

## Base Questions:

- 1) What is your current **role**? How many years of professional programming experience do you have?
- 2) What are the **typical tasks** you complete in your **role**?
- 3) Do you use **AI-based tools** to support your tasks for development/testing? (how often)
- 4) What specific tasks do you do using the AI tools?
- 5) How do you decide which AI tools to use? How do you decide **when** to use the AI tools?
- 6) How does using AI tools impact work assignments?
- 7) Can you walk me through a **scenario(s)** where you would use the AI tools?

## Task Specific Question

\*Ask about the tasks that the interviewee previously mentioned.

### Writing code

- 8) Are there any best practices or strategies you follow when using AI tools for Writing code?
- 9) What benefits do you feel from using AI tools for Writing code?
- 10) What challenges do you feel from using AI tools for Writing code?
- 11) How do you know if the output AI tool gave you is what you're looking for?

### Debugging

- 12) Do you use AI tools for debugging and getting help?
- 13) Are there any best practices or strategies you follow when using AI tools for Debugging and getting help?
- 14) What benefits do you feel from using AI tools for Debugging and getting help?
- 15) What challenges do you feel from using AI tools for Debugging and getting help?

### Documenting code

- 16) Do you use AI tools for documentation?
- 17) Are there any best practices or strategies you follow when using AI tools for Documenting code?
- 18) What benefits do you feel from using AI tools for Documenting code?
- 19) What challenges do you feel from using AI tools for Documenting code?

### Learning about a codebase

- 20) Do you use AI tools for learning about codebase? (Ask if not mentioned)
- 21) Are there any best practices or strategies you follow when using AI tools for learning about a codebase?
- 22) What benefits do you feel from using AI tools for learning about a codebase?
- 23) What challenges do you feel from using AI tools for learning about a codebase?

## Committing and reviewing code

- 24) Do you use AI tools for learning about committing and reviewing code? (Ask if not mentioned)
- 25) Are there any best practices or strategies you follow when using AI tools for Committing and reviewing code?
- 26) What benefits do you feel from using AI tools for Committing and reviewing code?
- 27) What challenges do you feel from using AI tools for Committing and reviewing code?

## Testing code

- 28) Do you use AI tools for testing code? (Ask if not mentioned)
- 29) Are there any best practices or strategies you follow when using AI tools for Testing code?
- 30) What benefits do you feel from using AI tools for Testing code?
- 31) What challenges do you feel from using AI tools for Testing code?

## Deployment and monitoring

- 32) Do you use AI tools for any tasks related to deployment and monitoring? (Ask if not mentioned)
- 33) Are there any best practices or strategies you follow when using AI tools for Deployment and monitoring?
- 34) What benefits do you feel from using AI tools for Deployment and monitoring?
- 35) What challenges do you feel from using AI tools for Deployment and monitoring?

## Ending Questions:

- 36) What are some of the main challenges you've faced while using AI tools for software development and testing?
- 37) What do you think can be the general best practices for using AI tools?
- 38) In an ideal world, what are your expectations regarding the functionality of the AI tools?
- 39) What could be improved in the AI tool?
- 40) What do you feel about the risks in AI?

## Added Questions after Analysis:

- 1) Is there a culture of sharing practices or strategies for using AI tools within your company?
- 2) How has the company culture changed?
- 3) Ever since the new AI tools have come out, how have your development tasks evolved and changed?
- 4) Does your company provide any guidelines and restrictions on using AI tools?
- 5) How do you ensure the security and privacy of data when using AI tools in software development?
- 6) Have you noticed any difference in productivity in your team since the adoption of AI tools?
- 7) Do you feel concerned about potential judgments when using an AI tool to assist with your tasks?

- 8) Previous surveys have found that developers enjoy the ability to spend less time on current tasks due to the use of AI tools. Do they know they are achieving more work? Or are they spending more time checking the quality of the work?
- 9) How did you learn and come to the decision that "this is the prompt" that will give the best result for your task?
- 10) Do you make any **customizations** to the AI tools (or use them as is)? If so, how?
- 11) Do you think using AI tools for your task breaks your workflow, or does it help with keeping the flow? Could you elaborate (Context switching)