

MASAI MARA UNIVERSITY

COM 4137-1 MOBILE SYSTEMS PROGRAMMING CAT

1. Write a program in Kotlin to display "Hello, Android!" on the screen. *(Practical)*
2. Create a simple UI layout in XML for an Android app with a TextView and Button. *(Practical)*
3. Write a Dart code snippet to increment a counter in Flutter. *(Practical)*
4. Write a REST API call in Flutter using the `http` package. *(Practical)*
5. How do you implement Firebase authentication in Android? *(Practical)*
6. Create a SQLite database in Android to store user data. *(Practical)*
7. What is asynchronous programming? Explain with Kotlin coroutines. *(Theoretical + Practical)*
8. Create a geolocation-based app in Flutter. *(Practical)*
9. What is JSON, and how do you parse it in Swift? *(Practical)*
10. Write a unit test for an Android function. *(Practical)*
11. How do you conduct performance testing for mobile apps? *(Theoretical)*
12. What is ProGuard, and how do you configure it in Android? *(Theoretical + Practical)*
13. Implement a custom splash screen in Android. *(Practical)*
14. What is continuous integration in mobile development? *(Theoretical)*
15. Write code to send a push notification in Firebase. *(Practical)*
16. Create an iOS app with a table view listing items. *(Practical)*
17. What is dependency injection? Explain with examples in Android.
18. How do you debug network errors in mobile apps? *(Theoretical)*
19. Create a Flutter app that fetches data from an API. *(Practical)*
20. Write a script to automate app builds in Android. *(Practical)*