

UCOSP

Undergraduate Capstone Open-Source Projects

UCOSP

- ◆ Undergraduate small-group projects
- ◆ Software development
- ◆ **Geographically distributed groups**
- ◆ Open-source code base
- ◆ Industry mentors

Geographically Distributed?

- ♦ Groups of 4-6 students with ideally 2 per university
- ♦ Winter 2010 Participants
- ♦ Changes the group dynamics
- ♦ Real-world experience

Why Open-Source?

- ♦ Existing community with willing mentors
- ♦ On-going code base
- ♦ History of geographical diversity
- ♦ Great for students' resumes
- ♦ Avoids IP issues

History

- ♦ Small pilot in **Fall 2008** / **Winter 2009**
 - ♦ students **6** / **11**
 - ♦ universities **4** / **5**
- ♦ More organized in **Fall 2009** / **Winter 2010**
 - ♦ students **43** / **44**
 - ♦ universities **11** / **9**

Administrative Details

- ◆ Students enroll in a course at home school
- ◆ Program administrator assigns students, TAs and mentors to projects
- ◆ Local faculty contact handles paperwork
- ◆ Grade determined in consultation with program administrator and project mentor

Code Sprint

A face-to-face kick start

- ◆ 2nd or 3rd week of term
- ◆ Bring everyone together for a long weekend
- ◆ Code Friday, Saturday and Sunday a.m.
- ◆ Guest speakers but mostly work in groups
- ◆ Funded by industrial sponsorship

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- ♦ Major costs
 - ♦ code sprints (travel, accommodation)
 - ♦ TA support
 - ♦ half-time administrator (new in 2010)
- ♦ Industrial support -- \$60K in last 2 years

Sponsors

- ◆ Cybera
- ◆ First Media Group
- ◆ Fog Creek Software
- ◆ IBM
- ◆ Ingres
- ◆ The Jonah Group
- ◆ Red Hat
- ◆ The Open Source Laboratory at Portland State University
- ◆ Rogers
- ◆ TUCOWS
- ◆ Yahoo!

UCOSP Administrator

- ◆ Recruits students, faculty and mentors
- ◆ Organizes code sprints
- ◆ Contact for fundraising and projects
- ◆ Manages questions, paperwork
- ◆ \$35K probably funded for 2010/11 by O'Reilly

Anticipated Questions

- ♦ What about governance?
- ♦ Plan for funding going forward?
- ♦ What do you want from us/me?

Get your students involved!

- ♦ 4th (or 3rd year students)
- ♦ Faculty contact
- ♦ Administrator will contact all departments but if you haven't heard something by June 1, contact us (mcraig@cs.toronto.edu)

Additional Ways to Participate

- ◆ Fund/donate a TAship
 - ◆ ~54 hours at ~\$38 per hour
- ◆ Recruit local industry sponsors
- ◆ Fund travel for some students
- ◆ Mentor a project or recruit a mentor

CACS Involvement

- ◆ Endorsement of Program
- ◆ Financial Support (if necessary) for
 - ◆ non-donated TAships
 - ◆ Code-sprint travel
 - ◆ Administrator (if O'Reilly falls through)
- ◆ \$10K maximum

Who should I corner this evening?

Alberta (5)

Toronto (16)

Carleton (1)

UT Mississauga (3)

Laval (7)

UBC (7)

Memorial (1)

Victoria (1)

SFU(12)

Waterloo (15)

Sherbrooke (2)

Student Feedback

“I had never worked on an open-source project before starting on this project, and I knew very little about Django. Over the past two months I’ve learned a tremendous amount about both. It’s been great getting to know the tools of the trade (ticketing systems, the reviewboard, etc) and working as part of a team.”

“The freedom UCOSP provides form[sic] rigid assignment definitions comes with the obligation to make some design decisions . As the existentialist say, we are doomed to choose.”