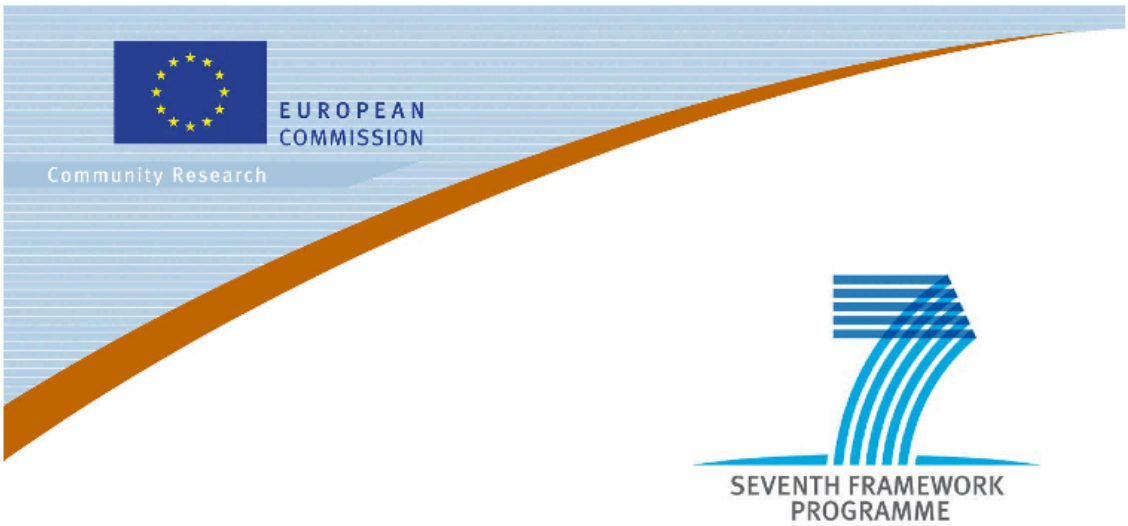

Private Public Partnership Project (PPP)

Large-scale Integrated Project (IP)

D12.4.1: Report on Campus Party Events (FI-WARE Activities/Actions)

Project acronym: FI-WARE
Project full title: Future Internet Core Platform
Contract No.: 285248
Strategic Objective: FI.ICT-2011.1.7 Technology foundation: Future Internet Core Platform
Project Document Number: ICT-2011-FI-285248-WP12-D12.4.1
Project Document Date: 2013-10-18
Deliverable Type and Security: PU
Author: FI-WARE Consortium
Contributors: FI-WARE Consortium

1.1 Executive Summary

This report is part of Dissemination Activities task, as framed in the Communication, Collaboration and Dissemination activities of the FI-WARE project.

As part of the dissemination actions proposed by the partners selected during FI-WARE's third call for new partners, the project is going to be presented in various Campus Party events between 2013 and 2014. Periodic reports will be published after these events. More specifically – but also depending on the own Campus Party dates:

- This report had to be delivered in October 2013 since the Campus Party Europe in London took place in September 2013
- The next one will be delivered by January-February 2014
- The final one should be delivered by April 2014, again depending on the CP dates

This very document is the report that summarizes all the FI-WARE activities that took place at the Campus Party Europe in London. Its index will be also followed by the subsequent documents. Please note that this document is complemented by, and complements, D12.2.4 "Report on Communication and Dissemination activities", especially on the chapters about promotional materials and dissemination actions through social networks.

1.2 About This Document

This report is the first of this task's series of three documents summarizing the activities carried out in the framework of FI-WARE during the various Campus Party (CP) events in which the project is going to be presented. This document focuses on the CP Europe in London.

1.3 Intended Audience

The document targets all types of stakeholders, especially public authorities, sponsors, venture capitalists and entrepreneurs. It is not a technical document, though it is also of interest to the developers community.

1.4 Acknowledgements

The current document has been elaborated using a number of collaborative tools, with the help of OG1 and also TID as Project Coordinators.

1.5 Keyword list

Campus Party, Campusero, Developer, Web Entrepreneur, Venture Capitalist, SME, Community, Geek, Hackathon, Challenges, End-users, FI-WARE, PPP, Architecture Board, Steering Board, Roadmap, Reference Architecture, Generic Enabler, Open Specifications, Developers Community and Tools, ICT.

1.6 Changes History

Release	Major changes description	Date	Editor
v0.52	First draft of deliverable, submission to TID	2013-10-18	Javier de Vicente, Esther Paniagua, Raúl Sánchez, Fátima Ruiz Clavijo, Belén Ruigómez (FNE), Miguel A. Expósito (AE3), Isabel Rosado (AE3)
v0.54	Improvements in Chapter 3	2013-10-21	Javier de Vicente (FNE)

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2 Campus Party

2.1 Rationale

Campus Party™ is a global and successful growing concept created in 1997 by a group of Spanish entrepreneurs, and today it is one of the most important events in ICT, and a technology & human ecosystem around the biggest geek social network that includes Public Administrations, large companies and SMEs, active internet communities and NGOs that help us to impulse a more digital and cooperative society through the use of technology advances. Check http://www,campus-party.org

The community around Campus Party includes technology heavy users, opinion leaders, researchers, entrepreneurs and creative minds that are ready to identify new opportunities to create daring things for a better society. As of October 2013 this community has exceed 300,000 "campuseros" from 130 different countries. Campus Party is also a meeting point where supply meets demand between private companies, public institutions and ICT experts.

Today, Campus Party is reaching 8 different countries: Brazil, Colombia, Ecuador, Spain, Mexico, Peru, UK and Germany; and the next steps for its global internationalization include India, Kazakhstan, China, Russia, Greece and Israel, among others.

Campus Party is a unique model with more than 500 hours of lectures, forums, hands-on workshops, debates, "hackathons" and challenges related to different ICT topics. These take place in several stages around four big-theme areas: Science, Innovation, Creativity and Digital Entertainment. Each edition features experts who share the most innovative trends with the participants. Examples include: Al Gore, Nobel Prize of Peace 2007; Sir Tim Berners-Lee and Vinton "Vint" Cerf, fathers of the Internet; Neil Armstrong and Buzz Aldrin; Stephen Hawking; Paulo Coelho; Steve Wozniak, co-founder of Apple; John "Maddog" Hall, developer of Linux, and Don Tapscott, among many others, All of them maintain a high level of commitment and involvement with the Campus PartyTM project and they are part of our "Campusero" community.

Campus Party counts with the maximum institutional and private support in every hosting country, with the presence of Prime Ministers, Presidents and Ministers, local institutions and municipalities, local development agencies and national or multilateral public organizations such as the SEGIB or the European Commission, among others.

Figure 1. Campus Party Europe in London. Logo

It is really an asset for FI-WARE taking active part in several Campus Party events. The project gets a totally revolutionary exposure to the real world of developers out there, who have the opportunity to experience and test the FI-WARE applications and spread the word. Campus Party's ecosystem is also filled with venture capitalists and entrepreneurs alike, and they also get to know the details of FI-WARE first hand, being able to explore the possibilities that such a technology can deliver.

