Smart Home Security

Technology

1. Web, Mobile App, IoTs, AI, Cloud
2. Microservice
3. Distributed System
4. CI/CD
5. Security
6. Laravel (Web)
7. Flutter (App)
8. GitHub (CI/CD)
9. AWS (Cloud)

Function in App (User)

1. Install App and Login
2. Home owner can use App for
   • Get Real Time Alert.
   • Live Video Streaming: Real-time video feed from smart cameras.
   • Device Management: Lock or Unlock (door or window) .
   • Sensor Integration: Integration window sensor for shut the window. when rain and Open Water when have fire.
   • Register member of family for have permission for lock or unlock door by Face ID, Card NFC and Password.
   • Reset Password door.
   • Manage lamp.

Function in Web (Admin)

1. See Dashboard
2. CRUD Account Users
3. Set Up Home
   • Connect Devices for see and control status (On or Off)
4. Manage Password Door of each home
5. Can access to manage status device of each home

Design Clouds

- 1st Cloud Store Admin & Users Authentication Service
- 2nd Cloud Store Device Management Service
- 3rd Cloud Store Video Video Streaming Service

Admin Web → **Functions**

Functions →
- Set Up Home → Connect Devices → Manage Status
- CRUD USER → Create Read Update Delete User
- Dashboard → Show Number status of User

Username & Password

Home Owner App → **Install & Login App** → **Functions**

Functions →
- Watch video Camera security stream → Can watch history Video
- Devices
- Add Member → CRUD member by Face ID and NFC for unlock door

Devices →
- Lock or Unlock Door → Front Door / Back Door / Room Door ....
- Lock or Unlock Window → Front Door / Back Door / Room Door .... → Auto shut when rain
- Turn off/on Fire Alarm → Front Alarm / Back Alarm / Room Alarm ....
- Turn off/on Lamp → Front Alarm / Back Alarm / Room Alarm ....