



## CASE STUDY

# SECURING & AUTOMATING the FUTURE:

## Quality Testing for Advanced Door Security Solutions





## OVERVIEW

The application is a synthesis of state-of-the-art software combined with cutting-edge hardware devices.

Crafted to **provide users with unmatched security solutions**, it grants unique **control over various types of doors, gates, and other security fixtures.**

Beyond just control, the application emphasizes security, ensuring that users can confidently rely on its robust features.







## CLIENT'S NEEDS

- Design QA processes for both manual & automation testing from scratch.
- Develop a comprehensive test plan and subsequent test documentation.
- Execute tests across varied environments.
- Work with the hardware part, ensuring its interaction and operation with software.







## IMPLEMENTATION JOURNEY

After gaining a profound understanding of the product and its end-users, we meticulously **crafted all QA processes in alignment with the client's objectives.**

The collaboration tools we adopted, including Skype, Google Chat, Jira, and Azure DevOps, **fostered seamless interactions and documentation.** Our synergy with automation experts paved the way for holistic test documentation, significantly **elevating the product's quality and resolving numerous bugs.**





## MAIN FOCUS DURING IMPLEMENTATION

- Crafting a structured test plan, generating extensive documentation in Azure DevOps, and maintaining flawless communication with developers and a management team via diverse channels.
- Examining devices, meticulous setup for testing, and constant skill improvement in handling hardware components.
- Coordinating software and hardware by identifying interdependencies, making a detailed description of their functions in the test documentation, and ensuring testing across different environments.
- Leveraging UX testing to guide the client on which devices to prioritize and shaping the product based on real-world experiences.





## HARDWARE INTEGRATION

Our QA team faced new challenges when the hardware segment entered the picture. Navigating through new devices, **our team delved deep into instructional guides, setup methods, and connectivity solutions.**

Over a short period of time, our knowledge of the hardware components increased, and **we effectively interlinked hardware testing with the software domain.**

This approach developed innovative testing scenarios and product improvement suggestions.







## TOOLS & TEST TYPES

### TOOLS:

- Chrome Dev Tools
- Postman, Snagit
- Jira
- Azure DevOps
- Skype
- Google Chat

### TESTING TYPES:

- Smoke Testing
- Regression Testing
- Functional Testing
- Exploratory Testing
- UI Testing





## RESULTS & CONTINUED COLLABORATION

### Our journey hasn't culminated yet!

Integrating hardware and software testing has been pivotal, bolstering our confidence and readiness to tackle complex challenges.

- Daily 20 smoke tests for core functionality.
- Daily PROD by running in-depth E2E tests focused on primary processes.
- A thorough check for the Admin role.
- Release pipeline via Azure Test Plans that allow easy test executions for clients.

**This streamlined approach ensures the product's peak performance and user satisfaction.**







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with QATestLab!**



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