

Tcl/Tk Community

Google Summer of Code

EuroTcl 08

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Google Summer of Code

- 4th year, 1125 students, 175 organizations
- Organizations apply to participate in GSoC
- Students apply to organization, mentors rate applications
- Google decides how many projects to fund for each org
- Coding period: 26 May – 18 August
- For successful projects, Google pays U\$4500 to student, U\$500 to organization

Tcl/Tk GSoC Organization

- Tcl/Tk Community: Core, Tcllib, XOTcl, aMSN, AOLServer, OpenACS
- Administrator: Matthew Burke
- Application: <http://wiki.tcl.tk/20836>
- Project Ideas: <http://wiki.tcl.tk/20832>

Mentors

Matthew Burke

Joe English

Clif Flynt

Steve Huntley

Andreas Kupries

Nima Mazloumi

Phil Mercurio

Dossy Shiobara

Bob Techentin

Philippe Valembois

Youness El Alaoui

Donal K. Fellows

Jeffrey Hobbs

Tomasz Kosiak

Steve Landers

Colin McCormack

Gustaf Neumann

Daniel A. Steffen

Patrick Thoyts

Tcl/Tk Projects

- ~25 Project ideas proposed
- 18 Students applied, 9 selected
- <http://code.google.com/soc/2008/tcl/about.html>
- Projects have assigned mentor and one or several secondary mentors, all mentors in pool help out

Loading shared libraries from memory and/or Tcl channels

- Student: Daniel Hans
- Mentor: Andreas Kupries
- Load shared libraries directly from VFS
 - Remove current need to copy out to temporary files on disk to load from
 - Already exists for Mac OS X .bundle, extend to other platforms

Tcl FUSE Language Binding

- Student: Alexandros Stergiakis
- Mentor: Stephen Huntley
- Export TclVFS layer to external processes via FUSE
 - Existing TclVFS filesystems available at OS level
 - Create FUSE filesystems in Tcl

TclDTrace

- Student: Remigiusz Modrzejewski
- Mentor: Daniel A. Steffen
- Implement a Tcl binding to `libdtrace`
 - Run D scripts and process results directly from Tcl
 - Tk visualization of tracing output

Audio input and output library and extension

- Student: Mohamed Abderraouf Bencheraiet
- Mentor: Youness El Alaoui
- Tcl binding to libao2 library
 - libao interface to libao2 library/drivers
 - add audio input
- Real-time audio processing

Tcl/Tk Printing Support

- Student: Blicharski Krzysztof
- Mentor: Clif Flynt
- Subtask of general printing support:
 - Generate PDF from Tk window with support for
 - embedded windows
 - scaling, rotation
 - fonts

Update Tk Test system

- Student: Ania Pawelczyk
- Mentor: Jeffrey Hobbs
- Harden Tk test suite for better operation across disparate platforms and system settings
 - Update tk test suite to tcltest 2
 - Rewrite/Cleanup outdated tests
 - Adapt testsuite for multiple platforms

Graph Manipulations

- Student: Alejandro Eduardo Cruz Paz
- Mentor: Steve Landers
- Add graph manipulation functions to tcllib
 - Iterators, graph traversal/search
 - Minimal spanning tree, shortest path
 - Find cut vertices & blocks
 - Topological sorting for DAG

AOLserver-GD integration

- Student: Matthew Gagen
- Mentor: Matthew Burke
- Rationalization of API
- Share graphics among server threads
- Build graphing and sparkline packages
- Improve use of Autoconfig and SWIG

A Business Rule Management System based on XOTcl

- Student: Franz Wirl
- Mentor: Gustaf Neumann

Student Presentation