Open Source Development Tooling

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FOSS B06

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Open Source and Innovation

- 1. Legal innovation
- 2. Process innovation
- 3. Software tool innovation
- 4. Business model innovation

Tooling Innovation

- Software forges
- Distributed version control

Software Forge

- A software forge is ...
 - A web-based tools platform for collaborative software development
 - Typically not just for one, but for many open source projects
 - Run as a service (though the forge software may be open source)

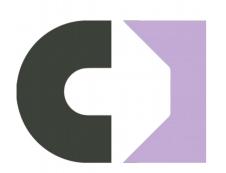
Open Source Software Forges







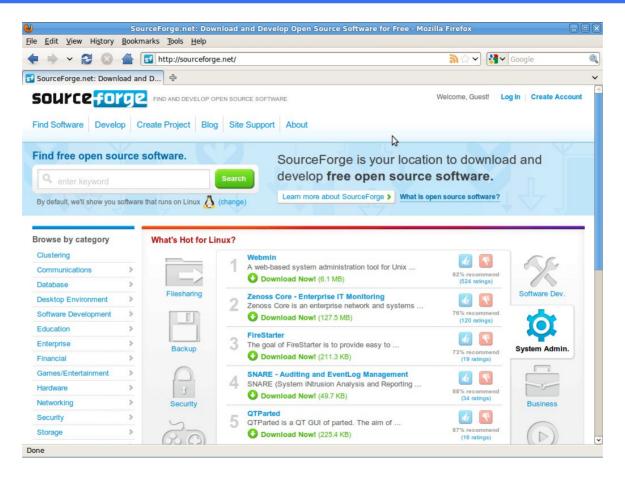




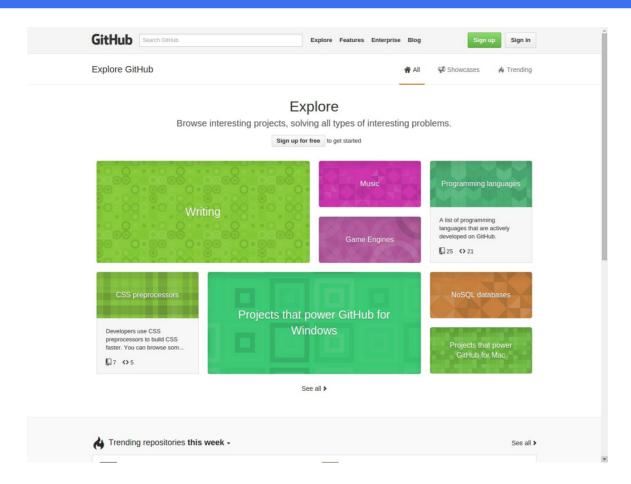




SourceForge



GitHub



Innovative Features

A forge helps

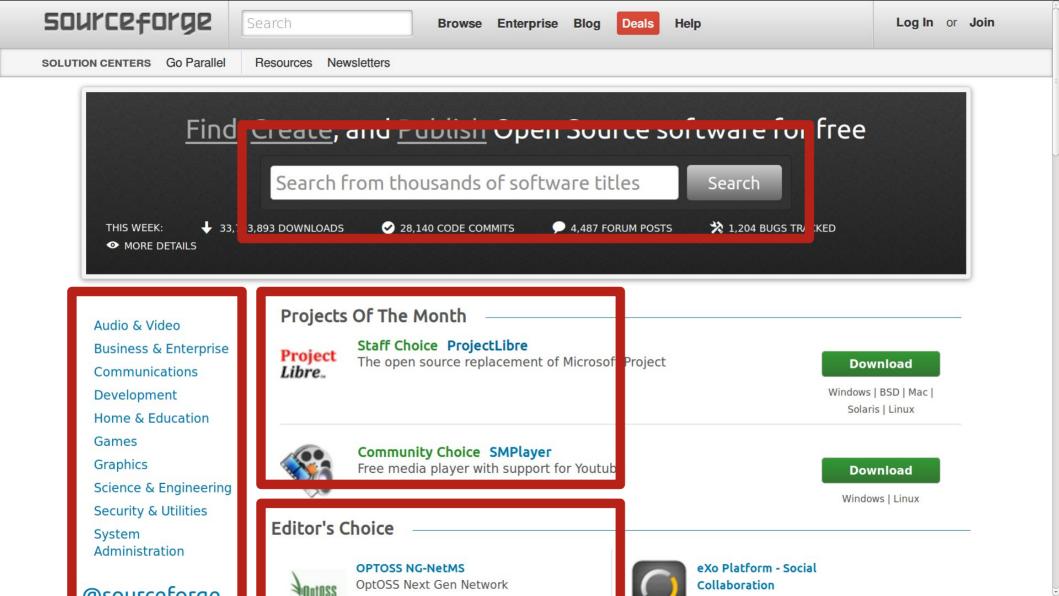
- 1. Community process
- 2. Improve code quality
- 3. Shares best practices