London was chosen to be the hosting city for the first public presentation of the FI-WARE results at Campus Party, including the launch of the FI-LAB (FI-WARE Open Innovation Lab http://lab.fi-

ware.eu/). The reader can visit http://www.campus-party.eu/2013/index-cpeu.html and have all the details on the Campus Party Europe (CPE) in London.

2.2 Venue and location

The O2 Arena's premises and nearby areas hosted the CPE event from Monday the 2nd of September 2013 to Saturday the 7th. The O2 Arena's is a multi-purpose indoor arena located on the Greenwich Peninsula in London, England, and it is characterized for being the second largest arena in the UK.

Figure 2. The O2 Arena in London

As usual, the venue featured several stages, focused on specific themes.

The main stage (see http://www.campus-party.eu/2013/O2-MainStage.html for more details) is "the home and platform for keynote speakers (…). Once a day everything stops and the focus of ten thousand people is called to one individual. It is also the stage upon which the electric opening and closing ceremonies take place; entertainment, atmosphere and inspiration all erupt from here". The very first FI-WARE action, which was the very first conference/round table, took place here at 10:00 AM on the 3rd of September.

The Pythagoras stage (see http://www.campus-party.eu/2013/pythagoras.html for more details) is the developers' stage, and several FI-WARE interventions took place here. Other contents included "from coding to the development of iOS apps, from the importance of user interfaces to speakers whose knowledge on software and web development is entirely incomparable".

Other stages include the Archimedes stage (Open source, Security; see http://www.campus-party.eu/2013/archimedes-stage.html), the Hypatia stage (E-Commerce, social media, education 2.0 and big data; see http://www.campus-party.eu/2013/hypatia-stage.html), the Galileo stage (robotics, innovative materials; see http://www.campus-party.eu/2013/galileo-stage.html), the Gutenberg stage for startups (see http://www.campus-party.eu/2013/gutenberg-stage.html), the Michelangelo stage for multimedia (see http://www.campus-party.eu/2013/michelangelo-

stage.html), the Leonardo stage (eHealth, green technologies; see http://www.campus-party.eu/2013/Leonardo_Stage.html) and others.

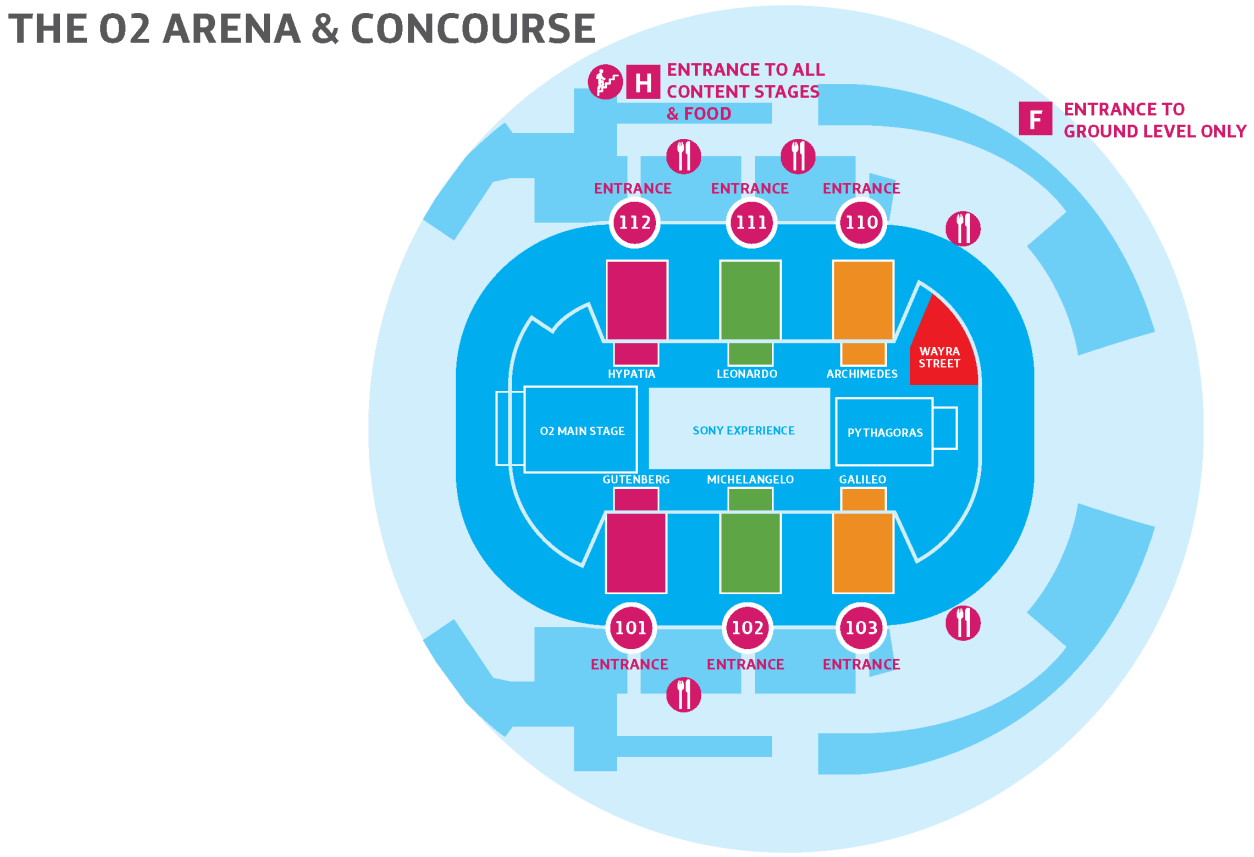


Figure 3. Venue Map

The Live Quarter is where all the stands are and the workshops take place. It is also – hence its name – the area that the campuseros occupy, the zone that is bursting with ideas, information exchanges and the heat from the hardware.

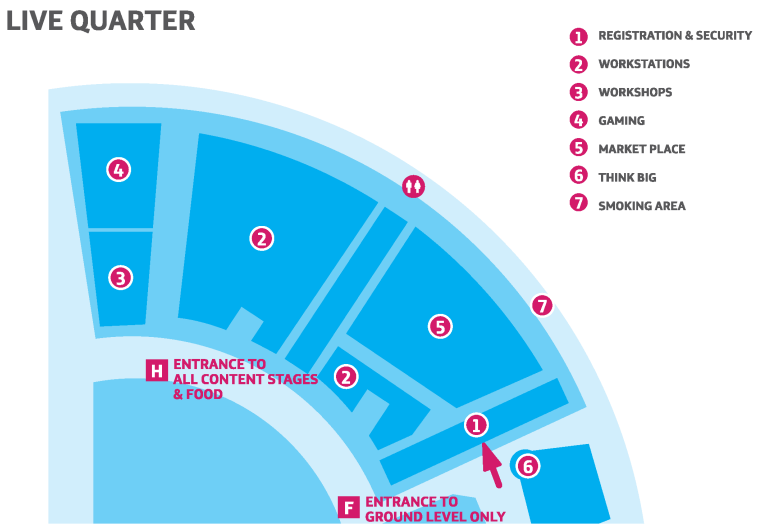


Figure 4. The Live Quarter

Figure 5. The Live Quarter (2)

Late at night, or should we say, early in the morning, the campuseros go back to their tents in the nearby surroundings of the O2 Arena and have a quick rest. At least half of the campuseros sleep in the camping area.

