Open Source Licenses and Project Growth

It has long been hypothesized that the choice of an open source license impacts the growth of open source projects. This thesis analyses the Ohloh data set, a large database of active well-working open source projects, for the relationship between choice of license and project growth. It provides models for licenses and project growth and correlates them.

Work Description

- Prior work, review of literature
 - Review of models of open source licenses
 - Review of open source project growth
 - Review of work correlating project growth with licenses
- Model of open source licenses
 - Provision of a small model of licenses, e.g. permissive vs reciprocal
 - Classification of existing licenses according to model
- Model of open source project growth
 - Provision of several observable variables indicative of project growth
 - Minimally, growth in lines of code, commit frequency, number of committers
 - \circ $\,$ Provision of analytically closed models for these variables, binned by licenses
- Comparison of by-license community growth models and evaluation thereof
 - Provision of confidence measure as to statistical significance of differences
- Discussion of causation vs. correlation in this context
 - Discussion of other impacting factors, e.g. people behind license choice
 - Discussion of un/desired effects of license on development and use situation

Prior Materials

- http://osr.cs.fau.de/2011/06/18/open-source-licenses-and-community-growth/
- <u>http://www.blackducksoftware.com/oss/licenses</u>
- Research papers by Daniel German, <u>http://turingmachine.org/</u>

Advisor

Dirk Riehle Universität Erlangen <u>dirk.riehle@cs.fau.de</u> 2011-08-16