





The CoMEte Project (Course on Mozilla Education and Technologies @ Evry)

Judith Benzakki & Didier Courtaud

Email: judith.benzakki@univ-evry.fr didier.courtaud@univ-evry.fr

FOSS market







- The FOSS market has a huge expansion rate
 - 33 % in 2009 and 30 % in 2010 (estimated)
 - 1470 M€ in 2009 in France
- FOSS is now used everywhere
 - Administrations
 - Public sector
 - Big companies
- FOSS becomes mandatory
 - "Up to 2012, at least 80 % of all the softwares will use FOSS" (GARTNER Group)

FOSS & Education







- There is an important need of "FOSS-formed" engineers in the companies
 - Cost of the projects become important
 - Need of new technologies: Web 2.0, rich applications
- It is the role of University to develop new FOSS cursus
 - To help students find a good job
 - Make them discover new job opportunities
 - To help communities to create new technologies
 - Standards, interoperability, independance
 - To help the development of the Numerical Economy

Why Mozilla?







- The Mozilla Foundation is leading major FOSS projects including Firefox, Thunderbird, Fennec, ...
- The technologies which are used to build these products are
 - At the leading edge of innovation
 - Web standards based
 - Universal
- They give a new paradigm to make Web applications
 - Faster
 - More easy to maintain
 - More interoperable

Before CoMETE







- We began to experiment teaching these technologies on a small scale
 - A few courses in 2007-2008
 - Several successful student projects
- From these first experiments, we understood that
 - These technologies were ready to use
 - They define a new design paradigm for Web applications
 - On the Internet
 - But also on the Intranets



The CoMETE project





- The CoMETE project comes from
 - The results of our first experiments
 - The launch in parallel of the Mozilla Education Initiative and also the Web Science Initiative
 - The will of the MIAGE of Evry to be a leader in Web technologies learning
- Goal of the project
 - To learn the students all the Mozilla technologies in order they can invest themselves
 - In Mozilla or Mozilla-related products or in extensions to these products
 - To spread Mozilla technologies into the companies through the students
 - To make available on line educationnal ressources on Mozilla technologies

CoMETE audience







- About 30 students were involved in the CoMETE projects in 2009
 - A special "Learning Unit" has been created for them inside the MIAGE cursus
 - MIAGE is a well known French National Diplom in Computer Science at the M2 level of the European LMD schema
 - Some of the students combine work and academic study
 - They are employees of a company and they work directly for the company's Intranet

COMETE contents







- The CoMETE project is divided into two parts
- Theoretical learnings are given by experts who contribute to Mozilla for a long time
 - Laurent Jounneau and Fabien Cazenave (the project lead of Kompozer)
 - Equivalent to one full week
 - Spread over a month
 - The courses end with periods where students can test the technologies by themselves



CoMETE contents (II)





- Each student must do a practical project
 (40h / 3 months)
 - Proposed by the Mozilla community
 - To develop Mozilla or Mozilla related projects
 - Proposed by the companies where the students work
 - If the companies accept to use the Mozilla technologies
- Each project (ie each student) has
 - A project lead from the Community or the Company
 - A project lead from the University
 - Both project leads work together
 - To follow the project
 - To evaluate the project at the end



CoMETE contents (III)





Each project is managed as an Open Source project

- Wiki and/or blog to follow the schedule of the project
 - And to publish the differents releases of code
- Three intermediate versions of code that can be tested by everybody
- Collaborative work is encouraged
- With all other students
- With the Mozilla community
- At the end of the project
- The student must write a report explaining the result of their project, how and why this has been done
- There is a public oral presentation of all the projects
- All the students are evaluated on the contents of their work but also on their "contributiveness" in other projects









CoMETE: first year

- The results of the first year of the project are
 - Students are enthusiastic to participate
 - They are astonished by the quality of management of FOSS projects
 - Most of them were discovering FOSS
 - All the projects have been well driven by the students and the projects leads
 - The resulting production of the projects is fairly good
 - Some projects are even better
 - http://kazhack.org/tmp/jnm10 (in French)



CoMETE: student feedbacks







What students say about CoMETE:

- "It is marvelous to discover Open Source projects. We did not know this part of Computer Science"
- "We did not imagine that FOSS projects were so well structured"
- "We could apply immediately what we have learned in concrete projects"
- "It is amazing to see that the jobs we have done is taken into account in the next release"
- "It is the first time that we understand why we have learned this technology or another"
- "We have discovered how to code in cooperation and it is at the same time funny and professionnal"
- "Saying that we have participated to a FOSS project is a good point to find a job"

12

CoMETe results







- A "win-win" partnership between the Mozilla Foundation and the University of Evry
- The Mozilla technologies will diffuse into the Information Systems of many companies
- A lot of students will remember this course when in industry
 - To introduce and use these technologies
 - To collaborate to Mozilla products
- In any case, many of them will continue to contribute
- This partnership is also a good point for the University
 - Many students are attracted by this course

Conclusion







- The ComETe project is the beginning of a durable partnership between The Mozilla foundation and the University of Evry.
 - University of Evry is one of the European sites of the Mozilla Education Initiative
 - Possible partnerships with Seneca in Canada or Juan Carlos in Spain
- It is the first step to a more generalized introduction of FOSS in the academic cursus
 - One goal of the MIAGE Evry is to promote Web Science at large and a lot of its courses are already dedicated to Web technologies