Figure 6. Campuseros' tents

2.3 The CPE in figures

This section is a collection of bullet-pointed key messages, focusing on the facts and figures of the CPE in London:

- One of the largest and best Campus Party yet – some 10,000 "campuseros" visiting over the four days
- Around 5,000 visitors per day
- 3,500 campers from 40 countries around the world
- 52 buses with campuseros arrived from continental Europe
- 250 speakers and over 500 hours of content
- 16 sponsors – including, Sony, Microsoft, Barclays, Ladbrokes, Facebook, the European Union and UK Government – have contributed over €1 million in funding – including hard cash and benefits in kind
- 35 companies represented at the Market Place plus 50 of the brightest new European start-ups were brought along by Graduate recruitment experts "Enternships"
- Four top UK Government Ministers & Officials – including Ed Vaizey (UK Minister for Culture, Communications and Creative Industries); Vince Cable (Secretary of State for Business, Innovation and Skills and President of the Board of Trade); and Nick Hurd (Conservative Member of Parliament)
- A Vice President of the European Union – Neelie Kroes (European Commissioner for the Digital Agenda) and Máire Geoghegan-Quinn (European Commissioner for Research, Innovation and Science)
- More than 50 universities from across Europe and 30 from the UK
- 105 press outlets including broadcast and nationals signed up.
- 24 Wayra[1] start-ups working there continuously throughout the week "Wayra Street"
- Think Big and Mozilla twice daily workshops on app creation "Make the Web"
- Key campaigners: Jon "Maddog" Hall Twinterview, Nolan Bushnell Treasure Hunt, and David Rowan Kickstarter Investment

Figure 7. The main stage at the O2

[1] Visit http://wayra.org/en

2.3.1 Social media and the CPE website

Four months ago, the social media team created a Campus Party Europe website designed to provide event information and book tickets; plus a blog designed to engage audiences. These are the results:

- 175K visitors since 5th May
- 11K social mentions
- Traffic doubling monthly (no paid activity until 4/8)
- Dwell time of 4.02 minutes
- 3.28 pages/visit

3 FI-WARE activities at Campus Party Europe

3.1 Overview

This chapter is broken down into four categories: sessions, workshops, branding and the FI-WARE stand.

The sessions were published at http://www.campus-party.eu/2013/Whats_on_at_Campus_Party.html and the workshops were published at: http://www.campus-party.eu/2013/workshops.html The main difference between these activities is that sessions were not necessarily technical, but rather conceptual, serving as introductory, institutional and high-level pills for gathering the attention of developers, entrepreneurs and public bodies present at the CPE in London. Workshops were very technical, and aimed exclusively at the developer community: the latter included workshops on the architecture and building blocks that FI-WARE delivers and that are aimed at Internet of Things, cloud-based, open authentication and 3D rendering applications. The reader should note that the "Description" paragraph is the text as used internally for creating the CPE website's contents that accompanied each conference or workshop; then, "Further Considerations" are given, after our on-the-field experience during the CPE, and these considerations include updated information like number of attendees, questions asked and overall result.

The branding activities to visually promote FI-WARE at The O2 are also listed and this is then linked to the presence of FI-WARE through our project's stand in the CPE.

3.2 Sessions

3.2.1 FI-WARE and the Future Internet: opportunities for Europe

Where: Main Stage

When: Tuesday, 3rd of September, 10:00 AM - 11.00 AM

Description[2]: FI-WARE is the cornerstone project of the Future Internet Public-Private Partnership; launched in 2011 with the aim to position Europe towards capturing the opportunities that digitalization will bring in several economy sectors.

FI-WARE is targeted at achieving two main goals: firstly, the development of a core platform that will ease the creation of innovative applications lowering the costs and complexity of serving large number of users globally and handling data at large scale; and secondly, the creation of a sustainable innovation ecosystem engaging entrepreneurs, application sponsors and core platform providers.

Commissioner Mrs Neelie Kroes will open this session with a major and exciting announcement: the Launching of FI-LAB, a live instance of FI-WARE available to developers for free experimentation with the FI-WARE technology that is already deployed for them. Entrepreneurs developing applications based on FI-WARE at FI-LAB will be able to apply for the 100 M€ of funding that the EC will provide for developing innovative applications based on FI-WARE during 2014 and 2015. And if you cannot wait, target the 870 K€ in prizes of the challenges that will be announced at Campus Party!

In addition to Mrs Kroes, Carlos Domingo, Director of Product Development and Innovation at Telefonica Digital and Executive President of Telefónica R&D, will give you first-hand information about what FI-WARE delivers. On the other hand, Luis Ivan Cuende (young entrepreneur and winner of HackNow contest in 2011) and Deborah Rippol (Startup Weekend) will provide

[2] As used internally for creating the CPE website's texts that accompanied each conference (see http://www.campus-party.eu/2013/Whats_on_at_Campus_Party.html)

testimonies about the benefits that will be derived from using FI-WARE technologies and joining the FI-WARE ecosystem.

3.2.1.1 **Further considerations**[3]

Around half a thousand campuseros attended the opening conference. Mrs Kroes[4] stressed the need for openness and urged the attendees to stop being humble about Europe. FI-WARE was shown as an example of open European innovation that can really change the scene. The Manifesto for Entrepreneurship and Innovation in Europe was presented as well. The Manifesto can be signed here: http://startupmanifesto.eu/. Mr Domingo followed the discourse by exemplifying how Nokia had just recently sold their devices division to Microsoft while at the same time keeping all the knowledge and innovation legs of the company – selling its past and looking into the future. More information about the FI-WARE challenges and opportunities was delivered; while stressing the fact that, with FI-WARE, as opposed to other ways of developing applications, you are no longer tied to one company. FI-WARE is the one-stop place for horizontal open source components. Deborah Rippol followed by explaining the people-focused concept that is Startup Europe, giving insight about the need for reaching outside your own country if an entrepreneur wants his/her company to scale up. Luis I. Cuende explained how tied the developers are when deploying on top of an Amazon-based PaaS and introduced the openness of FI-LAB. The questions from the attendees focused on themes like open source and examples of GEs, but included other surprising inquiries, like one who wanted to know how Mrs. Kroes became a true campusera. In all, a very positive and promising beginning in the best environment ever.

Figure 8. The FI-WARE Opening at the CPE

3.2.2 FI-WARE: Open APIs for Open Minds

Where: Pythagoras (Developers') Stage

[3] Updated information (if applicable) and other considerations like number of attendees, questions asked and overall result.

[4] Link to the FI-WARE opening conference: http://campuse.ro/resource/29316/view.cp

When: Tuesday, 3rd of September, 15:00 PM - 16.00 PM

Description: Openness of specifications is a key principle to preserve linked to Internet. It was for the original definition of the protocols stack TCP/IP, as it has been one fundamental pillar during the development of the Web.

Dr. Louis Pouzin, one of the Internet Pioneers and member of the Internet Hall of Fame, will open this session giving an inspirational speech about how important is to preserve this principle of openness inherent to the Internet.

