Nineleaps (Tesco) - March 2024

General

1. Could you provide a brief introduction?

2. Can you detail your recent project, including the framework and implementation used?

3. Did your recent project utilize SwiftUI or UIKit?

4. Are all of your projects typically mobile applications?

5. Have you used any Mac application templates?

6. What application architecture have you worked with?

Principles and Architecture

7. Can you explain the SOLID principles?

8. How do these principles relate to iOS applications? For instance, how is dependency inversion similar to what we do in iOS apps, and how do we apply the open-closed principle?

9. Let's consider designing a view consisting of a list of images and labels. How would you implement this using an architecture like MVVM? Walk me through the components you would use and how you would handle image downloading for smooth and fast performance, including displaying a loader.

   - How would you ensure that the cells being populated are reusable?

Networking

10. Which framework or library do you use for making API calls?

11. What differences have you observed between Alamofire and URLSession?

12. If we choose URLSession, can you describe how your API manager or REST client would look like and how you handle false scenarios?

13. How do you manage different HTTP methods?

14. Some APIs require authentication headers while others do not. How do you handle this logic, and where do you implement it?

15. What are interceptors, specifically request and response interceptors?

16. In an async-await scenario where multiple API calls are needed to populate data on a screen, what would be your implementation approach? Would you make all the API calls and wait for all responses before populating, or how would you proceed?

Testing

17. Have you written unit tests (XCTest)?

18. What was the code coverage of your unit tests in the project?

19. What difficulties or challenges do you encounter in iOS when trying to achieve test coverage, or what aspects can be tricky to cover comprehensively?

20. Which classes typically pose challenges in achieving 100% test coverage?

21. Do you conduct UI testing?

Analytics and CI/CD

22. Have you worked with any analytics tools? If so, what type of events do you typically track?

23. When integrating third-party libraries, what's the best approach from an implementation perspective? For instance, if we're using Google Analytics and need to switch to another analytics provider, how significant are the required changes?

24. Have you utilized any CI/CD pipelines for app releases, and if so, are they set to automatic?