



## Bluetooth Interface Test System for Mobile Diagnostic Devices



Our customer is a leading international company in the field of medical technology and develops a wide range of medical diagnostic devices. Some of these mobile devices use Bluetooth interface to communicate with Android and iOS devices as well as third-party apps.

The customer commissioned konplan to develop and implement an automatic test system for these Bluetooth functions.

### Test System with App and Software Development Kit

For this project, konplan independently managed the task of designing and developing the test system including the Android and iOS apps. From the initial concept and functional specifications through defining the architecture, the test framework, the development planning, and final testing, the entire project was performed in-house. Developer previews of the Android and iOS operating systems as well as the diagnostic devices themselves were considered. In addition, certain components of the test app were made available in the form of a Software Development Kit which can be used as a reference for developing third-party apps.

### Early Identification of Communication Errors

The new system allows the customer to automatically test the Bluetooth interfaces. Communication errors are detected quickly and reliably through updates or revisions related to third-party manufacturer apps. This ensures early problem detection even before market launch. The system is also compatible for automated testing of different device generations. It only requires that the device to be tested also has a Bluetooth interface.

#### Result

- Early and reliable identification of communication errors
- Test system including Android & iOS app
- Automated test performance
- Software Development Kit for third-party vendors

#### Methodology & Technologies

- Android / Java, Kotlin
- iOS / Objective-C, Swift
- C/C++

#### Scope of Services

- Concept creation
- Software architecture
- Specification
- Software development
- Testing



12 months



3 employees  
(konplan)



Analysis & idea generation, conception, development, testing, implementation