Carlos Domingo, Director of Product Development and Innovation at Telefónica Digital and Executive President of Telefónica R&D, will elaborate on the open royalty-free nature of FI-WARE specifications, paving the way to a true open Future Internet that goes beyond connectivity and information sharing. An open Future Internet which will provide open cloud capabilities and a library of Generic Enablers exporting open APIs easing the connection to the Internet of Things, gathering, publishing and processing of data and content from distributed sources at large scale in real time, Big Data analysis, cross-selling and co-creation of applications. Everything in a simple yet powerful manner that is truly open!

Details about the challenges launched at the Campus Party looking for innovative applications based on FI-WARE, and the several workshops organized to train you on FI-WARE, will be provided at the session. Don't miss the opportunity to learn how you can be one of the winners!

Figure 9. The Pythagoras Stage from the audience's perspective

3.2.2.1 Further considerations

After a master class from Mr Pouzin on operational ideas for the start of any Internet-based project, Mr Domingo took the floor to speak about the future of Europe as an ICT continental power. If Europe kind of missed the boat in the boom of the web, it is now time the EU positions itself. In this sense, FI-WARE is not looking at the past nor the present, but at the future. The key for this is to connect things, not only people, since people is already connected. This was linked to the first FI-WARE workshop, which dealt deliberately with the Internet of Things (see Chapter 3.3). Mr Domingo continued by explaining the different levels of opportunity that FI-WARE and the FI-PPP

are offering: the CPE Hackathon, the future FI-WARE challenges, and the venture fund for open calls (December 2013).

Once more, the FI-WARE ambassador Luis I. Cuende stepped in to explain the different natures of the FI-WARE workshops at the CPE. The audience showed interest by asking questions like “what is the coolest thing you have ever developed with FI-WARE? or “where does my team sign up?”. Other included different requests for further information on FI-WARE, its GEs or the constraints imposed by programming languages, which, by the way, are not the case of FI-WARE.

3.2.3 The FI-WARE Use-case examples

Where: Pythagoras (Developers’) Stage

When: Tuesday, 4th of September, 15:00 PM - 16.00 PM

Description: FI-WARE provides Generic Enablers and Cloud capabilities that can be exploited in multiple application domains. One of the most promising ones is that of Smart Cities, where FI-WARE can provide the basic technology foundation for the development of applications.

Representatives from several cities will participate in this session to share their vision about the concept of Smart City and the role of Open Data. They will also elaborate on how they see that FI-WARE can contribute to the definition of an open and interoperable set of APIs for the development of Smart City applications and the creation of a sustainable open innovation ecosystem around Smart Cities across Europe.

FI-WARE, though, is not limited to smart cities. There is a large number of application domains where it can be used, as Use Case projects in the FI-PPP program can demonstrate. Several testimonies from these projects will be presented to illustrate this concept.

3.2.3.1 **Further considerations**

This session was driven from a round table whose participants were:

- Mr. Dave Carter (Head of Manchester Digital Development Agency - MDDA)
- Mr. Ger Baron (Amsterdam Economic Board)
- Mrs. Katia Beatrici (Responsible of International Relations in the Cabinet of the Mayor of the Municipality of Trento)
- Mr. Marc Sanderson (Malaga Valley International Economic Development Director)

The speakers addressed around one hundred attendees and shared their vision about the role of Smart Cities and Open Data in the Future Internet, the need to define standards in the area of Smart City platforms, and the possibilities to create an open innovation ecosystem engaging developers and entrepreneurs around Smart Cities. The speakers commented on the potential of FI-WARE and FI-LAB to help in the materialization of relevant standards and a sustainable open innovation ecosystem around Smart Cities. In this sense, Dave Carter even commented on the idea of having open standards just as we are conceiving open data – coming from the universities and developer communities and not necessarily from the big corporations or governments.

The FI-WARE hackathon was again officially presented and this raised questions from the audience to the members of the round table. One attendee asked how city councils are really benefited from hackathons. Mr. Carter and Mr. Baron explained how hackathons – for instance in the Open Data field – have been used in both cities. In the case of Manchester, of the latest sixteen apps presented by independent developers in this field, the council is now supporting four. Hackathons are key tools to grab ideas, and then of course more resources need to be in place in order to secure sustainability and wider use. Other comment was the need for listening to the citizens’ real problems, instead of creating new necessities for them.

3.3 Workshops

3.3.1 Developing your first application using FI-WARE

Where: "Workshop 1" space

When: Tuesday, 3rd of September, 16:00 PM – 18:00 PM

Description[5]: Wish to be one of the hackers awarded by the 20 K€ in prizes distributed by FI-WARE at Campus Party? Don't miss this workshop that will teach you how to create your first app using FI-WARE!

Using a Live Demo Application as an example, our speakers will explain you how to gather and publish context information, how to develop mashable applications and how to connect to physical sensors/actuators (Internet of Things) using FI-WARE. They will also show you, campuseros, how to develop simple software which can run on Raspberry Pi boxes for gathering context information from connected sensors. They will provide pointers to further investigate other useful features (e.g. Complex Event processing or Big Data analysis).

Don't miss this opportunity to meet the FI-WARE team. Get ready to develop applications for the FIWARE Hackathon at Campus Party!

3.3.1.1 **Further considerations**

The three FI-WARE workshops at the CPE were a huge success and were fully booked within one week in advance. Campuseros showed much interest in these activities and the spaces literally ran out of seats; many people attended the workshops from *outside* the workshops.

Figure 10. The queue for the first FI-WARE workshop

[5] As used internally for creating the CPE website's texts that accompanied each workshop (see http://www.campus-party.eu/2013/Whats_on_at_Campus_Party.html)

In this first workshop, an example of a complete Smart City application in the Spanish city of Santander was shown and the fundamental concepts of FI-WARE (GEs, NGSI model and others) were introduced to the participants.

In a second part of the workshop, the concept of mashable widgets and webs was presented, and the correspondent FI-WARE developments (like the Open Widget API) were also explained. This can help developers to easily, openly and quickly create new pages. Callback functions and push functions were explained and at all times the FI-LAB components were used, along with their documentation.

The Internet of Things (IoT) challenge – the FI-WARE hackathon at the CPE – was presented, and the materials given away to participants were also introduced. This was really motivating, especially the Raspberry Pi module. All the steps for registering the modules in FI-WARE were explained, including the relevant scripts, network information that was needed and other procedures. The fact that around thirty FI-WARE developers from the consortium were available to help the campuseros was seen as a great advantage. The questions coming from the audience showed that the core of the message had been assimilated and that great things were about to happen in the hackathon.

3.3.2 The FI-WARE Cloud: bringing OpenStack to the next level

Where: “Workshop 1” space

When: Wednesday, 4th of September, 10:00 AM -12:00 AM

Description: Wish to be one of the hackers awarded by the 20 K€ in prizes distributed by FI-WARE at Campus Party? Don't miss this workshop that will teach you how to deploy your app on the FI-WARE Cloud since there will be a special jury award to the "Best FI-WARE Cloud Application"!

