Github Copilot Certification Questions

Domain 1: Responsible AI (7%)

1. What is Responsible AI?

- A) AI that is always accurate
- B) AI that adheres to ethical guidelines and principles
- C) AI that is developed by large companies
- D) AI that is open-source

2. Which of the following is a key principle of Responsible AI?

- A) Profit maximization
- B) Transparency
- C) Speed of development
- D) Proprietary algorithms

3. Why is fairness important in AI?

- A) To ensure AI systems are profitable
- B) To prevent bias and discrimination
- C) To increase the speed of AI development
- D) To reduce the cost of AI systems

4. What does AI transparency involve?

- A) Making AI systems open-source
- B) Explaining how AI decisions are made
- C) Ensuring AI systems are fast
- D) Keeping AI algorithms secret

5. Which organization provides guidelines for Responsible AI?

- A) World Health Organization
- B) OpenAI
- C) IEEE
- D) NASA

6. What is the goal of AI accountability?

- A) To make AI systems faster
- B) To ensure there is a clear responsibility for AI outcomes
- C) To reduce the cost of AI systems
- D) To make AI systems open-source

7. Which of the following is a risk of not following Responsible AI principles?

- A) Increased profitability
- B) Bias and discrimination
- C) Faster development
- D) Proprietary algorithms

8. What is AI ethics concerned with?

- A) The speed of AI development
- B) The moral implications of AI
- C) The profitability of AI systems
- D) The proprietary nature of AI algorithms

9. Why is inclusivity important in AI development?

- A) To ensure AI systems are profitable
- B) To prevent bias and ensure diverse perspectives
- C) To increase the speed of AI development
- D) To keep AI algorithms secret

10. What is the role of human oversight in Responsible AI?

- A) To make AI systems faster
- B) To ensure AI systems are used ethically and responsibly
- C) To reduce the cost of AI systems
- D) To make AI systems open-source

Domain 2: GitHub Copilot Plans and Features (31%)

11. What is GitHub Copilot?

- A) A project management tool
- B) An AI-powered code completion tool
- C) A version control system
- D) A bug tracking system

12. Which AI model powers GitHub Copilot?

- A) GPT-3
- B) BERT
- C) T5
- D) GPT-4

13. What programming languages does GitHub Copilot support?

- A) Only Python
- B) Only JavaScript
- C) Multiple programming languages
- D) Only Java

14. How does GitHub Copilot provide code suggestions?

- A) By analyzing the entire internet
- B) By using a large language model trained on public code
- C) By using a fixed set of code snippets
- D) By using a rule-based system

15. Can GitHub Copilot be used for writing documentation?

- A) No, it only writes code
- B) Yes, it can help write documentation
- C) Only for Python documentation
- D) Only for JavaScript documentation

16. What is the main benefit of using GitHub Copilot?

- A) It makes code reviews unnecessary
- B) It helps developers write code faster
- C) It replaces the need for human developers
- D) It makes projects open-source

17. How does GitHub Copilot handle code context?

- A) It ignores the context
- B) It uses the context of the current file and function
- C) It only uses the context of the current line
- D) It uses the context of the entire project

18. What is the GitHub Copilot Labs feature?

- A) A feature for managing repositories
- B) A feature for experimenting with new AI models
- C) A feature for testing code
- D) A feature for managing issues

19. Can GitHub Copilot be used in Visual Studio Code?

- A) No, it only works in GitHub
- B) Yes, it has an extension for Visual Studio Code
- C) Only in the web version of Visual Studio Code
- D) Only in the desktop version of Visual Studio Code

20. What is the GitHub Copilot for Business plan?

- A) A free plan for individual developers
- B) A paid plan for teams and organizations
- C) A plan for open-source projects
- D) A plan for educational institutions

Domain 3: How GitHub Copilot Works and Handles Data (15%)

21. How does GitHub Copilot generate code suggestions?

- A) By using a rule-based system
- B) By using a large language model trained on public code
- C) By analyzing the entire internet
- D) By using a fixed set of code snippets

22. What type of data does GitHub Copilot use for training?

- A) Proprietary code
- B) Publicly available code
- C) Only Python code
- D) Only JavaScript code

23. How does GitHub Copilot ensure the privacy of user data?

- A) By storing all data locally
- B) By not storing any user data
- C) By anonymizing and aggregating data
- D) By using encryption

24. What is the role of the OpenAI Codex model in GitHub Copilot?

- A) It manages repositories
- B) It generates code suggestions
- C) It tracks issues
- D) It handles pull requests

