Dev8d summary

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- What is Dev8d
- People attending Dev8d
- Linked data London meetup
- Dev8d talks
- The ones I attended
  - Cloud workshop (Amazon Ec2 tutorial)
  - Clojure
  - Microsoft Zentity
  - Google application engine workshop
  - Python lab
- Other benefits
- Conclusions

- Dev8D is a coding event in the UK
- Organised by DevCSI (http://dev8d.jiscinvolve.org/)
  - Organisation which fosters generation of new ideas by providing a good environment for development of applications in UK
  - DevCSI is managed by UKOLN (http://www.ukoln.ac.uk/) and funded by the JISC (http://www.jisc.ac.uk/)
- Dev8D structure
  - Set of workshops, coding dojos, talks, etc.
  - Common areas for people to talk and ask (base camp, project zone)
  - Many people together learning the same things with different ideas on mind
  - New ideas come up from learning new tools
  - Bounties for each technology

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- Linked data London meetup
  - People from the linked data community
  - Talks about linked data applications
  - Success stories of linked data applications
    - BBC, UK government, all developed by Talis
- People from Fujitsu, interested in Linked data (and other technologies) and other companies
- People from U Edinburgh (OGSA-DAI)
- People from U Southampton
- People interested in programming hardware devices
- Basically computer science freaks

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- Linked data talks

- Linked Data: Implications for Applications

- BBC Wildlife Finder

  - (http://www.bbc.co.uk/wildlifefinder/) allows people to access DDB data about wild life.

  - Vocabulary + Linked data application

- UK Government Linked Data use case, John Sheridan & Jeni Tennison (data.gov.uk)

- Leigh Dodds & Andy Seaborne (Talis) – SPARQL 101 workshop

  - + questions to Andy

- A web-developer API for (Government) linked data

- Focused in promoting Linked data

- They showed nice use cases

  - Which show lots of data linked

  - From powerful organisations

  - Technology mainly provided by Talis: http://blogs.talis.com/nodalities/2010/03/jisc-calls-for-linked-data-projects-talis-can-help.php

- Lots of people from the Linked Data community

  - Possibility of asking many questions about your own developments

  - Possibility of giving talks/tutorials

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- Pipes lab (Yahoo Pipes, promoting access to Linked Data, using different Google, services)
- Arduino workshop (beginners and experts)
- Clojure lab
- Cloud workshop
- iPhone workshop
- Ruby on Rails lab
- Discussions about genetic algorithms,
- Scanning and Recognition / DIY Scientific Instruments / Multicore Processing
- Microsoft Zentity, Scala, Google application engine,
- Python + accessing SPARQL endpoints with python libraries
- Lightning talks (15 minutes each)
- ...

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- "dialect" of LISP
- Functional programming
- You define functions which can be arguments of other functions
- Java integration
- http://delicias.dia.fi.upm.es/wiki/index.php/Dev8dTalks/Clojure

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- Workshop about how to use Amazon EC2 (and Linode demo)
- What is Amazon EC2 + features
  - Elastic computing
  - AMIs = ISOs in Amazon
  - Cons: is like a live CD, 78$ per month (to just run an instance)
  - Static (moveable) IPs, you can assign your won DNS
  - Persistent storage through an EBS volume (S3 mounted as a volume)
- How to
  - start a new machine
  - deploy services in it
  - access this machine
  - save data in the Amazon cloud

- Cost for one hour, launching 2 VM, playing with them, 1GB used: 0,56$

- http://delicias.dia.fi.upm.es/wiki/index.php/Dev8dTalks/AmazonEC2Tutorial

- Linonde demo: similar to Amazon but it maintains the VM state

- Very useful if you want to make some experiments
  - Just install your environment (in about 5-15 minutes)
  - Run it

Table of Contents

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- Microsoft Zentity is repository platform with services around it
  - Has a hierarchy for the management of a research group: entities like publications, thesis, papers
  - Everything is an object
- First thing: learn power shell for develop anything in Zentity
  - We add resources (me, my papers, etc) and we get them developing code
- It uses LINQ (Language-Integrated Query) for accessing resources.

- It has a basic inference engine:
  - Carlos is a person (terminal command, it adds Carlos as a resource/entity).
  - adding relationship: Carlos knows steven.
  - Carlos knows ?.
- on top of Zentity you can build different visualizations or ways for accessing elements in Zentity
- It seems a good tool if you have time for developing all the entities in a Microsoft platform

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- Based on the book "Using Google App Engine" from O'Reilly
- How to develop simple applications that use the Google application engine
  - Based on python
  - The book focuses in those people who know anything about Web development
  - How to use the console, logs, browse your application, etc.
  - All using Google technology
- Discussion about MapReduce, Hadoop and the next generation of large data storage approaches
- All the workshop is here: http://wiki.2010.dev8d.org/w/Google_Workshop

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- Python for web interaction
  - We learned how to access wikipedia and dbpedia, retrieving some of their content, manipulate it and presenting it
  - All using Python libraries
  - In 2 to 3 hours
- First, quick introduction to Python
  - Data types, flow control, classes, functions, use of tabular spaces, etc.
  - http://www.slideshare.net/azaroth42/python-web-tutorial
- Second: development of the application for web interaction
  - Urllib (url = urllib.urlopen(url))
  - Urllib2 (request = urllib2.Request(url))
  - Urlparse
  - rdflib

```python
from rdflib import ConjunctiveGraph, URLInputSource, Namespace

prop = Namespace("http://dbpedia.org/property/")
origin = prop['origin']

topgraph = ConjunctiveGraph()
count = 0
for nt in ntitles:
    graph = ConjunctiveGraph()
    dburi = 'http://dbpedia.org/data/%s.rdf' % nt
    try:
        graph.parse(URLInputSource(dburi))
        topgraph += graph
        count += 1
    except:
        pass
    sys.stdout.write('.')
    sys.stdout.flush()

query = "SELECT ?band ?origin WHERE { ?band prop:origin ?origin . }"
res = topgraph.query(query, initNs={'prop' : prop})
```

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- OGSA-DAI people was there
  - I chased them until I got what I needed:
  - How to run tests in OGSA-DAI
  - Very good framework for running them
  - Based on Ruby and YAML
  - Run tests, automatic generation of reports, time to be configured: 5 minutes (if you configures it previously)
- Linked data people was there
  - I chased Andy Seaborne until he explained me how Jena's (D)ARQ worked and why it was that fast
- You meet lots of people
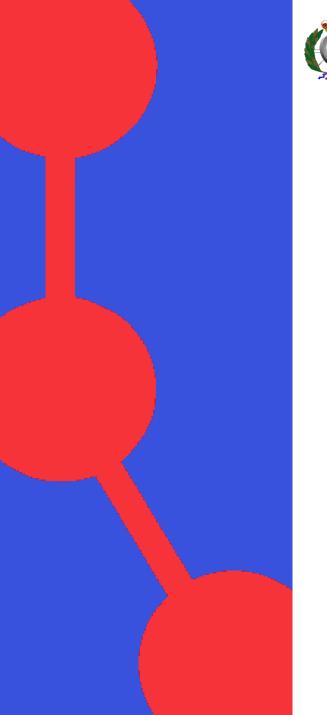- Bounties: lots of good prices for winners

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- Good place to learn new technologies
- You generate new ideas by learning and associating with your own expertise
- Many people around
  - Possibility of solving your own questions
  - Lots of contacts to do
- How much was it?: it was for free!
  - They even provided you accommodation in a hostel (in dorms, 1 metro station away)
  - Breakfast, lunch, social dinner and some beers included

Any question?