

Online Home Automation Control System

Graduation Project 1 Presentation
Group 45 - JC7
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Introduction

- **Very fast increase in automation** in the recent decade
- **Higher demand** for applications that can support remote control
- especially electrically controlled house appliances



Problem Statement

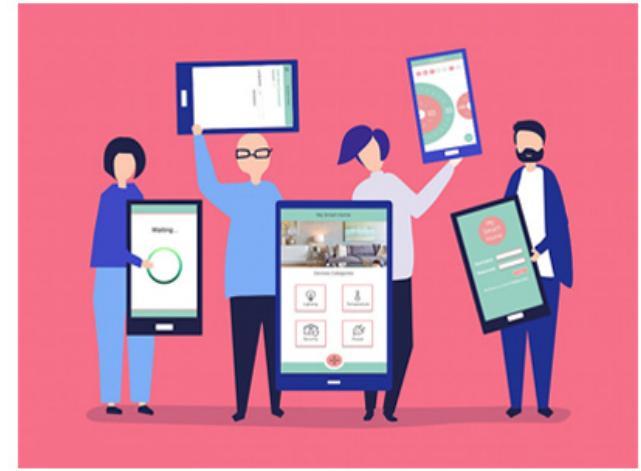
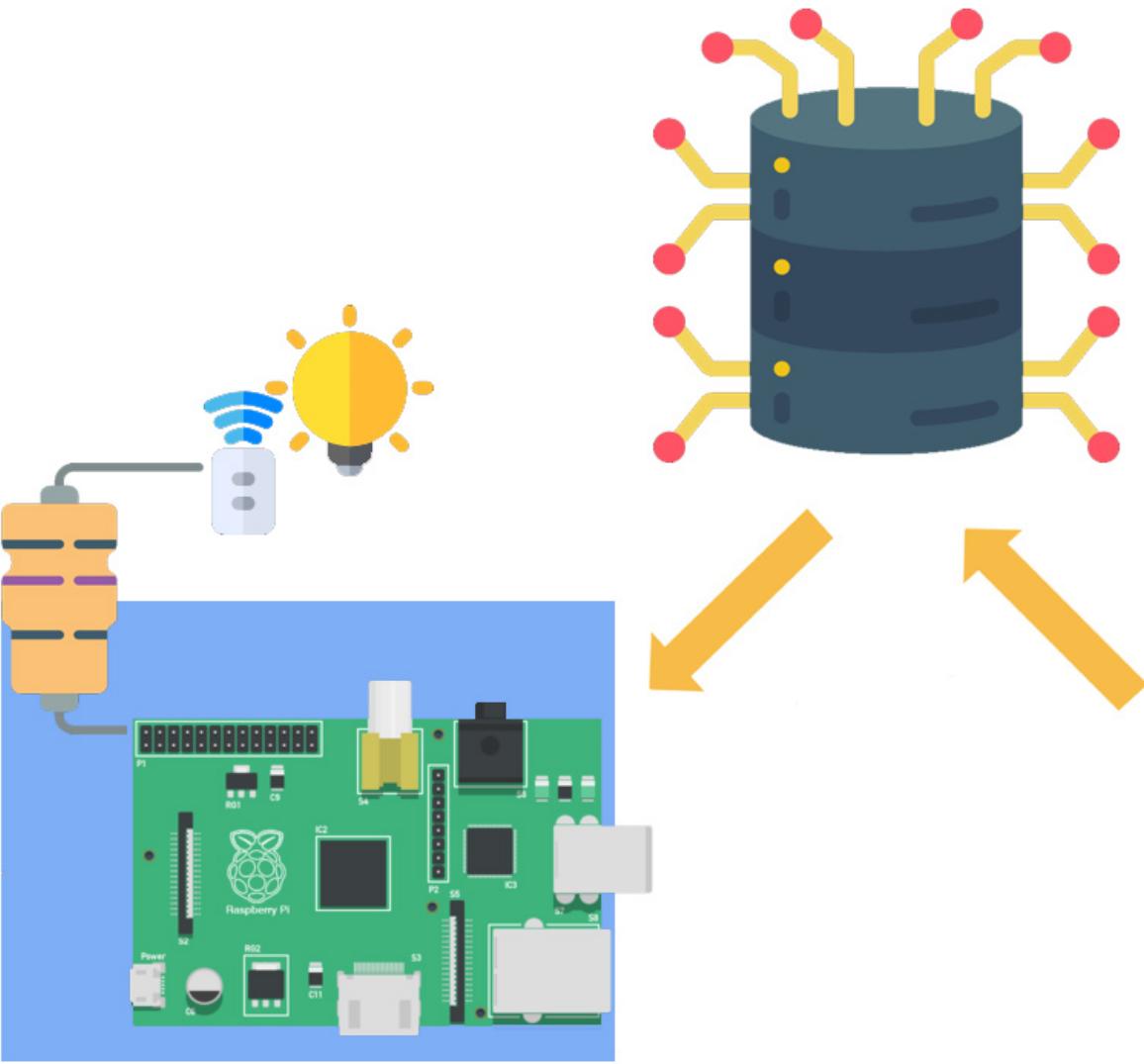
- **Many applications available** providing remote control at home
- **All work in a small set of devices and sensors**
- Main challenge: control these devices through the Internet
- Important for pet owners with UV lights, parents waking their children up etc



