[Institution redacted] Survey on Skills in OSS

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[Institution redacted] Survey on Skills in Open Source Software (OSS)

We are researchers at [institution redacted] investigating what role contributor skills play in open source software (OSS), especially projects for social good. You can help! We'd like to hear about your opinions and experience and provide feedback on a potential feature on GitHub. Your response to this survey will enable us to make recommendations on how to improve the participation in OSS.

The survey should only take about 20 minutes to complete. No information is collected that allows you to be directly identified. Please do not include any personal information in the responses. Aggregate information may be shared with research collaborators outside of [institution redacted] and used in publications and reports. We selected you as part of a sample of GitHub contributors. By responding to this survey, you agree that you (1) are at least 18 years of age, (2) are participating voluntarily in this survey, and (3) understand you can withdraw from the survey at any time.

We hope you enjoy filling out this survey. After completion of the survey, we invite you to enter your name into a separate form (to preserve your anonymity) to **win one of four $100 Amazon.com Gift Certificates.**

If you have any questions or comments about this research, please contact [name redacted] ([email redacted]).

Thank you for participating!

[names redacted] [email redacted]

[FULL CONSENT STATEMENT REMOVED]

By clicking "Yes, I agree" below, you voluntarily consent to participate, and you do not give up any legal rights you have as a study participant.   Please confirm your consent by clicking "Yes,

I agree" below. You can download a copy of this consent form for your records at [link redacted]. On behalf of [institution redacted], we thank you for your contribution and look forward to your research session.

X→

C3 Do you understand and consent to these terms?

○ Yes, I agree. (1)

○ No thanks, I do not want to do this survey. (2)

X→

Q4
Demographics and Background
 What is your gender?

☐   Woman (1)

☐   Man (2)

☐   Non-binary / gender diverse (3)

☐   Prefer to self-describe (4)

_____

☐   Prefer not to answer (5)

X→

Q5 What is your ethnicity/origin you identify with (select all that apply)?

☐ White (1)

☐ Asian (2)

☐ Black or African (3)

☐ Hispanic or Latino (4)

☐ Middle Eastern (5)

☐ American Indian or Alaska Native (6)

☐ Native American or Other Pacific Islander (7)

☐ Other (please specify) (8)

_____

☐ Prefer not to report (9)

Q6 How many OSS projects have you worked on (give your best estimation)?

_____

X→

Q7 Currently, what are your roles in the OSS projects you are most active in?

☐ Documentation writer (1)

☐ Bug submitter (2)

☐ Graphic artist (3)

☐ Translator (4)

☐ Coder (5)

☐ Maintainer (6)

☐ Porter (7)

☐ Tool builder (8)

☐ GUI designer (9)

☐ Other (please specify) (10)

_____

X→

Q8
OSS projects for social good are projects where the outcome distinctly targets a community of people to overcome a societal issue.
 Do you think **all** OSS projects are for social good?

○ Yes (1)

○ No (2)

X→

Q9 Have you worked on an OSS project that is for social good?

○ Yes (1)

○ No (2)

Q10
Skills in OSS

How do you define skills in the context of OSS? What are some examples of such skills?

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_____

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Q11 What are your strategies to grow your skills in the context of OSS?

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_____

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_____

_____

X→

Q12 Do you use GitHub to display skills and experiences that are relevant for OSS development?

○ Yes (1)

○ No (2)

X→

Q13 How do you display your skills and experiences that are relevant for OSS development on GitHub?

☐   GitHub profile description (1)

☐   Actively contributing to OSS projects (2)

☐   Having public repositories (3)

☐   Linking social media accounts to GitHub profile (4)

☐   Linking personal website to GitHub profile (5)

☐   Other (please specify) (6)
_____

X→

Q14 Do you use LinkedIn to display skills and experiences that are relevant for OSS development?

○ Yes (1)

○ No (2)

X→

Q15 How do you display skills and experiences that are relevant for OSS development on LinkedIn?

☐ LinkedIn experiences (1)

☐ Descriptions to LinkedIn experiences (2)

☐ Skills (3)

☐ Endorsements on skills (4)

☐ Skill quizzes (5)

☐ Recommendations from colleagues (6)

☐ Honors and awards (7)

☐ Courses (8)

☐ Projects (9)

☐ Other (please specify) (10)

_____

X→

Q16 Rate the following skills based on their importance for OSS projects.