25. How does GitHub Copilot handle sensitive information in code?

- A) It ignores sensitive information
- B) It flags and removes sensitive information
- C) It stores sensitive information securely
- D) It encrypts sensitive information

26. Can GitHub Copilot access private repositories?

- A) No, it only accesses public repositories
- B) Yes, with user permission
- C) Only for open-source projects
- D) Only for educational institutions

27. What is the purpose of the telemetry data collected by GitHub Copilot?

- A) To improve the AI model
- B) To track user activity
- C) To store user code
- D) To manage repositories

28. How does GitHub Copilot handle user feedback?

- A) It ignores user feedback
- B) It uses feedback to improve suggestions
- C) It stores feedback securely
- D) It shares feedback with other users

29. What is the main source of training data for GitHub Copilot?

- A) Proprietary code
- B) Publicly available code
- C) Only Python code
- D) Only JavaScript code

30. How does GitHub Copilot ensure the quality of code suggestions?

- A) By using a rule-based system
- B) By using a large language model trained on high-quality code
- C) By analyzing the entire internet
- D) By using a fixed set of code snippets

Domain 4: Prompt Crafting and Prompt Engineering (9%)

31. What is prompt engineering?

- A) The process of writing code
- B) The process of designing and refining prompts for AI models
- C) The process of managing repositories
- D) The process of testing code

32. Why is prompt crafting important for GitHub Copilot?

- A) To ensure code is written faster
- B) To improve the accuracy and relevance of code suggestions
- C) To reduce the cost of AI systems
- D) To make projects open-source

33. What is a good practice for crafting effective prompts?

- A) Using vague and general prompts
- B) Using clear and specific prompts
- C) Using long and complex prompts
- D) Using short and ambiguous prompts

34. How can you refine a prompt to get better code suggestions?

- A) By making the prompt more general
- B) By making the prompt more specific
- C) By making the prompt longer
- D) By making the prompt shorter

35. What is the role of context in prompt engineering?

- A) To ignore the context
- B) To use the context to generate relevant suggestions
- C) To store the context securely
- D) To share the context with other users

36. How can you provide context to GitHub Copilot in a prompt?

- A) By writing a detailed comment
- B) By writing a vague comment
- C) By writing a long comment
- D) By writing a short comment

37. What is a common mistake in prompt crafting?

- A) Using clear and specific prompts
- B) Using vague and general prompts
- C) Using short and ambiguous prompts
- D) Using long and complex prompts

38. How can you test the effectiveness of a prompt?

- A) By using the prompt in different contexts
- B) By using the prompt in the same context
- C) By using the prompt only once
- D) By not using the prompt at all

39. What is the benefit of using examples in prompts?

- A) To make the prompt more general
- B) To provide clear guidance to the AI model
- C) To make the prompt longer
- D) To make the prompt shorter

40. How can you improve a prompt that is not generating good suggestions?

- A) By making the prompt more general
- B) By making the prompt more specific
- C) By making the prompt longer
- D) By making the prompt shorter

Domain 5: Developer Use Cases for AI (14%)

41. What is a common use case for AI in software development?

- A) Managing repositories
- B) Code completion and suggestions
- C) Tracking issues
- D) Handling pull requests

42. How can AI help with code reviews?

- A) By replacing human reviewers
- B) By providing automated code analysis and suggestions
- C) By managing repositories
- D) By tracking issues

43. What is the benefit of using AI for bug detection?

- A) To reduce the cost of development
- B) To identify and fix bugs faster
- C) To make projects open-source
- D) To manage repositories

44. How can AI assist with documentation?

- A) By writing code
- B) By generating and maintaining documentation
- C) By managing repositories
- D) By tracking issues

45. What is a use case for AI in project management?

- A) Code completion and suggestions
- B) Automated task assignment and tracking
- C) Handling pull requests
- D) Writing code

46. How can AI help with testing?

- A) By writing code
- B) By generating test cases and automating tests
- C) By managing repositories
- D) By tracking issues

47. What is the role of AI in continuous integration and deployment (CI/CD)?

- A) Writing code
- B) Automating build and deployment processes
- C) Managing repositories
- D) Tracking issues

48. How can AI improve code quality?

- A) By writing code
- B) By providing automated code analysis and suggestions
- C) By managing repositories
- D) By tracking issues

49. What is a use case for AI in security?

- A) Writing code
- B) Identifying and mitigating security vulnerabilities
- C) Managing repositories
- D) Tracking issues

