# **Demographic Questions**

#### Introduction and Informed Consent:

Dear participants,

We are researchers from < Double Blind>>, < Double Blind>>.
We investigate how aware open-source software engineers are of quality assurance in their projects. The survey will take you approximately 15 minutes to complete. The data will be used for scientific publications, contributing to research on software engineering. We will ask you to consider an open-source project on GitHub that you have contributed to recently and then answer questions about quality assurance activities in that project.

As with any online activity, the risk of a breach is present. To the best of our ability, any personal information or recordings you

voluntarily share in this study will remain confidential. We will minimize any risks by collecting minimal personal data and storing it on <<Double Blind>>'s servers in <<Double Blind>>. Moreover, we will not save the IP address from which you complete the survey. Collected data is only used for research purposes and will not be sold or privately shared with third parties.

Any following scientific papers or datasets published from this work will contain de-identified responses. "De-identified" means that we will remove any data that personally identifies you (e.g., your email address); however, we cannot guarantee the published dataset to be anonymous. As your open-source work on GitHub is inherently public, and our study focuses on your activities on GitHub, be aware that your answers might be linked to your GitHub account.

Please do not share any personal or sensitive information in the open questions of the survey. Otherwise, we are going to remove

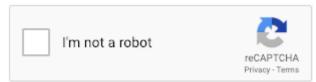
your answer from the final dataset.

Participation in this study is voluntary, and you can withdraw anytime. If you wish for your data to be removed before the completion of our research survey (Target: End of March 2023), please contact us.

Responsible and corresponding researcher: < < Double Blind>>

Thank you for your participation in our study!

O Click here to agree with the Informed Consent



How many years have you been developing software?

- O Less than 1 year
- O 1 to 3 years
- 3 to 6 years
- 7 to 10 years
- 0 10 years and more

When did you first contributed to an Open Source Software project?

- O Less than 1 year ago
- 1 to 3 years ago
- O 3 to 6 years ago
- O 7 to 10 years ago

10 years ago or more

What is the repository handle (`github\_user`/`repository\_name`) of the project that you have contributed the most recently?

(Please consider a software project on GitHub, and if you have contributed to many projects consider the most popular/active one)

In how many pull requests have you been involved (submitting, merging, or reviewing) during the last month for the project that you mentioned?

- O Less than 10
- O 10 to 50
- O 50 to 100
- More than 100

Which of the following best describes your role in the mentioned project? (if you have any kind of executive role in the project select second option)

$\bigcirc$	Source code contributor
$\bigcirc$	Maintainer / Integrator / Project (co-)owner / Tech lead (Please specify in the tex box below)

You work for:

Industry

Academia

Open Source Software

Other

Do you consider contributing to an Open Source Software project as your main professional activity?

$\bigcirc$	Yes	
$\bigcirc$	Nο	

# **Testing**

Please consider the open source software project you mentioned before, when answering the next questions.

Does the project have automated (scripted) tests?

- O Yes
- O No
- I don't know.

Please consider the open source software project you mentioned before, when answering the next questions.

What kind of (functional) tests do you have in the project? (leave open if you don't know)
☐ Unit testing
☐ Integration testing
☐ Validation testing
☐ System testing
Other (Please specify in the text box below)
What kind of test coverage information is available for the project? (leave open if you don't know)
☐ Statement/Line coverage
☐ Branch coverage
☐ Mutation score
Other (Please specify in the text box below)

Considering your answer to the previous question, do you know how much is the code coverage of the project?

Yes, I know. (Please specify in the text box below)

0	Yes, I know. (Please specify in the text box below)
	No, but I can find this information somewhere on project's GitHub. (Please specify in the text box below)
0	No, this information is not on the GitHub page of the project.
	nat kind of tooling do you use for testing of the project? ameworks, libraries, etc.)

## Code Review and PR

Think back to the last pull request you were involved in when answering the next questions.

•	omments did you receive (as the author of the pull give (as the maintainer)?
	nts that you received/gave were about:  The state of comments in the text box below the option)
	Tests
	Code quality or maintainability defects
	Functional defects

Other (Please specify the	subject and number of comments in the text box below)

How many code reviewers were involved in the pull request? (Not considering code review bots)

- $\bigcirc$  c
- O 1
- 0 2
- O More than 2
- O I don't know.

Does the project have a checklist/guideline to check before contributors submit or maintainers review a pull request?

	Yes (Please provide a link to it in the text box below)
O Not aware of it.	
O No.	

Does the project use GitHub's	Checks in	pull requests?
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(We are referring to the "Checks" tab in a pull request page) Yes I'm not aware of it. No. What kind of reports you get from GitHub's Checks' comments on your pull requests? Code quality warnings Code coverage reports **Build checks** Test results Other (Please specify in the text box below)

How	does	code i	review	ing he	lp you	5		

### **ASATs**

## Do you use ASATs in the project?

By ASATs, we mean any automated static analysis tool that helps developers detect bugs, code quality issues, code smells, etc.

For example, <u>Checkstyle</u> and <u>PMD</u> are two ASATs for Java programming language, and <u>SonarQube</u> is another popular one for multiple programming languages.

$\bigcirc$	Yes
$\bigcirc$	No.
$\bigcirc$	I don't know.

# **GHA/CI** related

Do you use <u>GitHub Actions</u> and/or <u>GitHub Apps</u> in the project?

O Yes, both.
O Yes, only GitHub Actions.
O Yes, only GitHub Apps.
O I don't know.
O No.
Which type of <u>GitHub Actions</u> do you use in the project? (Please name
them)

Which GitHub Apps do you use in the project? (Please name them)

Does the project have <u>CI workflows</u> configured on GitHub?  By CI workflows, we are referring to the automated workflows on GitHub to build and test the project.
<ul> <li>Yes.</li> <li>We don't have CI workflows.</li> <li>No we don't configure our CI workflows on GitHub.</li> <li>I don't know.</li> </ul>
How do you (or other people in the project) configure CI workflows on GitHub?

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	be a situation in which CI workflows helped you in your
COILLID	ution to the project.
Others	
	use bots in the project?
Do you	
Do you	use bots in the project?
Do you  Examples are	use bots in the project?  Dependebot and other GitHub Apps.

Which bots do you use in the project? (Please name them)
Does a newcomer get any guidelines about how to contribute to
the project? If yes can you provide a link to it?
Does the project have specific guidelines (e.g.,
CONTRIBUTING.md) to make the latest version of the project buildable/compilable?

#### **Last block**

# Consent for sharing & follow-up

I agree that my free text responses can be quoted de-identified in research outputs.

- O Yes
- O No

I give permission for the de-identified answers that I provided in this survey to be archived in a data repository, so it can be used for future research and learning.

- O Yes
- O No

You can contact me for follow-up questions via email.

	Yes (Please give us an email address)
No	

If you have any further questions about our data processing, anonymizing or publishing, please contact the responsible researcher << Double Blind>>

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