Objective and Proposed Solution

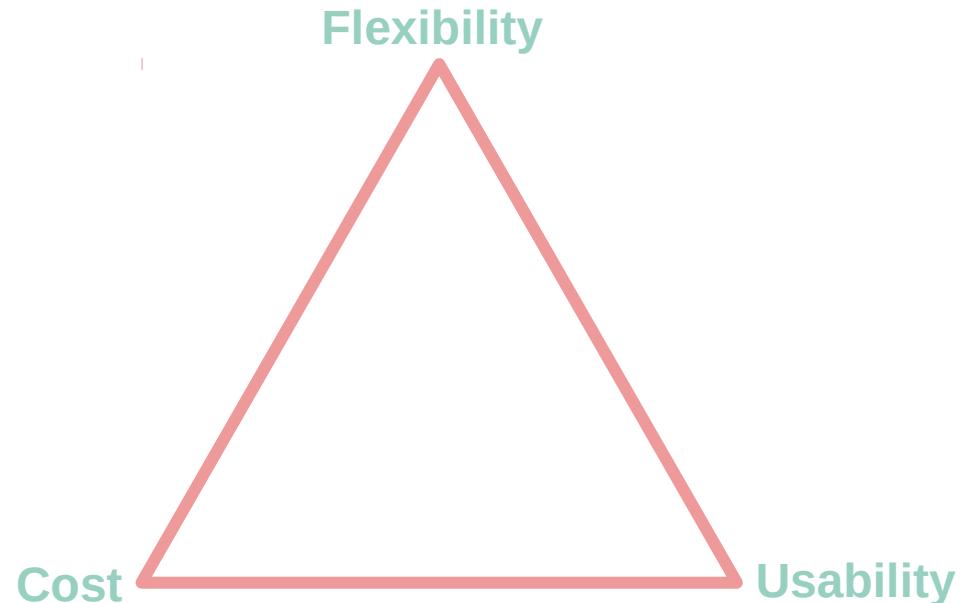
- **Objective:**
 - remote control of house appliances through IoT
- **Solution:**
 - creating **Android mobile** application that controls switches/lights etc by issuing commands
 - using **Raspberry Pi** to switch the lights/switches on and off
 - creating a **web application** interface between the mobile application and laptop