FI-WARE Cloud capabilities are based on an enhanced version of OpenStack, combined with additional capabilities to easily define, deploy and manage application blueprints comprising multiple Virtual Machines (VMs) where software packages with complex inter-dependencies can be deployed.

By attending this workshop you will learn how the FI-WARE Cloud will extend OpenStack and bring it to the next level. Furthermore, you will learn how to create your account in FI-LAB, the environment where you will find FI-WARE at work: creating the virtual infrastructure to host your applications and using FI-WARE Generic Enablers as a Service.

Our speakers will also explain you how to connect applications running on Raspberry Pi boxes to applications running on the FI-WARE Cloud.

Don’t miss this opportunity to meet the FI-WARE team. Get ready to develop applications for the FIWARE Hackathon at Campus Party!

3.3.2.1 **Further considerations**

The “FI-WARE Cloud” workshop was carried out in a very pedagogic way. Firstly, OpenStack was presented, along with cloud-computing concepts. All the steps for creating/configuring an image and starting an instance, and then accessing such instance via SSH were explained.

The PaaS Manager GEs was then introduced, which helps developers to choose VMs and their configuration, scaling-up and other usual cloud procedures, totally open, totally modular and compatible with other FI-WARE GEs. The different VM templates available in the FI-LAB were listed, and CHEF (for configuring a VM in terms of software installation) was introduced as well.

After that, the Open APIs part of the workshop started, in which the OCCI (Open Cloud Computing Interface) component of FI-WARE was introduced, followed by a hands-on presentation of the CDMI GE (Cloud Data Management Interface), which offers added value on top of the PaaS

Manager GE. Examples with Chrome's "advanced REST client" were done. Other GEs were presented, so the participants in the hackathon had more tools for their projects; these included the IDM GE based on OAuth2.0, for managing identity in FI-WARE, and the Business GE.

Figure 11. Attendees and mentors at one of the FI-WARE workshops

3.3.3 Advanced Web User Interfaces

Where: "Workshop 1" space

When: Wednesday, 4th of September, 16:00 PM -18:00 PM

Description: Wish to be one of the hackers awarded by the 20 K€ in prizes distributed by FI-WARE at Campus Party? Don't miss this workshop that will teach you how to develop advanced web user interfaces with 3D and Augmented Reality Features and win the special jury award to the "Best Web User Interface"!

FI-WARE will deliver a novel service infrastructure, building upon elements called Generic Enablers (GEs), which offer reusable and commonly shared functions making it easier to develop Future Internet Applications in multiple sectors. This workshop aims to introduce you to those FI-WARE GEs that will help you to develop outstanding web user interfaces.

The workshop will be structured in two parts. The first part is intended to provide an overview of the FI-WARE Generic Enablers that will ease development of Web-based User Interfaces supporting advanced 3D and AR features. The second part will be about performing advanced multimedia stream processing using some specific FI-WARE Generic Enablers.

3.3.3.1 **Further considerations**

Another success in terms of the FI-WARE ability to summoning developers at the CPE, the "Advanced Web User Interfaces" workshop was probably the most complex in technological terms. Nevertheless, all the forty seats were occupied. The 3D Web UI GEs were introduced. These GEs are not only important for gaming, but also for architecture-related tools, data visualization, education and training and 3D rendering for tourism, and are going to be key GEs in the future "Smart Society" challenge. All the 3D web UI GEs are based in Tundra, all are open source.

3.4 Branding: Presence of FI-WARE in the O2 Arena

FI-WARE had a very strong presence in the latest CPE in London. The panels and banners included:

- 1 x large panel solely for FI-WARE on the walk up to The O2
- 1 x large panel with all partners of the CPE on the walk up to The O2
- 1 x large banner at the Live Quarter with all sponsor logos
- 4 x large hanging banners at the Live Quarter with all sponsors' logos

Figure 12. The large panel with all partners on the walk-up to The O2

With regards to the digital signage:

- Partner branding on the broadcast network (a big screen on the walk up to The O2 and all screens inside of The O2). This was on a loop with all other venue content.
- Logo on the LED ticker/"arenamation" inside of The O2 Arena
- Logo on the two large screens at the main stage when stage was not in use by keynote speakers (again, logos were on a loop with all the other social media content that was being promoted).

FI-WARE was well represented and its logo was shown in the best possible places, just as the logos of other key partners of the CPE in London like Sony or Barclays.

This was effectively complemented by the fact that around forty to fifty members of the consortium – including more than thirty developers from the FI-WARE technical teams – were physically present and ready to help the campuseros. FI-WARE appeared as a reality supporting developers, entrepreneurs and the CPE infrastructure itself. FI-WARE *was there* for them.

Figure 13. The large banner at the Live Quarter, as seen from the registration booths

Figure 14. The large hanging banners at the Live Quarter

3.5 The FI-WARE stand at the O2 Arena

The FI-WARE stand was located at the very center of the Market Place, inside the Live Quarter, so it was actually at the core of it all.

Figure 15. Preparing the launch of the FI-WARE stand

The FI-WARE team of developers was seating next to the stand, willing to help the participants of the FI-WARE Hackathon and any other people interested in FI-WARE.

Figure 16. Mrs Neelie Kroes and other EC representatives at the FI-WARE stand – first-hand experiencing the Campus Party

The stand also acted as a meeting point for institutional activities, like the visit of the EC representatives, and for operational issues like meeting the hackathon teams prior to their presentations to the FI-WARE team, and giving away the FI-WARE promotional materials.

At all times, members of the consortium were at the FI-WARE stand, acting as ambassadors of the project and its outcomes.

Figure 17. A different perspective of the FI-WARE stand (notice the panel of partners, the Rasperry Pi and the promotional tees)

3.6 Promotional materials distributed at the CPE

As stated in D12.2.4 (Chapter 3.4), three different promotional materials were produced for FI-WARE promotion at CP Europe.

- T-Shirts: Used as a reward for participating in the Twitter contest.
- Sweaters: Distributed among FI-WARE members and stakeholders, some keynote speakers and some hackathon contestants.
- Wirstbands: Used the first two days to control the attendance to workshops and participation to the hackathons. From Day 3 onwards, they were placed at the stand as a free giveaway to everybody.

The reader is directed to D12.2.4 for finding the details on the design of such promotional materials.

4 The FI-WARE Hackathon at Campus Party Europe

4.1 Publication, materials and prizes

The FI-WARE hackathon was an open competition for any team of campuseros at the CPE in London, provided that at least one of the participants was 18 or older. Individual projects could also be presented.

The FI-WARE hackathon was one of the major events during the CPE. It was well promoted not only during the workshops but also during the sessions, and it was the first real test for the FI-LAB components and documentation. The questions were “Is FI-WARE easy but powerful enough for external developers?” and “Are we in the right direction in terms of training and documentation?” and the answers were really positive. Several very high quality projects were proposed by the campuseros, and the fact that they successfully covered many different themes, from tourism to IoT and advertising, with just three workshops and no previous experience whatsoever with FI-WARE proved very encouraging for the consortium and the representatives of the EC.

