SEKH GULAM MAINUDDIN

Experience

EMotorad | SDE1 - Mobile Application Developer

Dec. 2023 – Present | Bangalore, India

- Engineered Service-Level Architecture using Observer Design Pattern, and implemented a robust Foreground Service handling Bluetooth Operations efficiently using Coroutines, Flows, and Mutex on the Android and Method Channel with Isolates & RxDart support on Flutter Side for smooth data flow over the multi-threaded environment.
- Developed high-performance sub-modules for EBike, SmartLock, and TPMS, leveraging advanced strategies to enhance BLE connection stability from 40% to 90% and integrating MQTT for efficient data transmission to the backend.
- Integrated FlutterMaps with Mapbox to implement Route Playback & Geofencing features using Animation Builders, while building functionalities like Community Platform, Coins Redemption, all adhering to Clean Architecture principles with **BLoC** for state management and comprehensive unit testing using **bloc_test** and **Mockito**.
- Designed a CI/CD pipeline using GitHub Actions, enabling streamlined variant builds with automated unit tests.
- Improved app performance by 20%, reduced app size by 30%, reduced battery usage by 20% with efficient service management, resolved 80+ bugs, & refactored core modules to enhance readability, testability, and scalability.

Meliorist Developers | Flutter Developer Intern

June 2023 - Sep. 2023 | Remote

- Applied MVVM architecture with Bloc for scalable app design and API communication via Dio for robust data handling. Enabled payment processing with **Braintree** and used **Firebase** for push notifications and deep linking.
- Architected a feature-rich event management platform integrated with Google Maps and Google Meet, offering social-media capabilities such as media sharing, likes, comments, and video playback for 5000+ users.
- Added Qibla direction functionality with customizable alarm settings for Namaz prayer times using **AlarmManager**, and also added **Biometric Lock** feature for safety.
- Created functionalities for session booking and professional networking, built a job portal featuring resume uploads and a rewards system, and introduced customer support with ticket management and WebSocket powered realtime chat.

CyberHawkz | Android Developer Intern

April 2022 - Oct 2022 | Remote

- Implemented MVVM architecture with Foreground Services, WorkManager, and Broadcast Receivers, along with a service-level architecture for efficient data flow. Enhanced asynchronous operations using Coroutines and LiveData, and converted wireframes into engaging Android XML layouts with ViewBinding.
- Engineered advanced security mechanisms to analyze **DEX** files of newly installed apps and check for **trackers**, permissions and other vulnerabilities present in the app.
- Devised a system for real-time on-screen notifications of camera, GPS, and microphone usage, reaching 80-85% accuracy while leveraging RoomDB for access history. Built the Cyber News feature, incorporating bookmarking, search capabilities, and APK upload feature for server-side scanning.
- Wrote unit tests with Mockito & JUnit, resolving 50+ bugs, which improved app stability and performance, and drove a 30% increase in user engagement through strategic feature enhancements.

Education

DRIEMS University | BTech in Computer Science and Engineering - 9.4/10 GPA

2020 – **2024** | *Cuttack*, *India*

Technical Skills

Languages: Kotlin. Java, Dart, XML, C++, Javascript Tools: Android Studio, VSCode, Xcode, Git, Github Actions Android: Jetpack Compose, Dagger-Hilt, Coroutines, Retrofit, OkHttp, LiveData, Flows, RoomDB, Mockito, JUnit, FCM Flutter: Bloc, Provider, Getx, GoRouter, Dio, GetIt, Mockito, Hero, FlutterMaps, Hive, RxDart, Isolates, MethodChannel **DSA**: Solved 300+ questions on **LeetCode**.

Projects

LearnWithFun | LINK

Oct. 2023 - Jan. 2024

- Created Learning Management System app with features like Authentication, Video Tutorials, and Notes, Quiz with Cheat Detection using MLKit, and Course Enrollment with payment integration using Braintree SDK.
- Followed Clean Architecture with Hilt dependency injection ensuring app scalability and maintainability. Leveraged Data-Binding for advanced state management, Exoplayer for online video playback, RoomDB for caching, CameraX & MLKit for Cheat Detection, Retrofit2 for API Integration, Coroutines & Flows for asynchronous task.
- Crafted BackEnd with ExpressJS and MongoDB. Other tools: Brevo, Twilio, JWT, Braintree, FirebaseStorage, etc.

TimeShare | LINK

Mar 2023 - June 2023

- Developed a Social Media App with features like Chat(1-1 & Group), Voice & Video Call, Reels, Stories, and Posts.
- Followed MVVM Architecture with Dagger-Hilt. Integrated Chat feature with Realtime-DB, video-call with Agora, and real-time notification using FCM, Reels feature using ViewPager2 & Exoplayer with pagination support. Used Firestore & Firebase Storage to store user data, FirebaseAuth for Authentication (Phone, Email & Google).