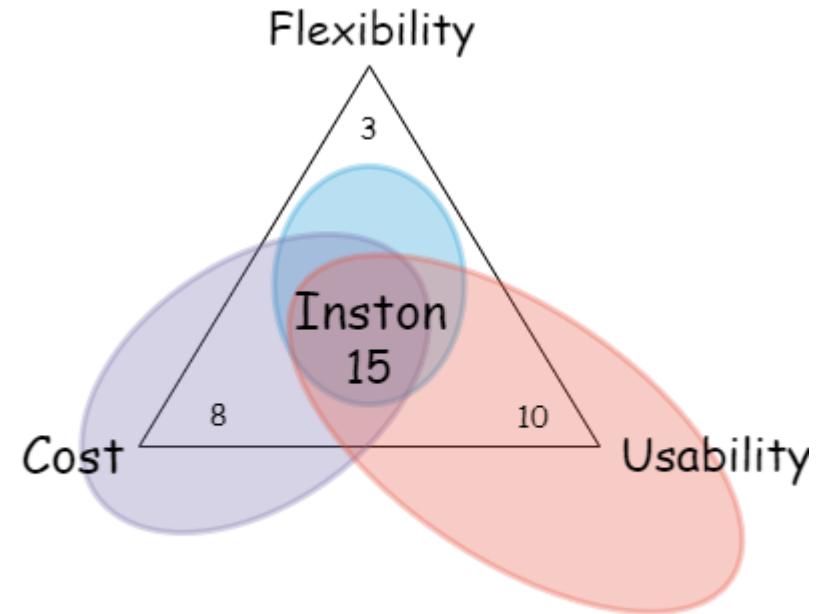


Related Work

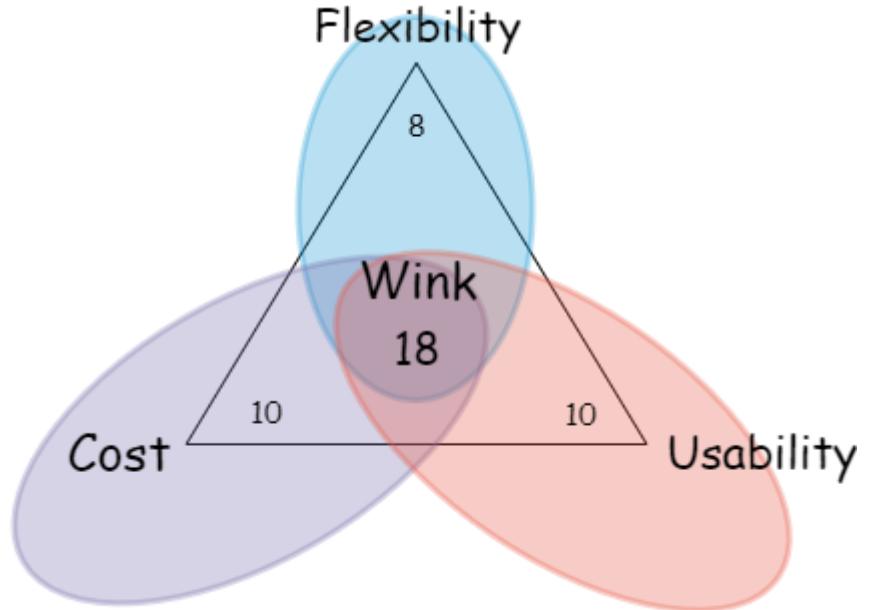
- Some examples of similar applications:
 - Insteon
 - Wink hub 2
 - Samsung smart things



