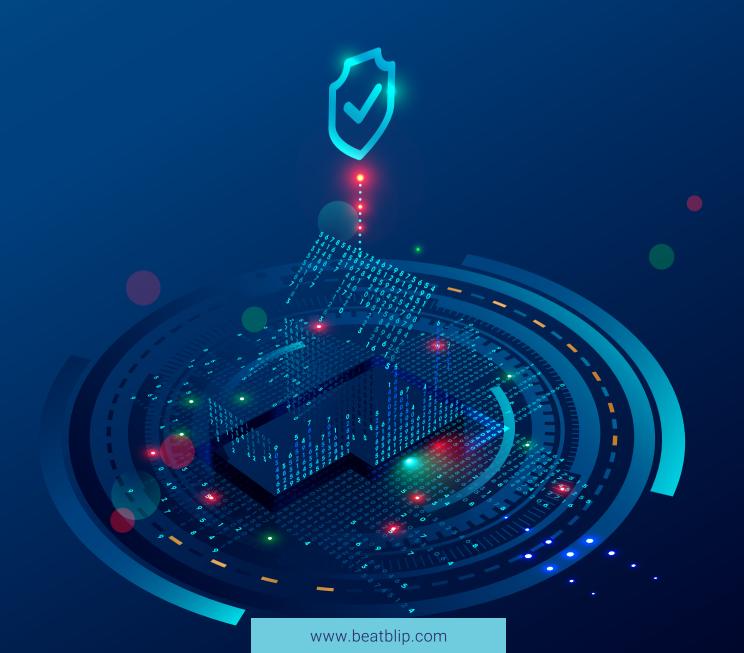# BeatBlip
helps a
Home Security Major to
Onboard New Users
Confidently

About Customer

Our customer has been keeping American homes safe for more than six decades through its innovative products and solutions. It is America's most trusted safety brand of smoke detectors, carbon monoxide alarms, and other home safety products. Its innovative and leading-edge home safety products have been helping protect the lives, well-being, and valuables of thousands of homeowners in the nation. By delivering a sense of preparedness and assurance, the home security major's products promote a higher quality of life.

The organization leverages leading-edge technologies to deliver next-generation home security. Towards this, the organization was developing an Internet of Things (IoT) home protection device. This connected smoke and CO detector would leverage Bluetooth Low Energy (BLE) to communicate with iOS devices. It would utilize the Wi-Fi to communicate with the cloud server to record event history and send push notifications to the users when needed.

Customer's Challenge

But to enjoy the innovative features of the smart smoke and CO detector, users will have to be successfully onboarded. The organization wanted to automate and simplify the initial onboarding using an iOS app. The user onboarding flow involved pairing the IoT device with the iOS app by 5 button presses on the smart device and following a series of actions. Once paired, the device would trigger notifications to the user's iOS device as soon as smoke or CO is detected in the home.

The organization wanted to make their new user onboarding process error-free and repeatable. Towards this, the home security major wanted to test two vital aspects:

Ensure that the onboarding flow worked seamlessly across all iOS versions and devices.

Make sure that the onboarding flow was error-free and repeatable.

The home security major wanted to implement test automation to attain such goals and ensure vitality of the onboarding process. However, there were two major challenges in implementing test automation:

- The pairing of the IoT device required a physical button press.
- Before repeating the test, the device had to be unpaired from the app, followed by a 5-button reset.

To overcome these test automation hurdles, the home security major wanted to partner with an experienced IoT test automation solution provider.

Our Solution

For more than two decades, AgreeYa has been helping enterprises achieve unprecedented business outcomes with our testing solutions, services, and product. Our proven track record and industry repute made it easy for the home security major to select us as their preferred technology partner for the project.

Upon engagement, our experts performed due diligence and proposed using BeatBlip to automate the entire onboarding process of the smart smoke and CO detector device. AgreeYa's BeatBlip is a codeless continuous test automation solution that has been enabling organizations to tackle their stiffest testing challenges and ensure optimum release quality.

One of the pressing challenges for our experts was how to replicate the 5-button-press reset process. To solve this, AgreeYa experts leveraged a robotic arm and developed a custom plug-in to integrate Arduino Controller with the IoT device. This strategy helped us automate the mechanical steps involved in the reset process. Arduino Controller is an open-source electronics platform that enables users to achieve tasks like physical pressing of reset buttons to repeat the same test multiple times.

Next, the AgreeYa team deployed BeatBlip to ensure the end-to-end test automation of the smoke and CO detector's onboarding process. BeatBlip allowed the home security major to rigorously test every step in the onboarding flow and ensure that the pairing and button-press process works flawlessly across all iOS devices and versions.

With BeatBlip, the home security major can test their iOS app across various iOS devices and platform versions using the same set of automation thus reducing the cost and time to test significantly. BeatBlip also ensured that automation scripts could be used for QA and UAT across various test and staging environments. Empowered with BeatBlip and AgreeYa's testing expertise, the home security major was able to keep the maintenance overhead of the provided automation to a minimum.

As a robust cross-platform mobile testing solution, BeatBlip delivered a strong foundation for future automation needs. The home security major can easily use the same automation scripts for Android devices as well.

Benefits Delivered

Reliability, quality, and trustworthiness are the cornerstones of the home security major's products, and our solution ensured that this legacy continued. By leveraging BeatBlip's advanced capabilities and AgreeYa's testing prowess, the home security major was able to market their new smoke and CO detector device with confidence. Efficient testing of the onboarding process ensured that the users could pair the device with any iOS device and version. AgreeYa also efficiently automated the mechanical steps involved in the device onboarding process. Other discernable benefits of the solution were:

Delivered up to **40%** reduction in test automation maintenance effort.

Allowed up to **35%** reduction in test cycle time, enabling faster product release.

Ensured that **zero** manual intervention is required for triggering the script execution.

Enabled a strong future foundation, wherein the home security major can leverage the same scripts for the Android platform with minimal effort.

Technology Stack

BeatBlip, Arduino Controller

Testimonial

> *It was great working with AgreeYa. The team helped us address a business-critical need by rigorously testing the onboarding process for our latest product. We were particularly impressed with the way they tackled the problem with mechanical steps involved in the onboarding process.*

Head of QA, Home Security Major

About AgreeYa

AgreeYa Solutions is a leading global provider of software, solutions and services to small, medium and global Fortune 100 organizations. Founded in 1999 and headquartered in Folsom, Calif., AgreeYa has over 2,000 professionals helping clients across the U.S., India, EMEA and Mexico. Leveraging a technology-enabled, consultative approach and diverse talent, AgreeYa offers modern workplace, smart analytics, intelligent automation, AI/ML, cloud transformation, mobility and talent management solutions to deliver digital transformation to its clients. AgreeYa has received considerable recognition including certifications like Microsoft Gold Partner and Cloud Solutions Provider; AICPA SOC 2 Type 2, SEI CMMI and ISO 9001:2015; and awards including "Dream Company to Work For" and "Best Employer Brand." Discover more at www.agreeya.com.

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