Interview Questions

The semi-structured interview questions were designed targeting a 15 to 30-minute session.

This tries to get participants' information on how they are using AI throughout the SDLC and

the benefits, and the risks of each usage.

Opening to get information on background and demographics

1. Can you describe your experiences related to software development with regard to the number of years of experience, and the work that you have carried out in brief?
2. Which of the following best describes the organization(s) you work for?

– Government

– For-profit company

– Non-profit company

– University

– Prefer not to say

Questions to get information on use cases of AI in SDLC

1. How do you consider yourself in terms of experience related to the software industry early-
    career, mid-career, or advanced-career professional in terms of using AI in SDLC tasks?
2. Have you worked on projects where AI needs to be used in SDLC?
3. If so, in which phases was AI used (requirements, design, coding, testing, maintenance-finance)?
4. How do you use AI based on your experience?
5. Is this an organization-level policy, a team-level practice, or an individual choice?

AI Tools Used in SDLC

1. Can you describe the AI tools you have used in software development?

Impacts of Using AI in SDLC

1. What are the expected or assumed positive and negative impacts of AI use?

2. Have you observed any positive impacts (e.g., resource or cost optimization, inclusivity) from AI use in the SDLC?

3. What risks and challenges you have seen when you use AI in SLDC tasks? Can you mention the scenarios?
4. What are the recommendations on how to use AI in SDLC

Conclusion

If time allowed, insights from the literature review briefly presented to encourage reflection.

1. What do you think is missing when comparing real-world projects that integrate AI into the SDLC with research findings? (Research suggests AI can support SDLC in various ways. From your experience, what challenges arise in applying these practices?)