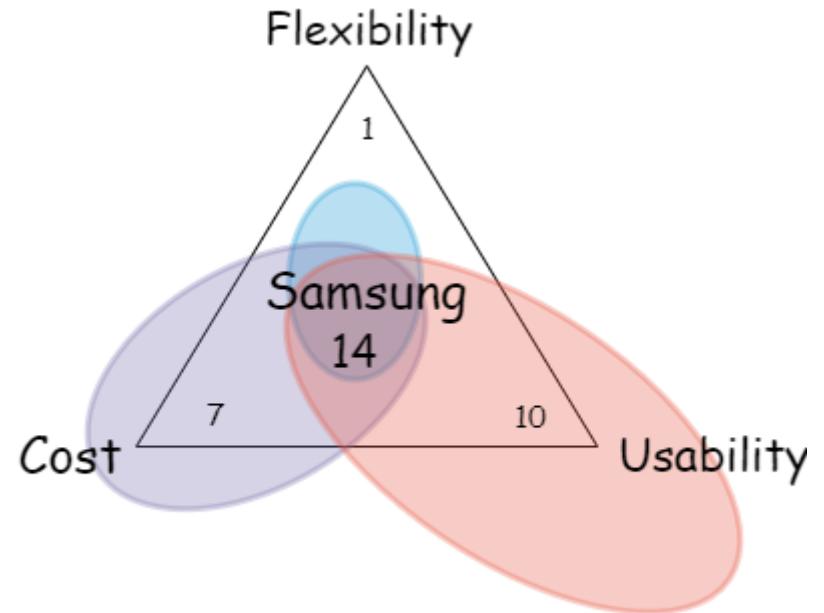
Related Work - Insteon



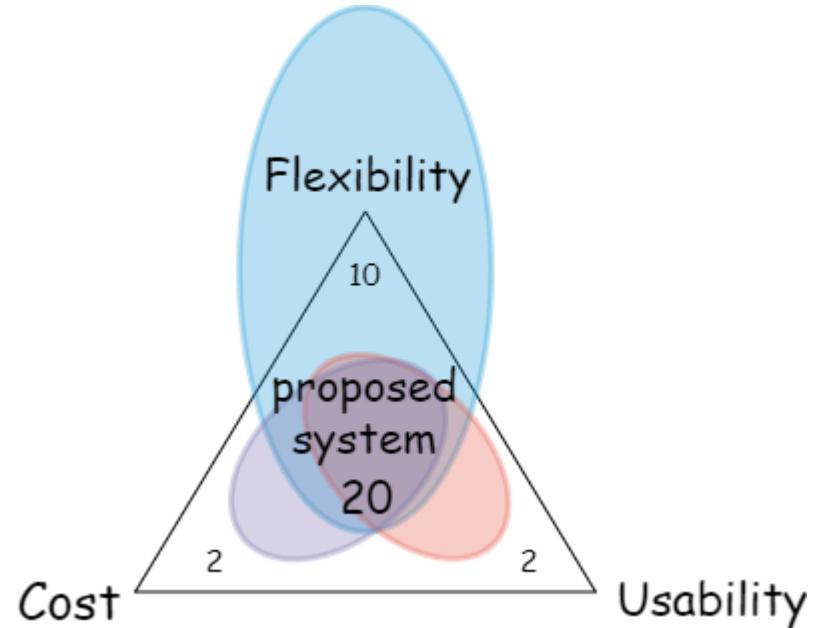
Related Work - Wink



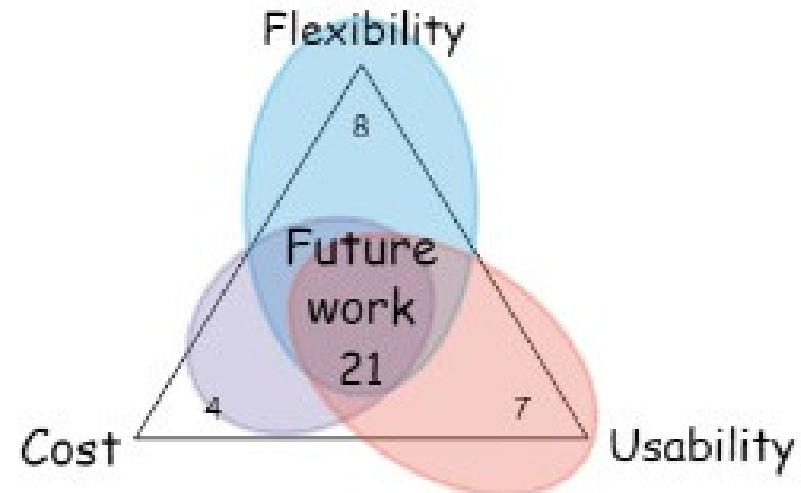