The hackathon was announced on the 28th of August 2013 through the Campus Labs website in three languages (see http://www.campus-labs.com/webapp/reto/ver/FIWARE?lang=en)

Figure 18. Announcement of the FI-WARE hackathon at the Campus Labs site

Two emails were sent to all the registered users of the Campus Party website, the first was an introduction to FI-WARE and its possibilities, and the second focused on the hackathon. Information on the workshop schedule was also delivered.

Reminders were sent – in the form of posts on the CPE blog – and a Facebook and Twitter campaign was launched as well. The Campus Labs, Campus Party Europe and Campus Party accounts were used.

Very few days before the closure of the hackathon, a new email was sent, supported again by more Social Networking actions. And this operation was repeated 24 hours before the deadline, during the CPE.

Figure 19. Mail sent to the campuseros community informing them of the hackathon

The key requisite was to register for entry, between 18:00 pm GMT on the 3rd of September 2013 and 8:00 am GMT on the 6th of September 2013, at http://www.campus-labs.com under the section "Build your Future Internet application using FI-WARE", and then, campuseros should propose an application that met these requirements:

- Must use FI-WARE technologies, specifically, using services provided by instances of "GEi products" deployed in FI-LAB.
- Part of its components must be deployed on the FI-WARE Cloud provided at the FI-LAB.

Participants should also describe any devices that they had used to develop and test the application and any third party or previously developed software which was involved.

The hackathon's terms and conditions were at all times available at the Campus Labs website, and had been agreed by Futura Networks, AE3 and Telefónica. They can be still downloaded from http://static.campus-party.org/labs/generic/images/retos/FIWARE_bases.pdf

The prizes were organized as follows. Four prizes for the winners existed:

- First prize - 5,000 EUR
- Second prize - 3,000 EUR
- Third prize - 1,500 EUR
- Fourth prize - 500 EUR

In addition to the above, there was an *extra* total of 10,000 EUR to award the following (this meant that one of the four prizes above may also receive any of the four prizes below):

- Best "Cloud Application" showing the best use of the FI-WARE Cloud capabilities – 2,500 EUR.
- Best "User Interface", which rewarded the most outstanding application from the interface user´s point of view – 2,500 EUR.
- Best "Connected to the Internet of Things" application to reward the most interesting application connected to the Internet of Things using FI-WARE GEs – 2,500 EUR.
- Best "Young Developer", which will reward the programmer under 21 years old that has developed the overall best application. – 2,500 EUR.

4.2 Awarded projects

After the act of the jury was published, on Friday the 6th of September the awarded projects were announced during a ceremony at the CPE's main stage, curated by Juan José Hierro, Coordinator and Chief arquitect of FI-WARE. Two posts were created on the CPE blog and on the Campus Party official blog. These were again supported by actions on Twitter and Facebook.

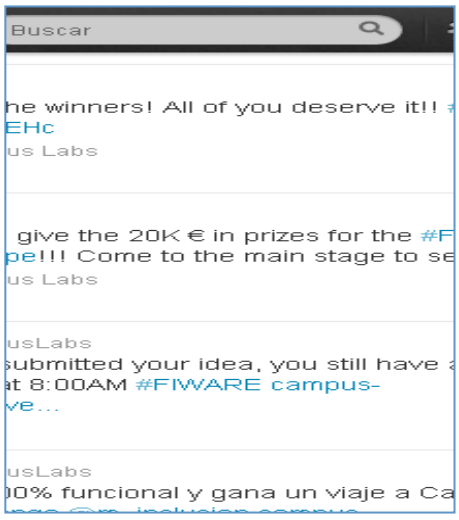


Figure 20. Examples of real tweets following the act of the jury on the hackathon

The judging panel was composed of 10 FI-WARE experts from different organizations. They evaluated the applications on the basis of the following criteria using a rating of 1 to 10:

1) Potential: the idea proposed had to be based on a technological and/or competitive differentiation about what exists as a solution to the problem, as well as having market potential.
2) Relevance: the proposed idea had to be a solution that made relevant use of the FI-WARE technologies.

The following is the list of awarded projects. The reader is referred to Annex I for more details on the participants. Furthermore, relevant samples of the awarded applications are progressively being collected at http://wiki.fi-ware.eu/Sample_Applications_created_in_the_hackathons; they can serve as examples for future hackathons and developments.

4.2.1 First Prize (and Best Young Developer): "SMADS, smart ads for smart cities"

Developed by Alberto Elías (Project Leader), Jorge Izquierdo, Alejandro Perezpayá and Braulio Valdivielso This project was described by their creators as follows: "With the buzz around smart cities, people are starting to worry about having advertisements everywhere. Smart cities have an enormous potential in this field. That's the reason why the creators of SMADS think that is important that we make use of it. This project proposes a system in which the ads displayed to a user are chosen based on the information received from different kinds of sensors that measure, for instance, the temperature, the proximity or the humidity. SMADS is a product that makes ads appears just in the most proper moment, according with the information coming from the sensors. This will allow advertisers to reach the users just when they need their products, then the brands will reach them in a more efficient way and will get a better impact".

Figure 21. The young winners of the first prize, presenting their project

This project combined a variety of GEs, sensors and actuators with a very specific business case inside a Smart City context. Alberto also won the "Best Young Developer" prize.

4.2.2 Second Prize: "Traffic monitor"

Developed by Justas Salkevicius from Lithuania, this project was described by its creator as follows: "(…) tries to monitor the crowdedness of a location. It will warn if the limit of people that

can be in a place is reached and about constant crowdedness. Traffic monitor will analyze the behavior in big events and traffic data to allocate the participants' flows better. It also gathers data about shop display window and ad efficiency.

Justas – who suffers from cerebral palsy – worked on his own to deliver this project, which combines mobility and IoT, and proved himself an example of perseverance and determination.

Figure 22. Justas, 24, is also co-founder of Sneakybox, a media development studio

4.2.3 Third Prize: "EnPhi, Feedback-Driven Environment Evaluating Platform"

Developed by Ivan Trancik from Slovakia, this project was described by its creator as follows: "(…) about finding, processing and displaying correlations between people's feelings about some place and an objective sensor data. In this way, you can figure which data (humidity, illumination, temperature, etc.) is what makes people feel better. This project will enable users to thumb-up or thumb-down their feelings about particular place. When the user makes his move, the subjective data are sent to the server, where a context is being created showing the user reviews by colors.

4.2.4 Fourth Prize: "SociWare"

Developed by Spanish Pau Contreras (Project Leader), Adrián Crespo, Pablo Iglesias, Jesús Iniesta, Jorge Lavin and Luis Polo; this project was described by its creator as follows: "(…) giving the customers the chance to feel part of a business or an event. Using the power of smartphones, the Raspberry-Pi device and the versatility the FI-WARE cloud, SociWare is a solution that provides the customers the possibility to execute codes via Twitter, generating events inside the event, like taking part in a poll to choose a favorite song or make a decision."

4.2.5 Best User Interface Prize: "Tweetbolt, a social charger"

Developed by Pablo García-Nieto and Adrián Martín Piñas. Tweetbolt is targeted to technological events such as Campus Party, music festivals and congresses like MWC where no power supply is available for users as they go. Their proposal is all about bringing new facilities for these places, based on charging stations with real-time notifications through the twitter API. With this software, the user can be notified whenever a device is fully charged, including security settings specifically designed for public charging stations.