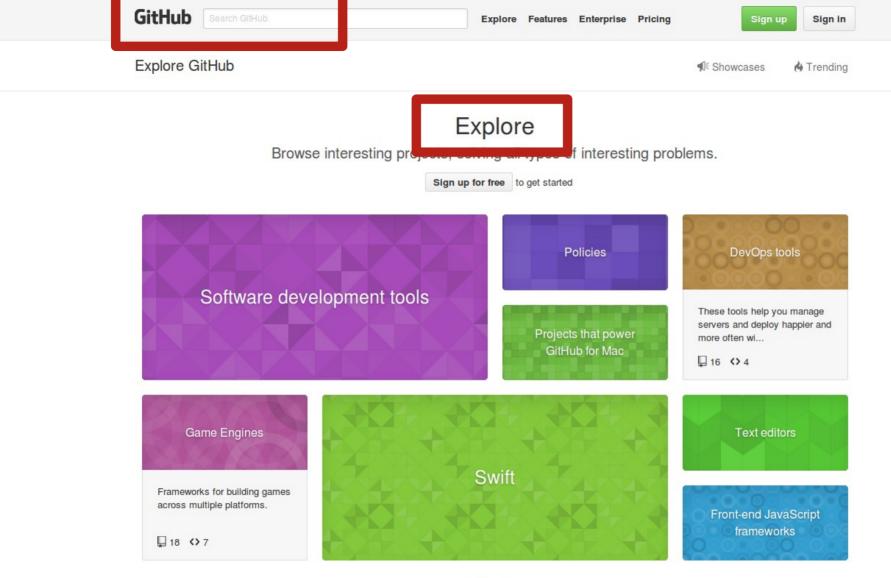
The Five Stages of Volunteering (Recap)

#	Volunteer View	Project View
1	Find project	Market project
2	Understand project	Explain project
3	Engage with project	Engage with volunteer
4	Work within project	Work with contributor
5	Lead project	Enable career

Forge Support for #1 Market Project

- Support stumbling
 - Random display of project
 - Featured project of the week
- Support searching
 - Indexed search for keywords
 - Hierarchical browsing

