SafeDrop

A Smart Solution for Secure and Convenient Deliveries

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Introduction

This guide provides instructions on how to operate the IoT Door Control and Notification System. The system allows a user to control a door remotely and receive updates on the door status, environmental conditions, and system health via an Android app.

System Components

Button: Initiates the door control process.

Buzzer: Provides audible notifications.

Servo: Controls the opening and closing of the door.

WebServer: Manages requests and sends notifications.

Hx711 Sensor: Measures weight for security purposes.

Timer: Monitors and controls time-based actions.

MP3 Player: Plays audio notifications.

Android App: User interface for remote interaction.

WiFi Module: Connects the system to the internet.

Operation Instructions

Controlling the Door

Manual Control:
Press the physical button to trigger the door mechanism.
The buzzer will sound once, indicating the signal has been received.
The servo then receives a command to open or close the door.
The WebServer confirms the door status and sends a notification to the Android app.

Remote Control via Android App:
Send a command through the Android app.
The WebServer processes the request and controls the servo accordingly.
The door status is then sent back to the app.

Operation Instructions

Receiving Notifications

When the button is pressed or a command is sent from the app, the WebServer triggers the MP3 Player to issue an audio notification.

The Android app will receive push notifications for the following:

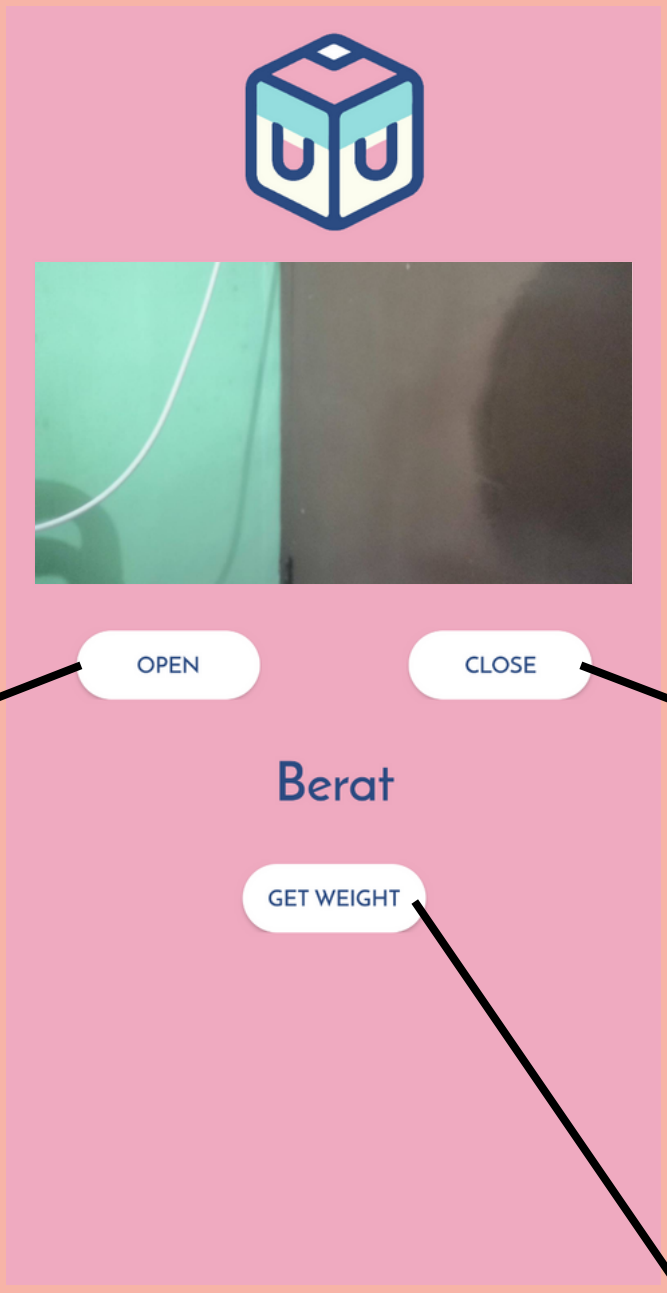
- Door status changes
- Weight measurements from the Hx711 Sensor
- Timer alerts
- MP3 Player and WiFi connection statuses

Automated Features

- Auto-Close Timer: The timer can be queried through the Android app to auto-close the door after a set duration.
- Weight Measurement: The Hx711 Sensor periodically sends weight data to the WebServer, which then updates the app.

Maintenance and Troubleshooting

- Connection Issues: Ensure the WiFi Module is connected to the internet.
- Audio Notifications Not Playing: Verify the MP3 Player's connection and functionality through the app.
- Door Mechanism Failure: Check the servo connections and test manually using the button.



Button to open box

Button to close box

Button to start measure package weight

FAQs

Q: What should I do if I stop receiving push notifications?
A: Check your internet connection and the health of the WiFi Module via the app.

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For further assistance, please contact our technical support team at support@safedrop.com or call us at 14045.