Demographics

Age¹

How old are you currently? [17 or younger, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 or older, prefer not to say]

Gender

Are you...? [female, male, other, prefer not to say]

Education²

What is highest level of formal education that you have completed until now? [high school diploma or GED, some college, associate and/or bachelor's degree, bachelor's degree, master's and/or doctorate and/or professional degree, doctorate and/or professional degree, doctorate, prefer not to say]

Background in open source

Programming languages used³

Which of the following languages do you feel comfortable using? Please select all that apply. [C, C++, C#, CSS, Go, Java, Javascript, Objective-C, PHP, Python, Ruby, Scala, Shell, Swift, Typescript]

Programming experience relative to team⁴

I consider myself [very inexperienced, inexperienced, comparable, experienced, very experienced]

Activity on Github

About how many years of experience do you have as a contributor to open source projects in general? [1, 2, 3, 4, 5, 6, 7, 8, 9, 10+]

Disengagement

Are you still active in any project on GitHub? [yes, no]

What made you stop being active in projects on GitHub? [open ended question]

Project related questions

Please identify one open source project in which you were recently active, that had at least THREE contributors. The following questions are related to this particular project; open ended questions

- 1. How would you describe the application domain of this project? (e.g. mobile, web application, API, hardware, blockchain)
- 2. What motivated you to start contributing to this project? Please list all motivations that might apply.
- 3. When did you first start contributing to this project? Please provide MONTH AND YEAR. (e.g. 01/2015 when you started contributing to this project in January 2015)
- 4. What do you consider your overall responsibilities in this project? Please list all that apply.

Individual satisfaction⁵; anchored between strongly disagree and strongly agree

I am satisfied with my contributions to this project.

I am satisfied with the contributions of the other people in this project.

I am satisfied with the way we collaborated in this project.

My expectations towards this project were not met.

I received support from other contributors.

I perceived my effort to be worth investing.

 $^{^{1}}$ based on the Github open source survey: https://github.com/github/open-source-survey/blob/master/survey-instrument.md

² based on information by the United States Census Bureau

³ commonly used technologies on Github

⁴ based on: J. Siegmung, C. Kästner, J. Liebig, S. Apel, and S. Hanenberg, "Measuring and modeling programming experience." *Empir Softw Eng*, vol. 19, no. 5, pp. 152-163, 2014.

⁵ based on: A. Filippova, E. Trainer, and J. D. Herbsleb, "From diversity by numbers to diversity as process: supporting inclusiveness in software development teams with brainstorming." in *ICSE*, 2017, pp. 152-163.

Collaboration related questions

Communication frequency⁶; anchored between never or hardly ever and every day or almost every day

Reading each other's code

Comments on issues, pull requests, or commits

Email

Text messaging (Slack, IRC, WhatsApp, Facebook messenger, iMessage, WeChat, etc.)

Audio communication (Phone, Skype, WhatsApp, Facebook, etc.)

Video messaging (Skype, Hangouts, FaceTime, etc.)

Social networks (Facebook, LinkedIn, etc.)

In person

Work engagement⁷; anchored between never and always

While working on this project, I feel bursting with energy.

While working on this project, I feel strong and vigorous.

I am enthusiastic about working on this project.

This project inspires me.

When I get up in the morning, I feel like working on this project.

I feel happy when I am working intensely on this project.

I am proud of the work that I do in this project.

I am immersed in my work while contributing to this project.

I get carried away when I am working on this project.

Social capital8; anchored between strongly disagree and strongly agree

I feel I am part of the community around this project.

I am interested in what goes on in that project.

Interacting with other contributors to that project makes me want to try new things.

Interacting with other contributors to that project makes me feel like a part of a larger community.

I am willing to spend time to support general activities in that project.

Through that project I come into contact with new people all the time.

There are several people in that project that I trust to help me solve my problems.

I know someone in that project that I can turn to if I urgently need help.

There is someone in that project that I can turn to for advice about making important decision.

The other contributors to that project would be good job references for me.

I do not know people in that project well enough to get them to do anything important.

⁶ Commonly used means of communication in open source projects.

⁷ based on: W. B. Schaufeli, A. B. Bakker, and M. Salanova, "The measurement of work engagement with a short questionnaire: A cross-national study." *Educ psychol meas*, vol. 66, no. 4, pp. 701-716, 2006.

⁸ based on: N. B. Ellison, C. Steinfield, and C. Lampe, "The benefits of Facebook "friends:" Social capital and college students' use of online social network sites." *J Comput-Mediat Comm*, vol. 12, no. 4, pp. 1143-1168, 2007.