50. How can AI assist with code refactoring?

- A) By writing code
- B) By providing suggestions for improving code structure and readability
- C) By managing repositories
- D) By tracking issues

Domain 6: Testing with GitHub Copilot (9%)

51. How can GitHub Copilot assist with writing test cases?

- A) By managing repositories
- B) By generating test cases based on code context
- C) By tracking issues
- D) By handling pull requests

52. What is the benefit of using GitHub Copilot for testing?

- A) To reduce the cost of development
- B) To generate test cases faster and more accurately
- C) To make projects open-source
- D) To manage repositories

53. How does GitHub Copilot handle test data?

- A) It ignores test data
- B) It generates test data based on code context
- C) It stores test data securely
- D) It shares test data with other users

54. Can GitHub Copilot be used for unit testing?

- A) No, it only writes code
- B) Yes, it can generate unit tests
- C) Only for Python unit tests
- D) Only for JavaScript unit tests

55. What is the role of GitHub Copilot in integration testing?

- A) It manages repositories
- B) It generates integration tests based on code context
- C) It tracks issues
- D) It handles pull requests

56. How can GitHub Copilot help with test automation?

- A) By writing code
- B) By generating and maintaining automated tests
- C) By managing repositories
- D) By tracking issues

57. What is a common use case for GitHub Copilot in testing?

- A) Writing code
- B) Generating test cases and test data
- C) Managing repositories
- D) Tracking issues

58. How does GitHub Copilot ensure the quality of generated tests?

- A) By using a rule-based system
- B) By using a large language model trained on high-quality code
- C) By analyzing the entire internet
- D) By using a fixed set of code snippets

59. Can GitHub Copilot be used for end-to-end testing?

- A) No, it only writes code
- B) Yes, it can generate end-to-end tests
- C) Only for Python end-to-end tests
- D) Only for JavaScript end-to-end tests

60. What is the benefit of using GitHub Copilot for regression testing?

- A) To reduce the cost of development
- B) To generate regression tests faster and more accurately
- C) To make projects open-source
- D) To manage repositories

Domain 7: Privacy Fundamentals and Context Exclusions (15%)

61. What is the importance of privacy in AI?

- A) To increase the speed of AI development
- B) To protect user data and ensure ethical use of AI
- C) To reduce the cost of AI systems
- D) To make AI systems open-source

62. How does GitHub Copilot handle user data?

- A) By storing all data locally
- B) By anonymizing and aggregating data
- C) By not storing any user data
- D) By using encryption

63. What is context exclusion in GitHub Copilot?

- A) Ignoring the context of the current file
- B) Excluding sensitive information from code suggestions
- C) Storing the context securely
- D) Sharing the context with other users

64. Why is it important to exclude sensitive information from code suggestions?

- A) To increase the speed of AI development
- B) To protect user privacy and prevent data leaks
- C) To reduce the cost of AI systems
- D) To make AI systems open-source

65. How can developers ensure their code does not contain sensitive information?

- A) By using vague and general prompts
- B) By reviewing and sanitizing their code
- C) By making their code open-source
- D) By using long and complex prompts

66. What is the role of encryption in protecting user data?

- A) To increase the speed of AI development
- B) To secure data and prevent unauthorized access
- C) To reduce the cost of AI systems
- D) To make AI systems open-source

$67. \ \textbf{How does GitHub Copilot ensure the privacy of code suggestions?}\\$

- A) By storing all suggestions locally
- B) By anonymizing and aggregating data
- C) By not storing any suggestions
- D) By using encryption

ANSWERS

1. B	19. B	37. B	55. B
2. B	20. B	38. A	56. B
3. B	21. B	39. B	57. B
4. B	22. B	40. B	58. B
5. C	23. C	41. B	59. B
6. B	24. B	42. B	60. B
7. B	25. B	43. B	61. B
8. B	26. B	44. B	62. B
9. B	27. A	45. B	63. B
10. B	28. B	46. B	64. B
11. B	29. B	47. B	65. B
12. D	30. B	48. B	66. B
13. C	31. B	49. B	67. B
14. B	32. B	50. B	
15. B	33. B	51. B	
16. B	34. B	52. B	
17. B	35. B	53. B	
18. B	36. A	54. B	

Refer this Github Copilot chat for Explanation for Each question

Link: https://github.com/copilot/share/42174388-0a80-8887-b853-c04864ec28a9