymPy, PyDEC	0	open
←	Any HDMI2USB project you suggest!	HDMI2USB - OSS Capture Hardware (a TimVideos project)	fpga, hardware, vga, display, hdmi, display port, dvi, video, multimedia, vhdl, verilog, myhdl	0	open
←	ARM port / device tree support	Haiku	C++, ARM, device tree	0	open
←	Audio Filters	Audaspace	audio,game,sound,music,c++11,dsp	0	open
←	Audio Nodes	Audaspace	audio,game,sound,music,c++11	0	open

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(status: open)

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## 'DDD' Day to Day Development: Real World Training

This project gives you the experience of what it is like to participate in the the daya to day running of a major software project as you might find in the IT industry.

You will learn how to build software packages using rpm, how to write and maintain the spec files which are used to build the packages on our build farm, how to update them and how to test them. You will be assigned bugs to be pursued and resolved.

You will work alongside experienced developers who will provide you with guidance when needed. You will use your own initiative to find solutions to any issues you face; developers will help you on your way but you will be expected to be to take a self-motivated approach to problem solving. You will participate in weekly meeting where issues relating to the project will be discussed and be expected to give a short report of what you have done over the previous week. These meeting are conducted on IRC.

The expected outcome of the project will be that you will have gained experience of the mechanics of software packaging, that you will have learnt a realistic approach to bug hunting and resolution and acquired the ability to cooperate and work smoothly with senior developers in a self-motivated manner.

About possible mentors: Bero, TPG, Itchka (Colin Close)

**TPG** is a long time GNU/Linux user since 2003, with involvement to many upstream projects and few distributions, with good knowledge of distribution architecture, starting from low level stuff. On a daily job, he works as a experienced project manager in an european telco industry.

**Bero** is a Linux generalist whose code can be found in anything from the kernel to KDE. His preferred programming languages are C++, C, and good old shell scripts. At work, he is an Android engineer at Linaro.

**Colin Close** has used UNIX since 1986 and Linux since 2000 and currently is a member of the OpenMandriva QA team. Has 15 years of microcontroller controller assembler experience working on code for instruments used in fail safe applications and has written three quality assurance manuals.



## 2. Iscrizione alla piattaforma

<http://vps1516.semesterofcode.com/user/register>

- L'iscrizione prevede l'inserimento di un codice specifico della propria università, da richiedere al professore di riferimento



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**Username \***

Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.

**E-mail address \***

A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you wish to receive a new password or wish to receive certain news or notifications by e-mail.

**What is your full name?**

(If you leave this empty, we will use your account name instead)

**Type the key you got in the invitation**

This code is different per role.

**Select the language you want for Semester of Code**

English ▼

This will be the default language

[Create new account](#)





### 3. Sviluppo e upload della proposta di progetto

- La proposta consiste in una descrizione sintetica dell'idea progettuale
- La proposta verrà valutata dall'azienda tramite il Mentor

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# Projects

Tags:

Organisations:

All Organisations

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Status: NA

Project title	Organisation	Tags	Proposals	Status	
<a href="#">An Antlr v4 grammar for Groovy</a>	Groovy Community	java, c++	3	pending	<a href="#">🗑</a>
<a href="#">An example project idea</a>	Groovy Community	java, spring, hibernate, MVC, jquery	2	pending	<a href="#">🗑</a>
<a href="#">Build new java module for acme</a>	Acme Foundation and so on	java	0	pending	<a href="#">🗑</a>
<a href="#">Define SPARQL commands in Jena rules</a>	Apache Software Foundation	php, open source	2	pending	<a href="#">🗑</a>
<a href="#">Dial First Call and Send SMS via Drupal 8</a>	Drupal	drupal, php	1	pending	<a href="#">🗑</a>
<a href="#">Drupal 8 media subsystem</a>	Drupal	drupal, php, media, css	2	pending	<a href="#">🗑</a>
<a href="#">Full body and hands gestures tracking</a>	Acme Foundation and so on	java, c++	1	pending	<a href="#">🗑</a>
<a href="#">GLSpace</a>	Acme Foundation and so on	dot net, javascript	5	pending	<a href="#">🗑</a>
<a href="#">Groovy and Java joint compiler without stubs</a>	Groovy Community	java, c++	1	pending	<a href="#">🗑</a>
<a href="#">Groovy on Android</a>	Groovy Community	java, c++	3	pending	<a href="#">🗑</a>

click here

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(status: pending)

### An Antlr v4 grammar for Groovy

As of today, Groovy 2 still uses Antlr v2 for its grammar. The original grammar was based off of the Java grammar itself. But we would like to create a dedicated grammar for Groovy with the latest version of Antlr, ie. with version 4. Antlr v4 has evolved nicely and makes it easier to evolve grammars, without the painful work of rule disambiguation. So the idea is to develop a clean room implementation of the Groovy grammar for the upcoming versions of Groovy, that would be able to also cover new syntax elements, like the support of Java 8 lambda syntax, or the type annotation JSR, and we'd also take the opportunity to tackle things that we haven't covered so far, like JavaDoc comments in the resulting AST.

#### Statistics

Number of proposals already submitted to this project (3)  
 The project mentor has not marked any proposal as their preferred solution yet.

Comments (2) show

Mark this project  
Create proposal for this project

or click here

Next →

status	
pending	🔍

Groovy on Android	Groovy Community	java, c++	3	pending	🔍
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## Create proposal for : "An example project idea"

### Student details

Name: student\_j

Email: student\_j@student.com

Institute: University of Acme

First supervisor: ps3com50

Give a title to your proposal \*

For easy communication, it is nice to have a title for your proposal

Choose a supervisor for this project

You can also choose a supervisor later. The supervisors in this list have voted that they are willing to be supervisor for this project

### Give a summary of your solution



Curabitur posuere ullamcorper arcu quis dapibus. Phasellus laoreet nunc sed faucibus fringilla. Quisque sit amet velit in libero semper maximus vel quis est. Morbi semper dignissim quam eget consectetur. Duis sed ullamcorper neque. Vivamus lacinia tincidunt fringilla. Nullam et arcu ac turpis dapibus fermentum et laoreet eros.





#### 4. Nel caso in cui la proposta venga accettata dall'azienda, inizia lo sviluppo del progetto

- L'accettazione della proposta viene comunicata via mail, ed è necessario poi confermarla sulla piattaforma
- Il professore farà da supervisor e aiuterà gli studenti nello sviluppo del progetto
- Durante lo sviluppo del progetto, università e azienda comunicano in maniera diretta



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## My project offers

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Here you can select which of your project offers you wish to accept

Filter by Organisation:

Project	Organisation	Accept
An example project idea	Groovy Community	★

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# Info utili



- Piattaforma VALS:  
<http://vps1516.semesterofcode.com/>
- Per qualsiasi informazione inerente alle modalità di partecipazione al progetto il mio indirizzo mail è [alessandra.commisso@uniud.it](mailto:alessandra.commisso@uniud.it)

Domande?



Grazie per l'attenzione