EPAM - June 2024 - Questions

Introduction and General Background

1. Can you introduce yourself?

2. Where are you currently working?

3. What was the last company you worked for?

4. What is your notice period?

5. What was your last salary, and what is your expected salary?

Project Experience and Architecture

6. What was the most recent project you worked on?

7. What was the architecture pattern of the app in your recent project?

8. Are you aware of the Model View Intent (Model View Intent Architecture Pattern)?

9. What architectures have you worked on?

10. What architecture design patterns have you implemented?

11. Can you explain MVVM?

12. In MVVM, how does data reach the view?

Design Patterns

13. What design patterns have you used (not including architecture)?

- Can you discuss your experience with Singleton, Builder, Prototype, Registry, Factory, Adapter, F

14. What was the use case of the Adapter pattern in iOS?

15. What does 'I' stand for in SOLID principles?

16. What is the Liskov Substitution Principle?

Swift Language and Concepts

17. What are the differences between a class and a struct in Swift?

18. Does a struct typically consume more memory compared to a class?

19. What are Associated Values in Enum, and what benefits do they provide?

20. Can you explain Associated Type in Swift?

21. How do we determine the data type in an Associated Type?

22. Can you define what a generic type is?

23. Could you provide an example of a generic function?

24. What is a lazy property?

25. What does it mean to conform to a protocol?

26. What is the default definition of a protocol in Swift?

SwiftUI and Combine

27. In SwiftUI, what are Opaque Types?

28. What is a property wrapper?

29. What does Combine do exactly?

30. What are the different types of subscribers?

Concurrency and GCD

31. What is Concurrency?

32. Can you explain what GCD (Grand Central Dispatch) is?

33. What are the differences between GCD and Operation in iOS?

34. Can you explain what a dispatch group is in GCD?

35. In modern concurrency, how does Async/Await differ from traditional approaches?

36. How do you convert a closure to Async/Await?

37. How can you add dependency in Async/Await? For example, ensuring that a fourth operation happens after the completion of three.

Core Data

38. How do you save a dictionary in Core Data?

39. When is migration used in Core Data?

40. When do we need lightweight migration in Core Data?

Testing

41. Are you aware of unit test cases?

- Which framework do you use for unit testing?

- What about integration testing?

42. Are you aware of Appium for integration testing?

43. Are you familiar with third-party unit testing frameworks like Quick, Nimble, and Specta?

44. How do you perform testing?

45. Are you familiar with any third-party tools for unit testing?

46. How do you test an async function in unit testing using expectations?

47. Have you worked with TDD (Test-Driven Development)?

48. Have you worked with BDD (Behavior-Driven Development)?

Debugging and Optimization

49. How do you debug when your home view is loading slowly?

50. How do you estimate tasks for a feature?

Version Control and CI/CD

51. Are you familiar with Jenkins?

52. How do you perform version control?

Team Management and Leadership

53. Have you led a team before?

54. How do you manage a sprint backlog?

55. How do you conduct code reviews?

Frameworks and Tools

56. What would you do if you had to implement a framework you're not familiar with?

57. Given two frameworks, how would you choose which one to use?

Problem-Solving and Challenges

58. Can you describe a recent or past project where you faced difficulty?

View Management and Gaming

59. Have you created views programmatically in coding?

60. How have you managed views for iPhone and iPad in gaming?