IoT Based Lock & Access Control

DEVELOPMENT – SUPPORT & MAINTENANCE

ABOUT PROJECT

In 2014, our client, a leader in innovation of access control systems for homes, approached us with an innovative concept. The idea was to build a scalable and robust solution that uses mobile phone instead of a physical key to access home or workplace.

Our research and comprehension of the concept led to an integrated and highly intelligent solution that was not only compatible with their existing installed system but at the same time was designed to work for future innovations or updates in the access control systems.

THE REQUIREMENT

- IoT Based Lock & Access Control System
- Compatibility with Next Gen Devices
- Research & Analysis for Technology & Hardware
- Viability for Low Energy Consumption
- Scalable Software that Adapts to Various Systems
- Highly Secured & Easy to Use

> " With our IoT based solution compatible with next-gen locking devices, we enabled our client to become a major player in home automation and security systems. "

IoT Based Lock & Access Control

marici

DEVELOPMENT – SUPPORT & MAINTENANCE

SOLUTION

- Secured Access System Integrated with Hardware – Multi-functional solution with encrypted communication that is easily integrated with a variety of hardware.

- Integration of a BLE (Bluetooth Low Energy) Chip – The next-gen of BLE-enabled smart locks that intuitively interacts with the phone to unlock doors.

- Access authority configuration – The solution allows to configure access based on the level of authority required to gain access, especially at a workplace.

- Easy edit functionality – The backend of the solution allows easy edits of name and manage access permissions.

- Simplified Functionality for Ease in Use – The solution was designed to ensure maximum usability so that even non-technical people could operate it easily.

- Export Files to PDF or CSV Formats – The data generated by the smart devices could be downloaded in either PDF or CSF formats for making insights-driven decision.

ARCHITECTURE

User Mobile Device

Central Controller
- IrDA Receiver/Decoder
- BLE
- Local Network Monitor
- Drivers
- Power Monitor

Authenticator | Web Listener
Event Bus | Service Registry
State Session | Command Listener | Database
Timer | Database Manager

BENEFITS

Highly Scalable System

Elimination of Traditional Key-Lock System

Highly Secured Work & Home Environments

Operate Remotely