Secure Door Lock

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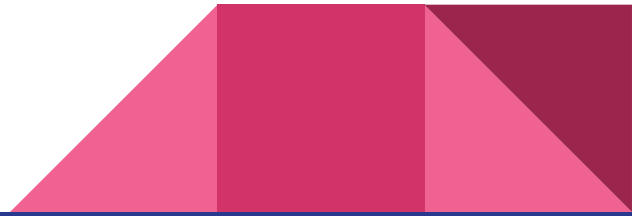
Motivation

- Producing a secure and easy to use product
- Upgrading conventional lock while keeping modern features
- Drive the cost of the systems down in industry
- Require less specialized people to fix and maintain the lock

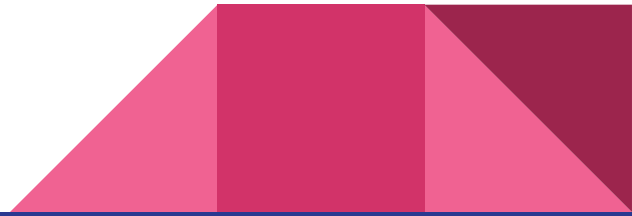
Goal

- Maintain security
- Fix scalability
- Configure who can open door
- Work lock from an app
- Monitor lock status from app



Approach

- View the status of all your doors
- Secure your doors from anywhere
- Unlock your doors with just your face
- Verify who is at your door



Novel Features

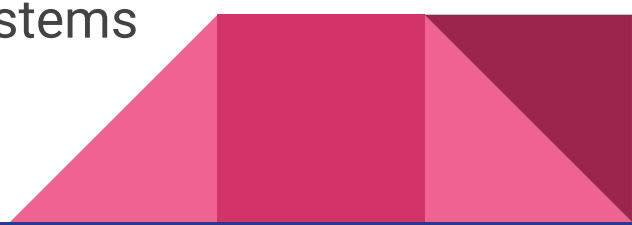
- Facial recognition software built into integrated camera
- Notifications of door entries with snapshot of the entering party
- Remote lock/unlock from a mobile device

Technical Challenges

- Implementing facial recognition on an imbedded system
- Integrating an embedded system with a mobile application
- Ensuring proper failover options if the system fails

Milestone 1 Tasks

- Compare and select a Tech Stack
- Design a proper IOT acceptance criteria
- Set up Jira board
- Requirements documentation
- Design documents for subsystems
- Integration documentation for subsystems
- Design solution for lightweight facial recognition system
- Design needed infrastructure to integrate all systems



Milestone 2 Tasks

- Integration of camera and Raspberry Pi system
- Creation of initial .apk for testing and basic mock up
- Development of backend endpoints necessary for integration

Milestone 3 Tasks

- Implementation of facial recognition system on the Raspberry Pi
- Completion of app UI and beginning functionality of the system
- Initial integration between all subsystems

Thank you. Questions?