LTIMindtree - June, 2024

Miscellaneous

1. What is a Run Loop in iOS?

2. What is the difference between the Inactive and Background states?

3. Are there any drawbacks to using storyboards?

Swift Language Features

4. What is the difference between internal and private access specifiers?

5. What is the difference between stored and computed properties?

6. Can we have property observers on computed properties?

7. Have you ever written a custom subscript for classes or structures?

8. Provide an example where we can see a strong reference cycle in Swift.

9. When should you use weak and when should you use unowned?

10. What is the difference between generic and Any in Swift, and which one is more commonly used?

11. What is static dispatch and dynamic dispatch?

12. How do protocols in Swift follow static dispatch?

13. What are the different access specifiers in Swift?

14. What is the final keyword in Swift?

15. What is the difference between a static function and a class function in Swift?

Object-Oriented Programming and Memory Management

16. How do you resolve memory leaks in iOS?

17. When should you use weak and when should you use unowned?

18. Provide an example of the Open/Closed Principle apart from extensions.

19. How do you approach Dependency Inversion in Swift?

Design Patterns

20. Which design patterns have you worked with?

21. Could you explain the Coordinator pattern in iOS development?

22. What kind of structure does your Coordinator have: single Coordinator or parent-child Coordinators?

23. Provide an example of implementing MVVM for retrieving student details from a server.

24. Please explain the components of the VIPER architecture.

25. Where do you write network API calls in VIPER?

26. How do you pass data between the presenter and the interactor in VIPER?

SwiftUI-Specific Questions

27. What is the difference between @StateObject and @ObservedObject in SwiftUI?

28. What is the difference between ObservableObject and EnvironmentObject in SwiftUI?

29. What is the difference between Environment and EnvironmentObject in SwiftUI?

30. What is identifiable in a SwiftUI view?

31. What are the different ways to handle navigation in SwiftUI?

32. How do you solve the re-rendering problem in SwiftUI?

Concurrency and Async Operations

33. How does Async-await work with traditional closure APIs?

34. Have you used Combine to bind your view to a view model?

Objective-C Specific Questions

35. How do you create a singleton class in Objective-C?

36. Why do we use dispatch_once in creating a singleton class in Objective-C?

Data Security and Core Data

37. What practices do you follow for application data security, such as SSL pinning?

38. Do you have experience working with Core Data in different threads, and how do you handle multi-threaded Core Data operations?

39. What if you access the same NSManagedObject in two different contexts?

Miscellaneous

40. Can you provide an example of Object Graph Debugging?

41. Have you created any frameworks yourself?

42. Which third-party frameworks have you worked with?