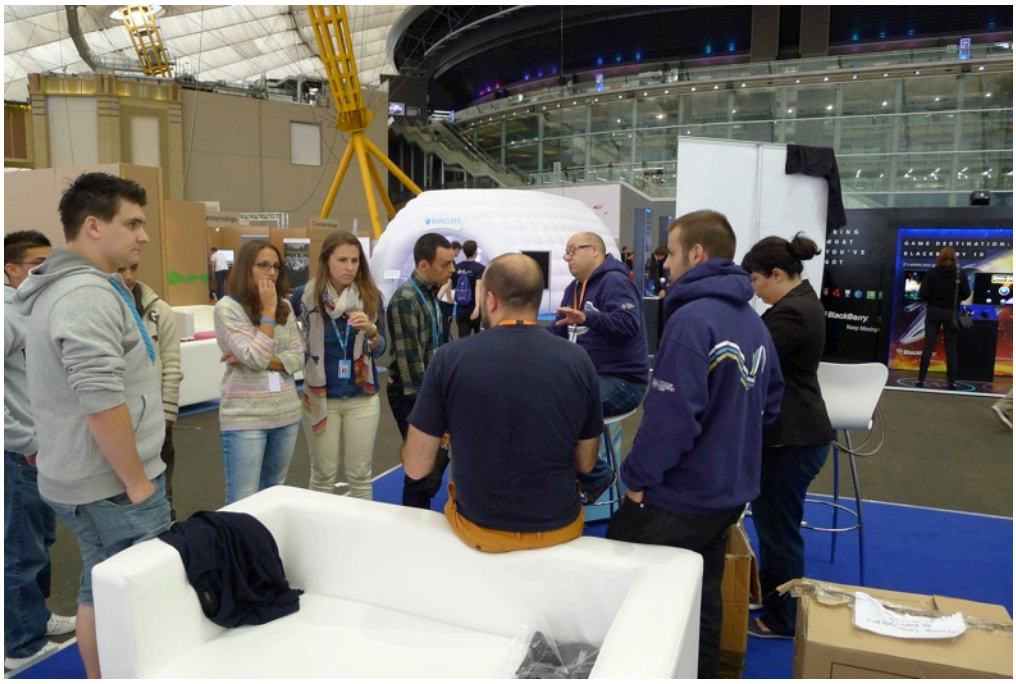


Figure 23. The FI-WARE developers meeting one of the teams participating in the hackathon

4.2.6 Best Connected to the Internet of Things Prize: “Hotel Automation

Developed by Daniel López and Antonio Sánchez, Hotel Automation was a project focused on space automation. It can control and manage the sensors in a hotel room. Using the sensors, it will improve the comfort of the guests and their experience.

Figure 24. The winners of the hackathon on the main stage with Juan José Hierro

5 Other communication activities through Social Networks

Please be referred to Chapter 5.1 in D12.2.4 for specific details on the dissemination actions carried out to ensure visibility, interest and participation in all the FI-WARE activities at the CPE in London.

6 Lessons learnt and conclusions

With all the actions presented in the previous chapters, FI-WARE gained visibility in a vast community of potential users and stakeholders who are – *were* – alien to the most important results of many EU R&D projects and initiatives.

This has changed with the Campus Party Europe in London.

FI-WARE has shared stages, spaces and interest with some of the most prominent ICT individuals, ideas and companies around. FI-WARE has been promoted and supported for one full week as a *real* solution to many problems and as a *real* game-changer for future businesses; and this has been done in the right environment, surrounded by the most brilliant and active young minds. Sessions have been put up, workshops have been carried out and the hackathon has been a success; the key lessons learnt are summarized here:

- Visibility can sparkle interest and use, if done within the right community
- Young developers are willing to learn and FI-WARE gathers some of their most sought-after characteristics: open, easy, modular, powerful, ready-to-go.
- While willing to learn, they also need guidance and precise documentation. The messages during future sessions and workshops need to be clear and to the point.
- There are precise conceptual differences between institutional actions and educational actions. We need to be sure of who the audience is, at all times.
- Important work needs to be done to ensure that the momentum is grabbed – and keeps growing. The FI-WARE challenges and the future activities in Campus Party Brazil will be very relevant for this.
- Campus Party Europe has meant a before and after. We are in the right direction.

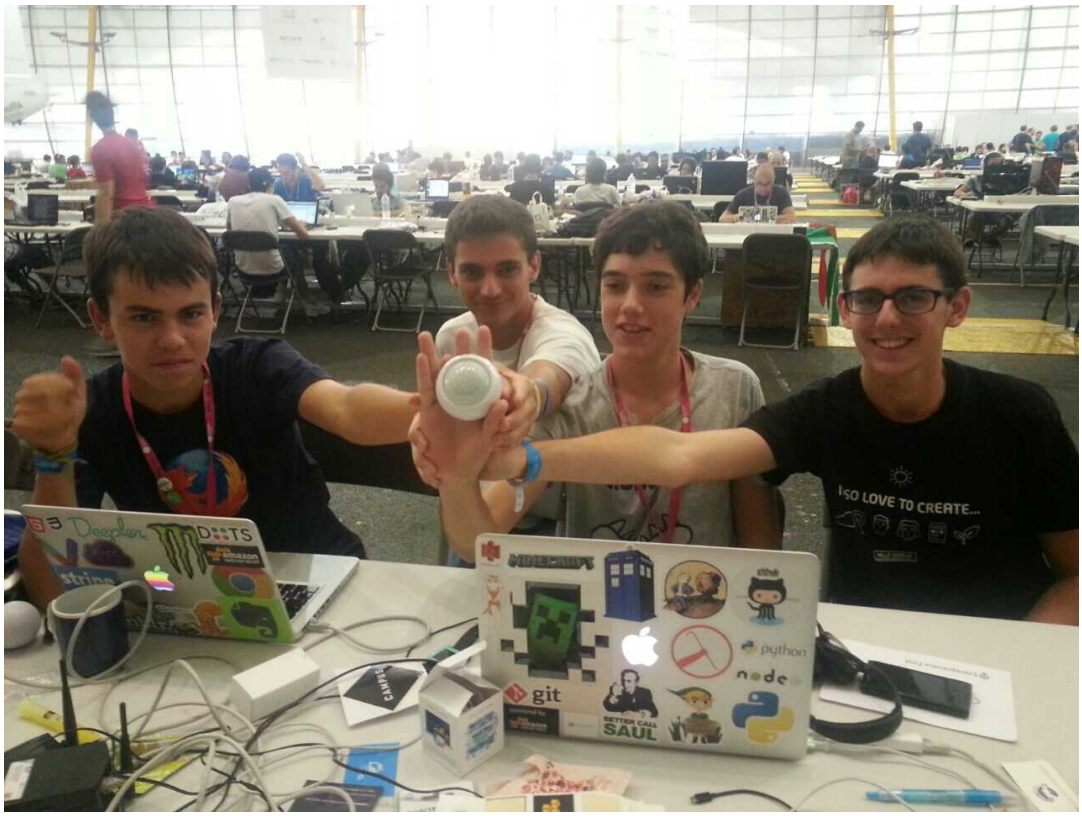


Figure 25. These four youngsters also love to create

Annex I: The hackathon winners

This section introduces the hackathon winners, by including a photograph and a short description of each one of them.

