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EASYHOME StratOs Technologies



Team Members

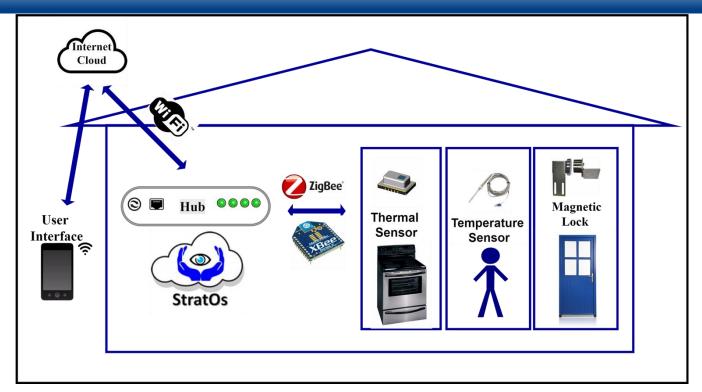
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What is EasyHome?

- Remote control and monitoring of home appliances via audio communication from smartphone
- Reduce challenges faced at home in:
 - Cooking
 - Locking/unlocking doors
 - Reading body temperature
 - Color identification

Why EasyHome?

- Audio-based platform designed for visually impaired people
 Provides independence for blind people
 - Market
- Visually impaired peopleElderly people
- Patients with Alzheimer's disease



- **Hub:** The brain of our platform where data is propagated between end devices using ZigBee communication
- Stove state detector: IR sensor used to detect fluctuations in stove top temperature to detect status of stove burners
- **Door lock Mechanism:** Magnetic sensor and relay controls the lock on the door. The mechanism is initiated by the user through the mobile application
- **Body Temperature sensor:** Integrated Circuit detects the body's temperature which will be read out by the application to the user
- ☐ Mobile App: Android and iOS app to control end device and provides audio feedback

Safety:

- Platform designed to provide ondemand aural feedback in the case of long term heat on stove Provide alerts to the application
- in the case of home intrusion.

Challenges for the blind:

- Inability to know which stovetop burner is on
- Inability to know if the door is locked or not
- Inability to detect color on clothes etc.

Desired Improvements

- No false/incorrect information is provided to the user
- Improving the overall rate of communication using the latest communication protocols and devices