



GadgEon
Engineering Smartness



Door Bell Silencer

Door bell silencer is a BLE enabled device which can be used for turning door bell on/off, and can be controlled using a smartphone App via BLE connection

Challenge

- iOS/Android App connect to the device using BLE and send command to control the device
- relay control for controlling door bell and sense circuit for detecting door bell switch press

Outcome

- Product design and architecture
- Development of complete device hardware, firmware and cross-platform Mobile application
- Integration of Mechanical and electronics
- Device to be launched in USA

Connected Door Bell Silencer

CLIENT

- US based Home Automation company.

PRODUCT

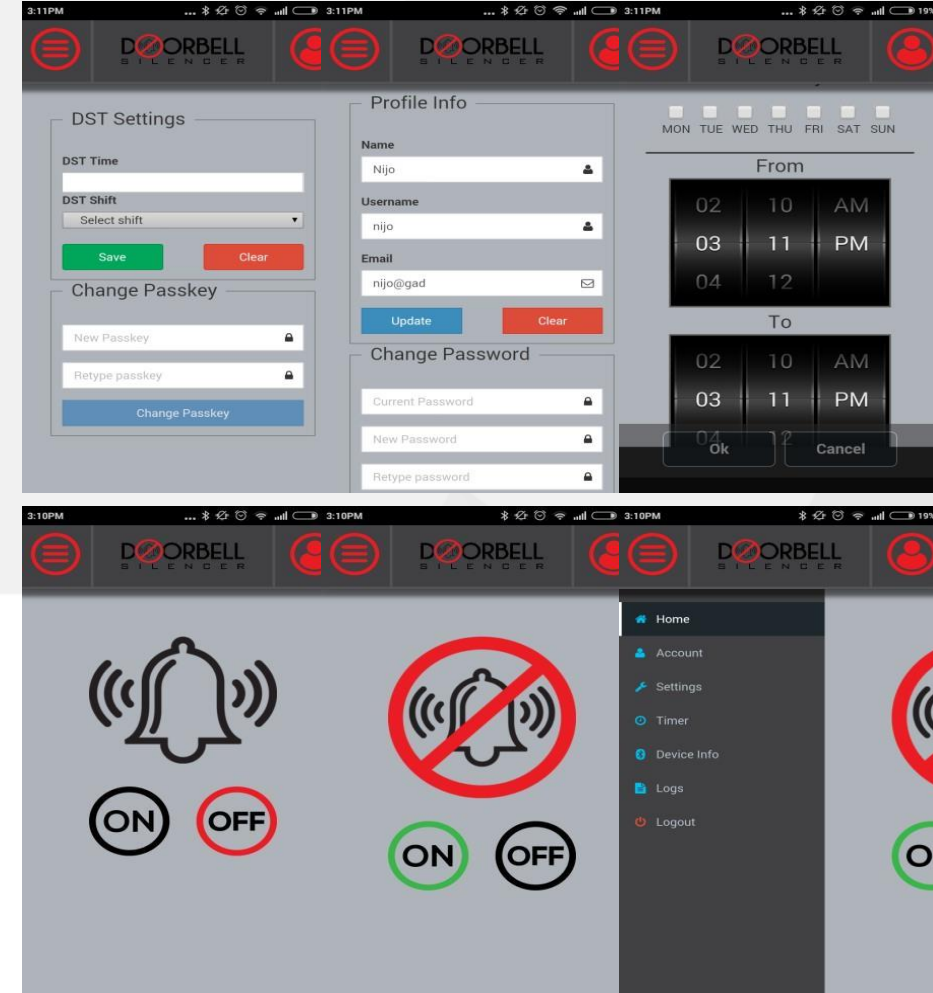
- A BLE based Doorbell silencer, controlled by a mobile application.

TECHNOLOGY

- Nordic nRF51822 BLE SoC, Android 4.4 and above, iOS 7 and above, PhoneGap

USE CASE

- Connect and control the Doorbell device using mobile app.
- Silence or turn on the door bell device from the mobile app .
- Present the time of a day (and the day(s) of a week) at which the Doorbell to be silenced from the app.
- Notifications should be received on the mobile, when the Doorbell is pressed during a silence period.
- Doorbell logs and other information like battery life on the mobile application.



WHAT DID GADGEON DO?	PLATFORMS/ TECHNOLOGIES USED
1) Architecture for complete system including BLE based ruggedized water proof camera flash system and IOS/Andorid Mobile App to control the device.	Requirements Gathering & Analysis, Uses cases, Architecture development, identification of functional components.
2) Hardware design, prototyping, boardbring up for BLE based system.	Orcad for schematics and allegro16.6 for layout
3) Embedded firmware BLE based system and its integration and testing on reference platform and on Target platform	Nordic nrf51 BLE Stack and SDK , Keil IDE. The device has the following hardware peripherals a. EE2-5NU relay
4) Mobile App design and development for controlling and managing the ruggedized door bell.	Followed the recommended design patterns from Apache cordova. Advertisement, pairing using the passkey, discover services, enable/disable doorbell, notification to the house users with history logs.



GADGEON SYSTEMS INC

881 Yosemite Way, Milpitas, CA 95035, USA

CONTACT - USA

Wes Schropp – VP Sales : +1-408-621-2570

CONTACTS - INDIA

Hari Nair : +91 9895 01 58 80 | Sreenandh : +91 9747 08 66 88

GADGEON SMART SYSTEMS PVT LTD

VI 405/E1, Fathima Tower, Malepally Road, Thrikkakara PO, Kochi, Kerala, INDIA, Pin: 682 021



sales@gadgeon.com