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
Teaches others to be involved in the OSS project (1)	○	○	○	○	○
Has commitment to the OSS project (2)	○	○	○	○	○
Has experience with specific tools, frameworks, or programming languages (3)	○	○	○	○	○
Has strong problem-solving skills (4)	○	○	○	○	○
Is familiar with OSS practices (5)	○	○	○	○	○
Puts in effort to make high-quality contributions (6)	○	○	○	○	○
Is a strong communicator (7)	○	○	○	○	○
Learns continuously (8)	○	○	○	○	○
Follows proper processes to make contributions to OSS projects (9)	○	○	○	○	○

	○	○	○	○	○
Is a strong project manager (10)	○	○	○	○	○
Builds good relationships with stakeholders (11)	○	○	○	○	○
Has knowledge of algorithms, data structures, and programming paradigms (12)	○	○	○	○	○
Is available to answer questions (13)	○	○	○	○	○

X→

Q17 Rate the following skills based on their importance for OSS projects that are for social good.

OSS projects for social good are projects where the outcome distinctly targets a community of people to overcome a societal issue.

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
Teaches others to be involved in the OSS project (1)	○	○	○	○	○
Has commitment to the OSS project (2)	○	○	○	○	○
Has experience with specific tools, frameworks, or programming languages (3)	○	○	○	○	○
Has strong problem-solving skills (4)	○	○	○	○	○
Is familiar with OSS practices (5)	○	○	○	○	○
Puts in effort to make high-quality contributions (6)	○	○	○	○	○
Is a strong communicator (7)	○	○	○	○	○
Learns continuously (8)	○	○	○	○	○
Follows proper processes to make contributions to OSS projects (9)	○	○	○	○	○

Is a strong project manager (10)	○	○	○	○	○
Builds good relationships with stakeholders (11)	○	○	○	○	○
Has knowledge of algorithms, data structures, and programming paradigms (12)	○	○	○	○	○
Is available to answer questions (13)	○	○	○	○	○

Q18 List any skills not included in the questions above that you would display on your GitHub profile.

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_____

_____

_____

X→

Q19 Rate the following skills by how likely you are to improve them in the next 12 months.

	Extremely likely (1)	Somewhat likely (2)	Neither likely nor unlikely (3)	Somewhat unlikely (4)	Extremely unlikely (5)
Teaches others to be involved in the OSS project (1)	○	○	○	○	○
Has commitment to the OSS project (2)	○	○	○	○	○
Has experience with specific tools, frameworks, or programming languages (3)	○	○	○	○	○
Has strong problem-solving skills (4)	○	○	○	○	○
Is familiar with OSS practices (5)	○	○	○	○	○
Puts in effort to make high-quality contributions (6)	○	○	○	○	○
Is a strong communicator (7)	○	○	○	○	○
Learns continuously (8)	○	○	○	○	○

Follows proper processes to make contributions to OSS projects (9)	○	○	○	○	○
Is a strong project manager (10)	○	○	○	○	○
Builds good relationships with stakeholders (11)	○	○	○	○	○
Has knowledge of algorithms, data structures, and programming paradigms (12)	○	○	○	○	○
Is available to answer questions (13)	○	○	○	○	○

Q20 What factors influence which skills you want to improve on?

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_____

_____

_____

_____

Q21 Please rate your agreement with each of the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I know how to improve the OSS-related skills I want to grow. (1)	○	○	○	○	○
I am taking steps to improve the OSS-related skills I want to grow. (2)	○	○	○	○	○
I would be more motivated to improve my OSS-related skills if they were displayed publicly on GitHub. (3)	○	○	○	○	○

X→

Q22 Please rate your agreement with each of the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I choose to contribute to an OSS project based on the skills that I can gain from the project. (4)	○	○	○	○	○
I choose to contribute to an OSS project based on the skills that I can offer to the project. (2)	○	○	○	○	○
I would choose to contribute to a project if I knew it had a collaborator who was strong at a particular skill. (5)	○	○	○	○	○
I would choose to contribute to a project if I knew they were looking for contributors with a skill I have. (6)	○	○	○	○	○

X→

Q23 For the OSS project(s) you maintain, rate the following skills based on how important they are for new contributors to have.