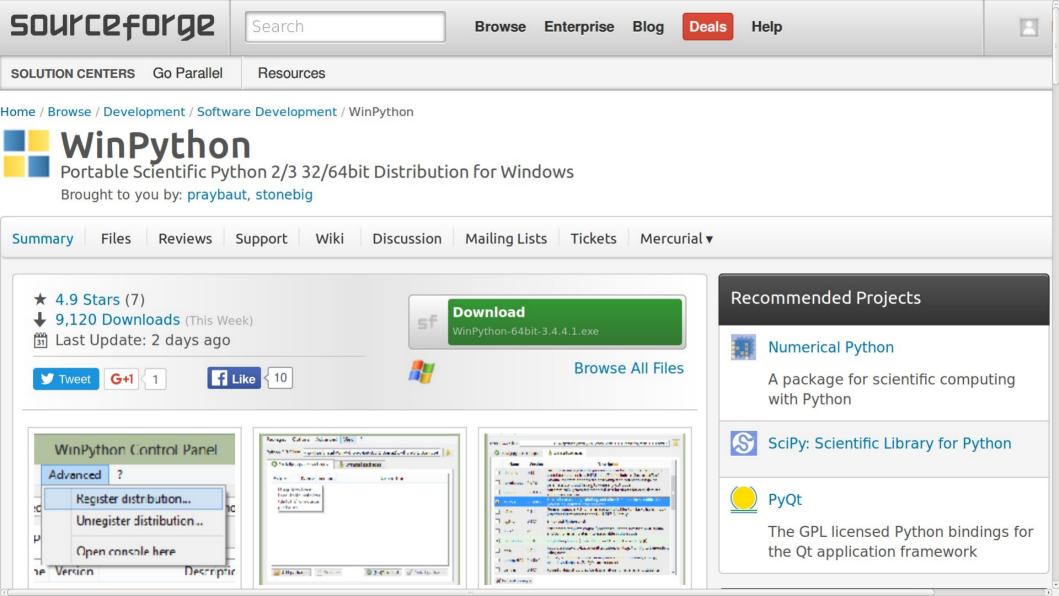




See all >

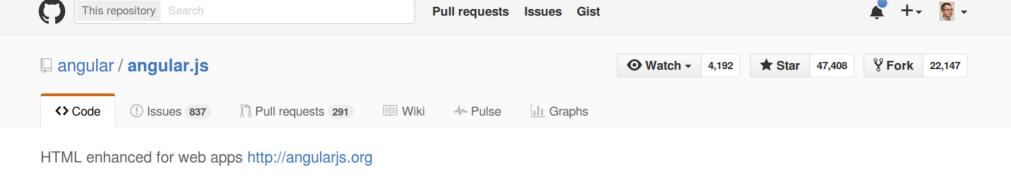
Forge Support for #2 Explain Project

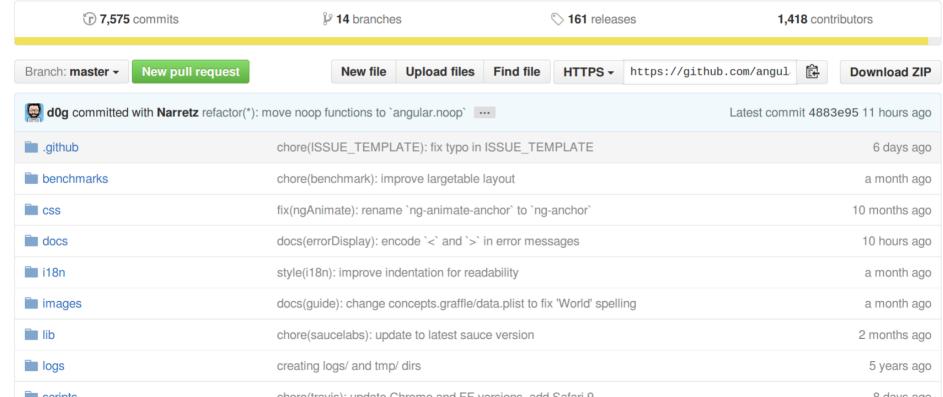
- Provide summary
 - Project home page
- Provide documentation
 - Wikis and documentation download
- Provide communication
 - Forums and mailing lists



Forge Support for #3 Engage with Volunteer

- Provide installable download
- Provide open forums and mailing lists
- Provide all relevant tools open accessible





Forge Support for #4 Work with Contributor

- Support email updates, notifications
- Support forge persona, reputation building, kudos, etc.

Improves Code Quality

- Quality of open source project improves, because
 - There is less redundant, more shared development, because
 - All projects are findable, co-located, never deleted

Shares Best Practices

- Projects get better faster, because
 - Co-location and spill-over help knowledge sharing

Distributed Version Control

- git and hg changed how we develop software
- Decoupling of efforts ("distributed") speeds up development

Review / Summary of Session

- Open source tool innovation
 - Software forges
 - Distributed version control
- Software forges help
 - The community process
 - Improve code quality
 - Share best practices
- Distributed version control
 - Speeds up development

Thank you! Questions?

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