Proposal on a Collaborative Project for AOSS

Lim Kin Chew 8 – 10 March 2010

Agenda

- The Problem
- Purpose of Project
- Proposed Curriculum
- Some Examples
- Schedule
- Suggested Deliverables

Background

- The AOSS community has been developing course materials over the years since the AOSS workshops started.
- What have we benefitted:
 - Collected much course materials
 - Acquired many tips and tricks on OSS
 - Familiarised with various OSS initiatives in Asia
 - Made many friends who are passionate about OSS



The Problem

- Some difficulties encountered so far:
 - Training materials come in many formats
 - Lack of standardization in many training materials
 - How much of FOSS contents to cover in a course?
 - How can we share the course materials? Have we checked the copyright?
 - Can the authors collaborate even after the workshops are over?
 - How to assess learning by students
 - Is there a certification for the students?

What do we want to do?

- A vision of a project for all of us to continue working on OSS course materials
 - Initiate a collaborative project to provide solutions to above-mentioned difficulties

Purpose of Project

- Allow OSS professionals and experts to collaborate and offer an online certification programme on OSS
- Share best practices on the use and practice of OSS in the various Open Source Centres
- Enable OSS personnel to carry out online training and assessment

What is the Project all about?

- Provide assessment / certification for OSS personnel
- Allows OSS experts to collaborate and contribute to the Human Resource development of OSS professionals in Asia
- Develop our expertise in developing online resources on OSS, especially in distributed learning and transfer of technology
- Practise the spirit of Open Source <u>openness</u>, <u>peering</u>, <u>sharing</u> and <u>acting globally</u>

Online Programme Structure



Suggested Curriculum

- 1. All about Open Source Software
- 2. Desktop Software & Applications
- 3. Server Software & Applications
- 4. Open Source Software for the Enterprise
- 5. Open Source Software Applications
- Application Development using PHP and MySQL
- Rapid Application Development using Ruby on Rails
- 8. Managing Open Source Software Projects
- 9. Collaboration using Open Source Software
- 10. Security Issues for Open Source Software

Alternative Project

- Select an existing OSS Project
- Participate actively in its:
 - Ongoing development
 - Promotion
 - Content creation and usage
- Example:
 - OLAT -

www.olat.org/website/en/html/index.html

Building the Code - 1

• The goal is to introduce students to a typical build process. The problem, of course, is that builds have some fundamental similarities, but every piece of software has its own idiosyncracies, and it's difficult to plan for all of them.

The chapter basically walks through a build of Freeciv. It's instructive, it's fun, and at the end, the student has a game to play, w00t.

The goal of the chapter is really to prepare the students for building the code in whatever open source project they've selected, and exercises should at this point begin to focus on the particular projects.

Feedback and patches gratefully accepted.

Next chapter on the plate for me: "Debugging the Code".

Building the Code - 2

- Building the code: from source to executable
- <u>http://teachingopensource.org/index.php/Building_the_Code</u>
- What is "building", exactly?
- Living with complexity
- Building Freeciv: Watching GNU Autotools at work
- Finding the installation instructions
- Installing Prerequisites
- Configure
- Make
- Review: What has happened?
- Exercise: Building Your Developer Workstation
- Exercise: Build SDL instead
- Supplemental Reading

Tool

- http://etutor.sourceforge.net/
 - e-Tutor
 - Open Source Online Course Tool
- can be used in educational institutions to manage <u>course work</u>, particularly homework submission and return,
- encourage online education through communication.
 - There are Perl and PHP/MySQL version

Open-Of-Course

- <u>http://open-of-course.org/courses/</u>
- Human knowledge only have value if it can be shared.
- Open-Of-Course only publishes educational information that is published as open content.
- Open content makes it possible to share educational information, because the licenses explicitly allow that.
- Licenses you see here are mainly <u>GPL</u> and Creative Commons licenses.
- They give users the right to share courses with others, print the material and spread it, etc.

Quality Education

- Educational materials should be
 - high-quality,
 - collaborative, and
 - -free.
- Visit http://opensource.com/education and join the conversation.

Collaboration



Activities

- 1. Draft curriculum
- 2. Get approval
- 3. Publicise and recruit course developers
- 4. Develop course materials
- 5. Develop course assessments
- 6. Check quality
- 7. Set up trials, get feedback, improve courses, launch programme



References - 1

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- Software Freedom, Open Software and the Undergraduate Computer Science Curriculum -

http://www.cs.trinity.edu/~jhowland/ccsc2000/ccsc2000/ccsc2000.ht ml

- If:book: the Open Source Curriculum: wikimania - <u>http://www.futureofthebook.org/blog/archives/2005/08/the_open_sou</u> <u>rce_curriculum_wik.html</u>
- Books on courses on Open Source Software online (for free) -<u>http://celstec.org/content/books-courses-open-source-software-online-free</u>
- Free Technology Academy http://www.ftacademy.org/courses/methodology

References - 2

 Teaching Professors' Open Source Summer Experience -

http://teachingopensource.org/index.php/P OSSE

• OLAT:

www.olat.org/website/en/html/index.html

End of Presentation

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