	Must have (1)	Should have (2)	Could have (3)	No need at this time (4)
Teaches others to be involved in the OSS project (1)	○	○	○	○
Has commitment to the OSS project (2)	○	○	○	○
Has experience with specific tools, frameworks, or programming languages (3)	○	○	○	○
Has strong problem-solving skills (4)	○	○	○	○
Is familiar with OSS practices (5)	○	○	○	○
Puts in effort to make high-quality contributions (6)	○	○	○	○
Is a strong communicator (7)	○	○	○	○
Learns continuously (8)	○	○	○	○
Follows proper processes to make contributions to OSS projects (9)	○	○	○	○
Is a strong project manager (10)	○	○	○	○
Builds good relationships with stakeholders (11)	○	○	○	○

Has knowledge of algorithms, data structures, and programming paradigms (12)	○	○	○	○
Is available to answer questions (13)	○	○	○	○

X→

Q24 As a maintainer, do you use GitHub to determine what skills a potential contributor has?

○ Yes (1)

○ No (2)

X→

Q25 As a maintainer, what do you use to determine what skills a potential contributor has?

☐   Public GitHub activity (1)

☐   Activity on social media platforms (2)

☐   Personal website (3)

☐   Public repositories the contributor owns (4)

☐   Contributions from contributor on your OSS project (5)

☐   Interactions with the potential contributor on your OSS project (6)

☐   Contributions from contributor on other OSS projects (7)

☐   Interactions with the potential contributor on other OSS projects (8)

☐   Other (please specify) (9)

_____

Q26 **Proposed Prototype**

 In the next five questions we will have you review mock-ups of hypothetical skills-related features. To be clear, these are *not* features that already exist on GitHub and are not associated with current development.

These mockups present variations of a hypothetical feature in the GitHub profile side bar (outlined in the red box below).

X→

Q27 Consider the feature that shows contributor skills in the outlined red box. Rate your agreement with the following statement:

I would like this feature on GitHub.

○ Strongly agree (1)

○ Somewhat agree (2)

○ Neither agree nor disagree (3)

○ Somewhat disagree (4)

○ Strongly disagree (5)

X→

Q28 Consider the feature that shows contributor skills and their ratings below in the outlined red box. Rate your agreement with the following statement:

I would like this feature on GitHub.

○ Strongly agree (1)

○ Somewhat agree (2)

○ Neither agree nor disagree (3)

○ Somewhat disagree (4)

○ Strongly disagree (5)

X→

Q29 Consider the feature that shows contributor skills and their ratings below in the outlined red box. Rate your agreement with the following statement:

I would like this feature on GitHub.

○ Strongly agree (1)

○ Somewhat agree (2)

○ Neither agree nor disagree (3)

○ Somewhat disagree (4)

○ Strongly disagree (5)

X→

Q30 Consider the feature that shows activities completed that are associated with the skill below in the outlined red box. Rate your agreement with the following statement:

I would like this feature on GitHub.

○ Strongly agree (1)

○ Somewhat agree (2)

○ Neither agree nor disagree (3)

○ Somewhat disagree (4)

○ Strongly disagree (5)

X→

Q31 Consider the feature that shows how to improve contributor skills below. Rate your agreement with the following statement:

I would like this feature on GitHub.

○ Strongly agree (1)

○ Somewhat agree (2)

○ Neither agree nor disagree (3)

○ Somewhat disagree (4)

○ Strongly disagree (5)

X→

Q32 Which of the following information about your skills would you display on GitHub to just yourself, your collaborators, and the public?

	You (1)	You + your collaborators (2)	You + your collaborators + public (3)
Skill name (1)	○	○	○
Skill rating (2)	○	○	○
Which activities you've done that correlate with the skill (3)	○	○	○
Ways to improve the skill (4)	○	○	○

Q33
What motivates you to share skills information with others?

_____

_____

_____

_____

_____

Q51
Can you give examples of when it would be helpful to share skills information with others?

_____

_____

_____

_____

_____

X→

Q34
Skill Ratings
For each of the skills below, rate your agreement with the following statement: if I were

proficient at this skill, I would publicly display that I have proficiency in this skill on my GitHub profile.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Team player (1)	○	○	○	○	○
Commitment (2)	○	○	○	○	○
Familiarity with open-source software (3)	○	○	○	○	○

X→

Q35 For each of the programming languages below, rate your agreement with the following statement: if I were proficient at this programming language, I would publicly display that I have proficiency in this programming language on my GitHub profile.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
JavaScript (4)	○	○	○	○	○
Python (5)	○	○	○	○	○
Java (6)	○	○	○	○	○
PHP (7)	○	○	○	○	○
C# (8)	○	○	○	○	○
TypeScript (9)	○	○	○	○	○
Shell (10)	○	○	○	○	○
C (11)	○	○	○	○	○
Ruby (12)	○	○	○	○	○

Q36 Do you have any additional comments about skills in OSS? Is there anything else that you would like to share?

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_____

_____

_____

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End of Block: Survey