FIRST PRIZE: "SMADS: smart ads for smart cities"
Alberto Elías *, Project Leader, SPAIN

Co-founder of Holalabs and organizer of GDG Murcia

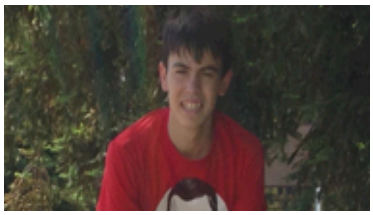
18 years old

He is an Android and Web developer with experience in backend and frontend web development..

Young advisor to Vice-President of the European Comissioner Neelie Kroes. Developer of different Android apps and I've done various freelance work, apart from work experience in different startups. I'm also a big fan of Free Software.

** He is also FI-WARE Young Developer Award*

FIRST PRIZE: "SMADS: smart ads for smart cities"
Jorge Izquierdo, SPAIN



Young iOS and Web developer

16 years old

He works at cardwee, a startup that he cofounded where they do loyalty cards stuff. He was awarded a WWDC Scholarship by Apple this year to go to San Francisco. He has built apps like Showy, A++genda and uRlate.

FIRST PRIZE: "SMADS: smart ads for smart cities"
Alejandro Perezpayá, SPAIN

Co-founder of weeZeel, a web based operative system

17 years old

He is a developer who loves coding backend and web, doing backend stuff at weeZeel.

He is keen on videogames, longboarding and programming. Starting with videogame development.

FIRST PRIZE: "SMADS: smart ads for smart cities"
Braulio Valdivielso, SPAIN

The second best hacker under 18 in Europe.

18 years old

He spends most of his time working on a 3D printing startup that attempts to manufacture highly customized phone cases. Last year, He ended up being second at the HackNow contest, being then the second best hacker under 18 in Europe.

SECOND PRIZE: "Traffic monitor"

Justas Salkevicius, LITHUANIA

Co-founder of Sneakybox, a small interactive media development studio

24 years old

He is currently pursuing computer science master's degree at KTU. AT Sneakybox, He is creating interactive solutions using motion tracking. Additionally, he is developing a mobile adventure game about ecology called "Never Future".

THIRD PRIZE: "EnPhi, Feedback-Driven Environment Evaluating Platform"

Ivan Trančík, SLOVAKIA

Co-founder of Cabbage.mobi – a real-time and social transportation marketplace.

24 years old

Graduated from Comenius University, Faculty of Mathematics, Physics and Informatics majoring in Informatics. His areas of interest are full-stack mobile application development and cloud/ virtualization technologies.

FOURTH PRIZE: "SociWare"

Pau Contreras de Luna (Project Leader) SPAIN

Telefónica Talentum program.

31 years old

He is a Computer Engineer and has finished an intership with Telefónica at the Talentum Program.

FOURTH PRIZE: "SociWare"

Pablo Fernández Iglesias, SPAIN

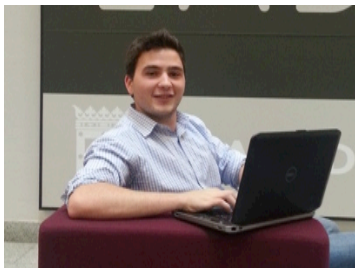
Founder at SecTrip

26 years old

Bachelor of Fine Arts, specializing in design, and technical application development. Working as Web Senior Developer in Madrid. Loves art, UX, interface design, computer security, internet and rock.

FOURTH PRIZE: "SociWare"

Jesús Hiniesta, SPAIN



Computer engineer studying Business Administration

23 years old

Recently graduated in computer engineering, in 2014 he will obtain his Grade of Business Administration. When he was 17 years old he started a technical support business by his own. He has worked as security consultant, and also developed many projects for many stakeholders as freelance.

FOURTH PRIZE: "SociWare"

Luis Polo Herráez, SPAIN

Sarting a Master's Degree in Information and Comunication System Security

21 years old

He has recently finished a degree in Computer Science and now he is going to start a Master's degree in Information and Comunication System Security. He is working by its own projects.The more he delves into the world of technology the more he likes it.

FOURTH PRIZE: "SociWare"

Jorge Lavin Montoro, SPAIN

Talentum program and intern in Telefónica I+D

22 years old

He holds a degree in Telematic Engineering. IN 2013 he was awarded with an internship in Talentum program for six months in which he could develop his own project. This project consisted of an application to get a taxi with our smartphones in simple and quick way. Currently he is working as an intern in Telefónica I+D in M2M department.

FOURTH PRIZE: "SociWare"

Adrián Crespo, SPAIN

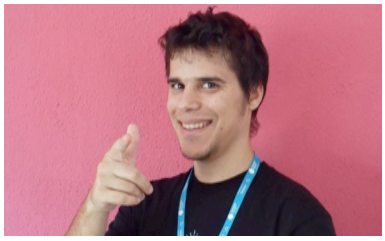
Talentum Startups Scholarship at Telefónica

24 years old

Telecommunications Engineer student at the Polytechnic University of Madrid. A self-taught, passionate about informatics, and a novice white-hat hacker. Now involved with the Mozilla Foundation and with the Hacker Highschool as a reviewer. Member of the Institute of Electrical and Electronics Engineers (IEEE) and the Electronic Frontier Foundation.

BEST CONNECTED TO THE INTERNET OF THINGS: "Hotel Automation"

Antonio Sánchez Pineda, SPAIN



Android mobile and web developer. Telefónica Talentum program

24 years old

He is finishing a bachelor in Information Systems (Computer Engineering speciality). I'm an Android mobile and web developer, using DJango for the last 2 years, among other technologies. He is currently working on the backend team at Nubbler.com. He is passionate about technology, computers, home automation.

BEST CONNECTED TO THE INTERNET OF THINGS: "Hotel Automation"

Daniel López Pedrosa, SPAIN

Telefónica Talentum program

24 years old

He is working on his Final thesis project in Technical Engineering in Computer Systems. He is working in In Urban M as an intern, developing the mobile software (web, iOS and cloud server) of a folding bike, both electric and Smart, by using a Raspberry Pi and sensors.

BEST USER INTERFACE: "Tweetbolt, a social charger"

Pablo García-Nieto Rodríguez, SPAIN

Experienced in Android development

18 years old

Student of Computer Science at the Polytechnic University of Valencia. Passionate about coding, computers and any kind of wire device. Experienced in Android development with successful applications already published. Always open to learn about new technologies and sharing his knowledge with anyone who would like to.

BEST USER INTERFACE: "Tweetbolt, a social charger"

Adrián Martín Piñas, SPAIN

Founder of a YouTube channel with over 8.000 subscribers

20 years old

Student of Telecommunications engineering at UAH (Madrid). Interested in programming, technology, design and filmmaking. Started a YouTube channel as a personal project a year ago with currently over 8.000 subscribers and now working on his first iPhone application. Never stop looking for new challenges and always ready to start interesting projects.