Related Work - Samsung



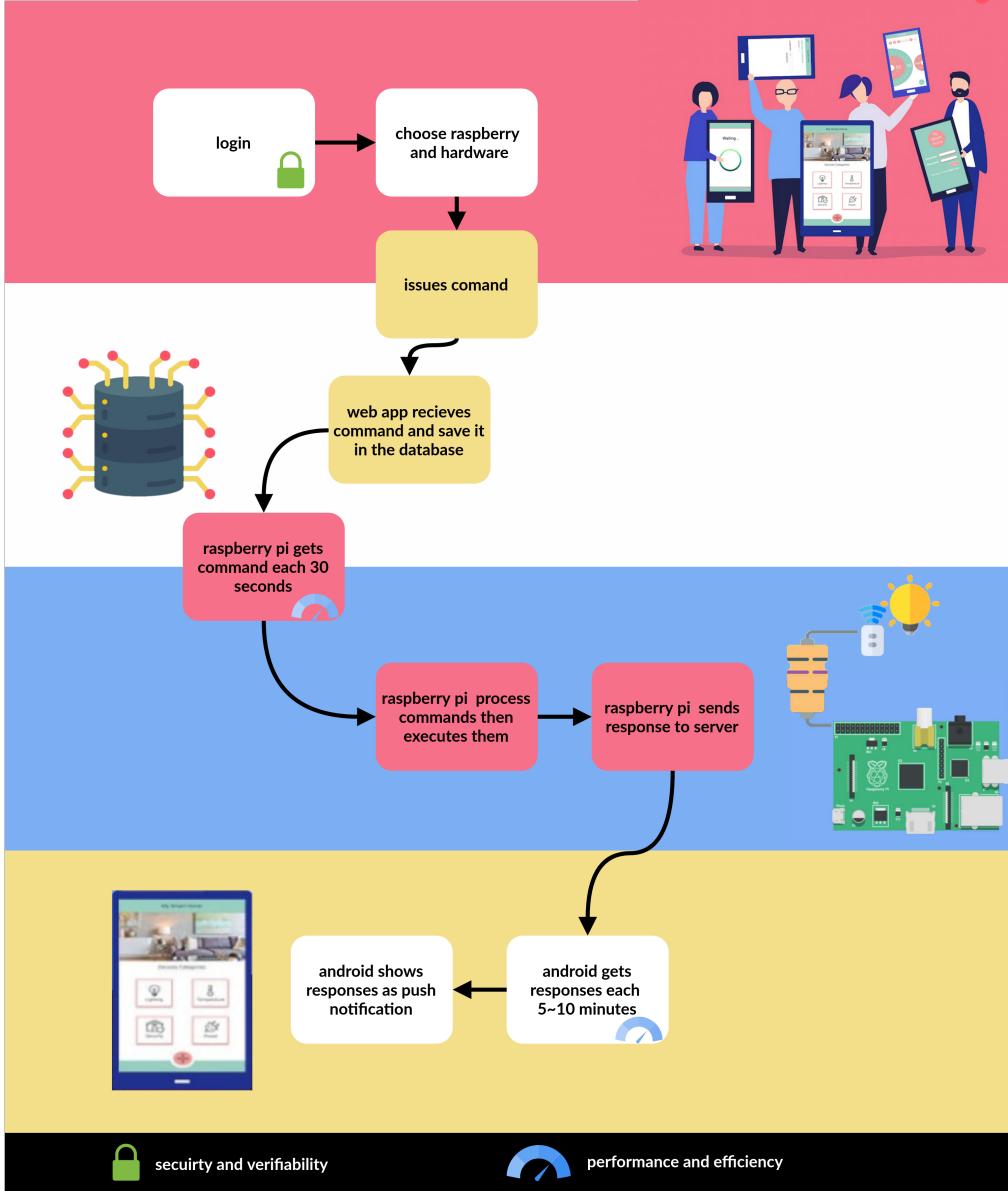
Related Work - Proposed

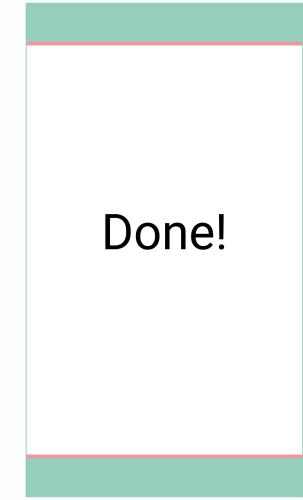
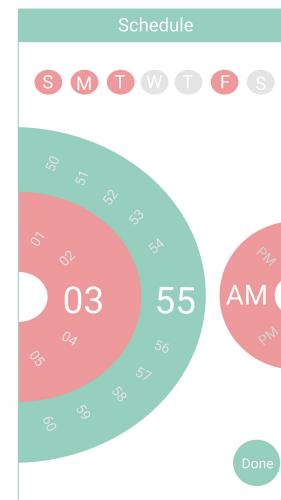
