42 iOS interview questions to ask your applicants

Questions

1. Can you explain the Model-View-Controller (MVC) design pattern and how it is used in iOS development?

- 2. What are the main differences between Swift and Objective-C?
- 3. How do you manage memory in iOS applications?
- 4. What is Automatic Reference Counting (ARC) and how does it work?
- 5. What is the purpose of delegates in iOS development?
- 6. How do you handle asynchronous operations in Swift?
- 7. Can you explain the difference between Synchronous and Asynchronous tasks?

8. What are the different states of an iOS app and how does state preservation and restoration work?

9. How would you implement data persistence in an iOS app?

- 10. What is Core Data and how is it used in iOS applications?
- 11. How do you ensure the security of data in an iOS application?
- 12. Can you describe what Grand Central Dispatch (GCD) is and how you use it?
- 13. What are extensions in Swift and how can they be useful?
- 14. How do you optimize the performance of an iOS application?

15. Can you explain the concept of protocols in Swift and provide an example of how they are used?

- 16. Can you explain the concept of Auto Layout in iOS?
- 17. How would you explain the concept of optionals in Swift to a beginner?
- 18. What's the difference between a struct and a class in Swift?
- 19. How do you handle user input validation in iOS apps?
- 20. Describe the app lifecycle and its key methods in iOS.
- 21. How would you implement dark mode in an iOS app?
- 22. What are some best practices for optimizing iOS app performance?
- 23. How do you approach debugging in iOS development?
- 24. What is the difference between a weak and strong reference in iOS?
- 25. Can you explain what closures are in Swift and provide a simple example?
- 26. How does UIKit differ from SwiftUI?
- 27. What is the purpose of the @escaping attribute in Swift closures?
- 28. Can you describe the differences between UIView and CALayer?
- 29. What are property wrappers in Swift and how are they useful?
- 30. How does the DispatchQueue work in iOS?

31. What is the difference between bounds and frame in iOS?

32. Can you explain what lazy properties are and when to use them?

33. How does Swift's type inference work?

34. What are the main differences between UITableView and UICollectionView?

35. Can you explain what Key-Value Observing (KVO) is in iOS?

36. Can you explain what a process is in the context of iOS and how it differs from a thread?

37. How does iOS handle background processes, and what are the limitations?

38. What is App Thinning in iOS, and how does it benefit the end-user?

39. How does iOS manage memory for applications, and what strategies can developers use to optimize memory usage?

40. What is the purpose of the App Delegate in iOS, and how does it relate to the app lifecycle?

41. How does iOS handle multitasking, and what are the implications for app developers?

42. What is Grand Central Dispatch (GCD), and how can it be used to improve app performance?