Pre-Screening Questionnaire: Developer Experience and Code Comprehension Study

Thank you for your interest in participating in our research study on how developers read and reason about Java code.

This short pre-screening questionnaire helps us ensure that participants meet the eligibility criteria for the controlled experiment phase.

What to expect

- This questionnaire takes about **3–5 minutes**.
- You will be asked about your **background, programming experience, and language familiarity**.
- Based on your responses, you may be invited to complete the main experiment involving short Java code comprehension tasks.

Data and privacy

Your responses are anonymous and will be used only for research purposes.
No personally identifying information will be shared.
You may withdraw at any time by closing this form.

Next steps

If you meet the eligibility criteria, you will receive a link to the main experiment.
Please answer all questions honestly to help us ensure data quality.

* Indicates required question

1. Consent to participate

   Before continuing, please review the following information about this study.

   Participation is entirely voluntary.

   By proceeding, you acknowledge that:

   - You are **18 years of age or older**.
   - You understand that participation involves answering background questions about your programming experience.
   - You may **skip any question** or **stop at any time** without penalty.
   - Your responses will be stored securely and analyzed only in **aggregate form**.
   - No personally identifying information (such as your name, email, or employer) will be shared in a publication or dataset.
   - This study has been reviewed and approved by the researchers' institution in accordance with standard research ethics guidelines.

   If you have any questions about the study, you may contact the research team at **g7shi@uwaterloo.ca.**

   Check all that apply.

   ☐ I have read and understood the above information and consent to participate in this study.

   Questions

   Thank you for agreeing to participate!
   The following questions ask about your **personal background and programming experience**.
   Your answers will help us confirm your eligibility and group participants by experience level in the main experiment.
   Please answer each question as accurately as possible — there are **no right or wrong answers**.
   This section should take about **3–5 minutes** to complete.

2. What is your primary spoken language? (Indicate one) *

   Mark only one oval.

   ◯ English

   ◯ Other: _____

3.   What is your highest level of education? *

Mark only one oval.

◯ High school diploma

◯ Bachelor's degree

◯ Master's degree

◯ PhD

◯ Other: _____

4.   What is your field of study? *

Mark only one oval.

◯ Software engineering

◯ Electrical engineering

◯ Mathematics

◯ Other: _____

5.   Have you received a formal education in *
      programming?

Mark only one oval.

◯ Yes

◯ No

6.   How many years have you been   *
      programming professionally? (A number between 0 and 100, inclusive)

_____

7. Which of the following best describes your * current role in software development?

   Mark only one oval.

   ◯ Software developer

   ◯ QA engineer

   ◯ DevOps engineer

   ◯ Researcher

   ◯ Other: _____

8. How many hours per week do you work * on OSS projects on average?

   _____

9. What is your primary programming * language?

   Mark only one oval.

   ◯ Java

   ◯ Python

   ◯ Kotlin

   ◯ C

   ◯ C++

   ◯ Rust

   ◯ Other: _____

10. How many years have you been ***** programming in the language you selected?

_____

11. Which programming languages do you * use regularly?

Check all that apply.

☐ Java
☐ Kotlin
☐ Python
☐ C
☐ C++
☐ Javascript
☐ C#
☐ Rust

☐ Other: _____

12. How often do you perform code reviews? *

Mark only one oval.

◯ Daily

◯ Weekly

◯ Monthly

◯ Rarely

◯ Never

13. Do you follow coding style guides in * your projects?

Mark only one oval.

⬭ Yes

⬭ No

14. How do you usually approach * understanding unfamiliar code?

Mark only one oval.

⬭ Refer to documents

⬭ Test/debug the code

⬭ Discuss with colleagues

⬭ Other: _____

15. How much time do you typically spend * reading code versus writing it?

Mark only one oval.

⬭ Mostly reading

⬭ Balanced

⬭ Mostly writing

16. Please leave your email address here if you are interested in participating in the next step!

_____

Google Forms