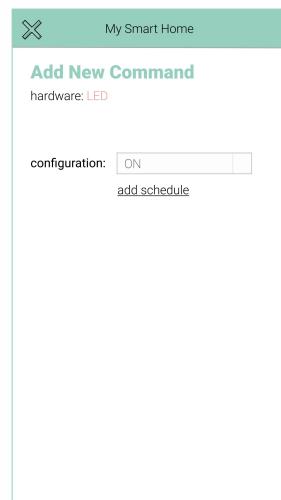
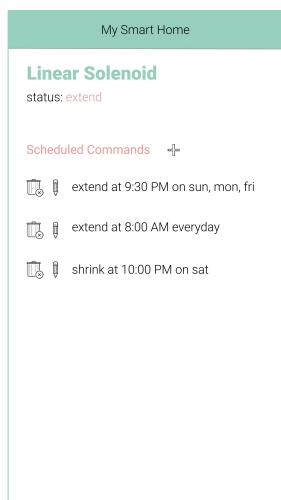
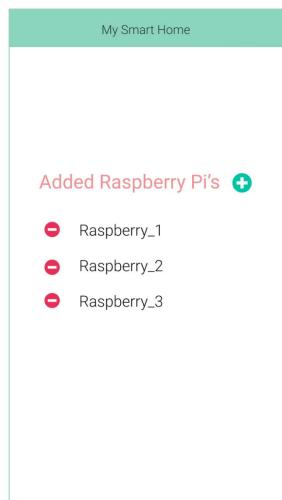
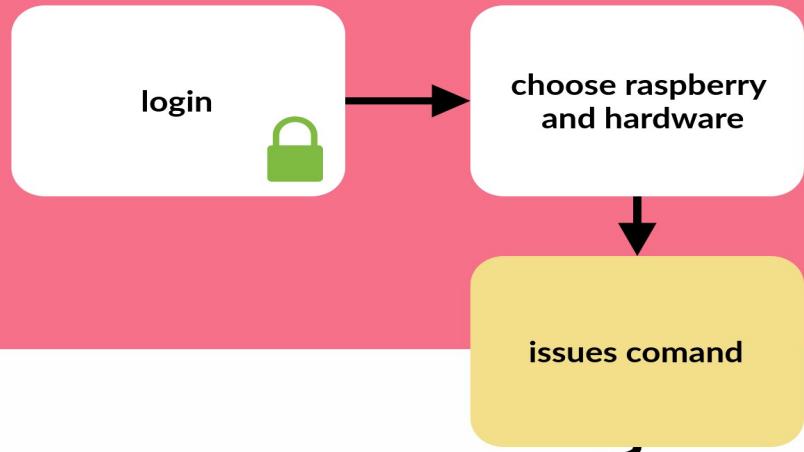


