Conceptual Mismatches: What FOSS At-Large might learn from the study of PyPI

Thesis

Did maintainers and users have mismatched ideas around sustainability for a FOSS project, leading to challenges the project faced in a major revision of the project? After the first interviews we moved to investigating differences around expectations and assumptions of what each group needed and how those "failed contracts," could stall the project and lead to tensions in the project community.

Methodology

Three open, round-robin, interviews with three maintainers and three users of PyPI, with a radically transparent research approach. Open-licensed interview protocols, transcripts, memos, and other artifacts can be found in our github repository. These were analyzed by the PIs and two FOSS professional project managers with some knowledge of PyPI.

Key findings

- Maintenance and sustainability is thought of primarily as technical capacity, or the ability to continue to generate more lines of code.

- Efforts around other vital needs of a healthy project, such as communications, recruitment, documentation, project management and sometimes financial and legal capacities, are seen as "stalling" the project.

- Even people specifically focused on the other capacities often don't consider themselves doing valuable work because they're not writing code.

Recommendations

FOSS Projects should seek out exemplars of success within FOSS that support all the capacities required by such efforts beyond software engineering. They should seek out training and professional development for project planning and management.

Industry partners, Government Entities and NGOs that fund FOSS development should look beyond supporting the production of code, to the wide range of capacities within a project. They should also look to find ways to provide more support to efforts that serve FOSS projects, communities at-large.

Calls to action

- Employ community health evaluations within your project and implement processes, or engage with FOSS projects, that create community health metrics

- Create and disseminate more exemplars of success within FOSS that support all the capacities required by such efforts beyond software engineering

. Seek out opportunities for training and professional development around FOSS project planning and management

Learn more about how to strengthen your FOSS project

Read the Report: *Conceptual Mismatches*
Research Artifacts: FOSSRIT/Mismatches (Github)
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