### **Universal SDK for Medical Device Integration**

**Overview**

For one of the customers, MOBIAN developed a universal SDK that automates the connection between mobile applications and cardiological medical devices. This solution enables seamless integration with multiple manufacturers, ensuring secure data transmission and eliminating the need for manual setup. The SDK serves as a standalone module, making it easily adaptable for various healthcare applications.

**Client Challenges**

* Lack of a unified integration system – each medical device required a separate implementation.
* Time-consuming and complex development – supporting multiple manufacturers involved extensive manual work.
* Ensuring data security and compliance – patient health information required a high level of protection.
* Limited access to medical devices for development – obtaining physical devices for testing was a logistical challenge.
* Requirement for a flexible solution – the SDK needed to be modular and adaptable for integration into different applications.

**Solution**

MOBIAN developed a scalable SDK that standardizes medical device integration, providing a single solution for connecting cardiological devices to mobile applications.

* **Universal interface** – a single integration point for CardioMobile, Omron, and Withings devices.
* **Automated data synchronization** – eliminates manual intervention, ensuring seamless communication between devices and applications.
* **High-security standards** – 80% code coverage, guaranteeing system reliability and compliance with data protection regulations.
* **Modular architecture** – designed for easy integration into third-party applications and future expansion.
* Technologies and Architecture:
  + Native Mobile Apps:
    - Android: Kotlin, Jetpack Compose, MVVM, Coroutines.
    - iOS: Swift, SwiftUI, MVVM.
    - Hardware communication: Bluetooth, Bluetooth Low Energy, WiFi

**Key figures:**

* First family of devices integrated within **1 quarter.**
* Overall project completion in **8 months**.
* SDK successfully integrated with **3 major medical device manufacturers**.
* **80% code coverage**.

**Why MOBIAN?**

By augmenting the client’s team, MOBIAN helped create a scalable, secure, and fully automated SDK for medical device integration. The solution enables seamless connectivity across multiple manufacturers, simplifying the process for healthcare applications.

If your company needs an innovative, secure, and flexible integration solution, MOBIAN is ready to be your trusted partner! 🚀