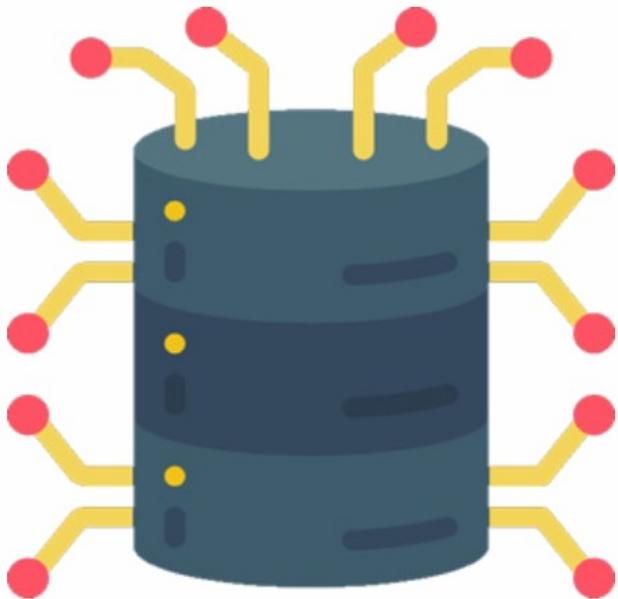
Related Work - Future



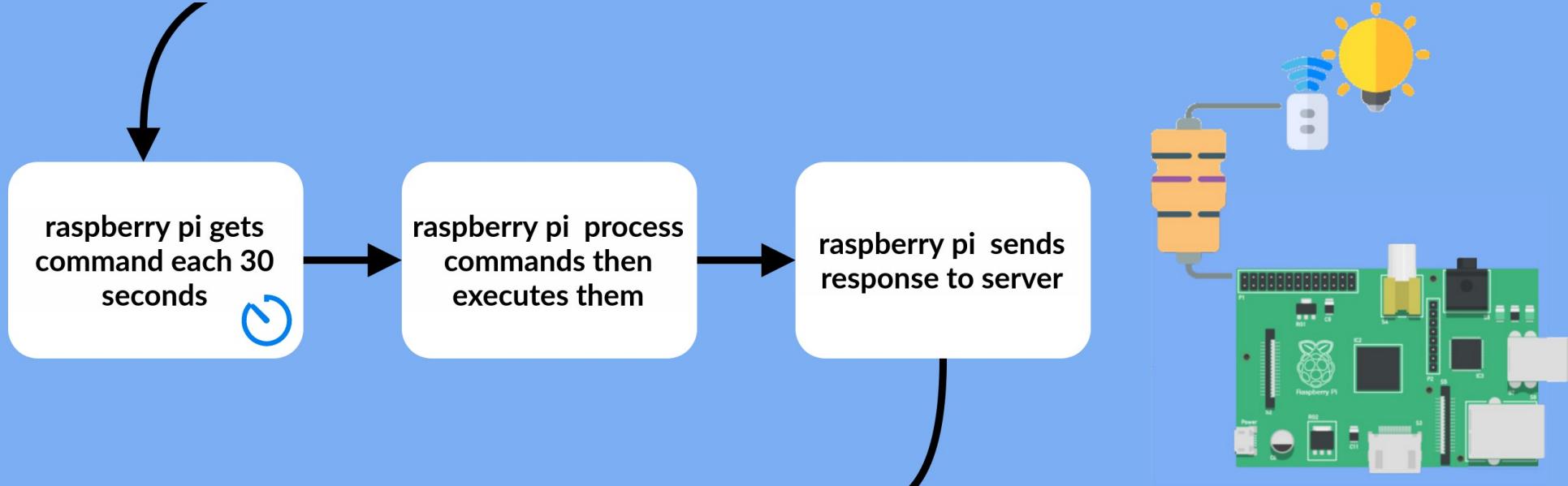
Methodology

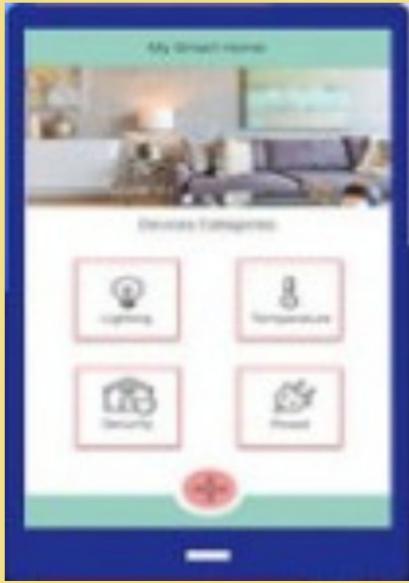






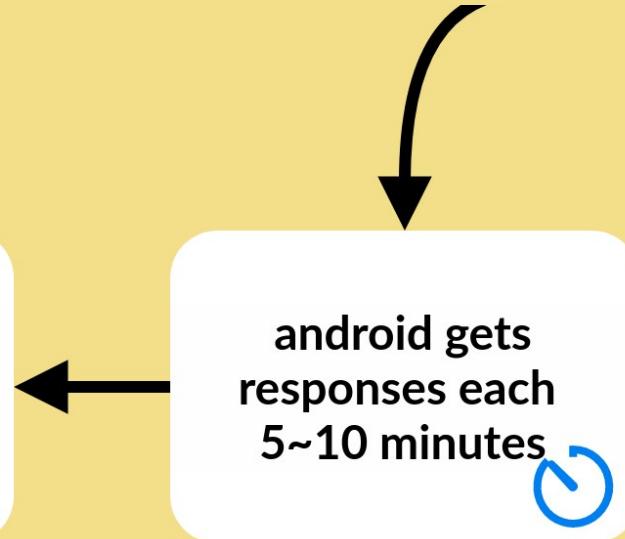
**web app receives
command and save it
in the database**





android shows
responses as push
notification

android gets
responses each
5~10 minutes



THANK YOU!

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