



# Online Home Automation Control System

Graduation Project 1 Presentation  
Group 45 - JC7  
Dr Abeer Mahmoud

# 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

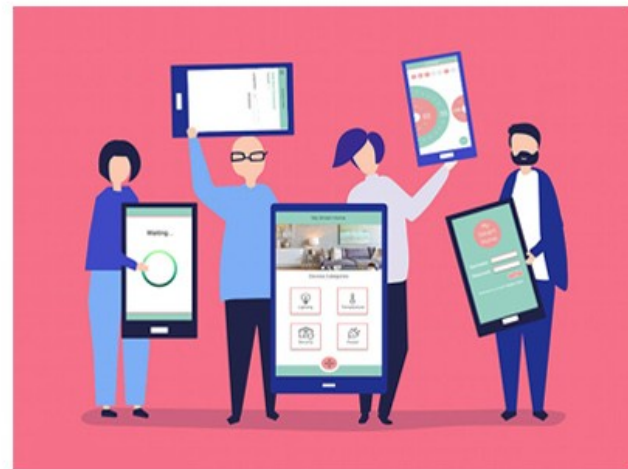
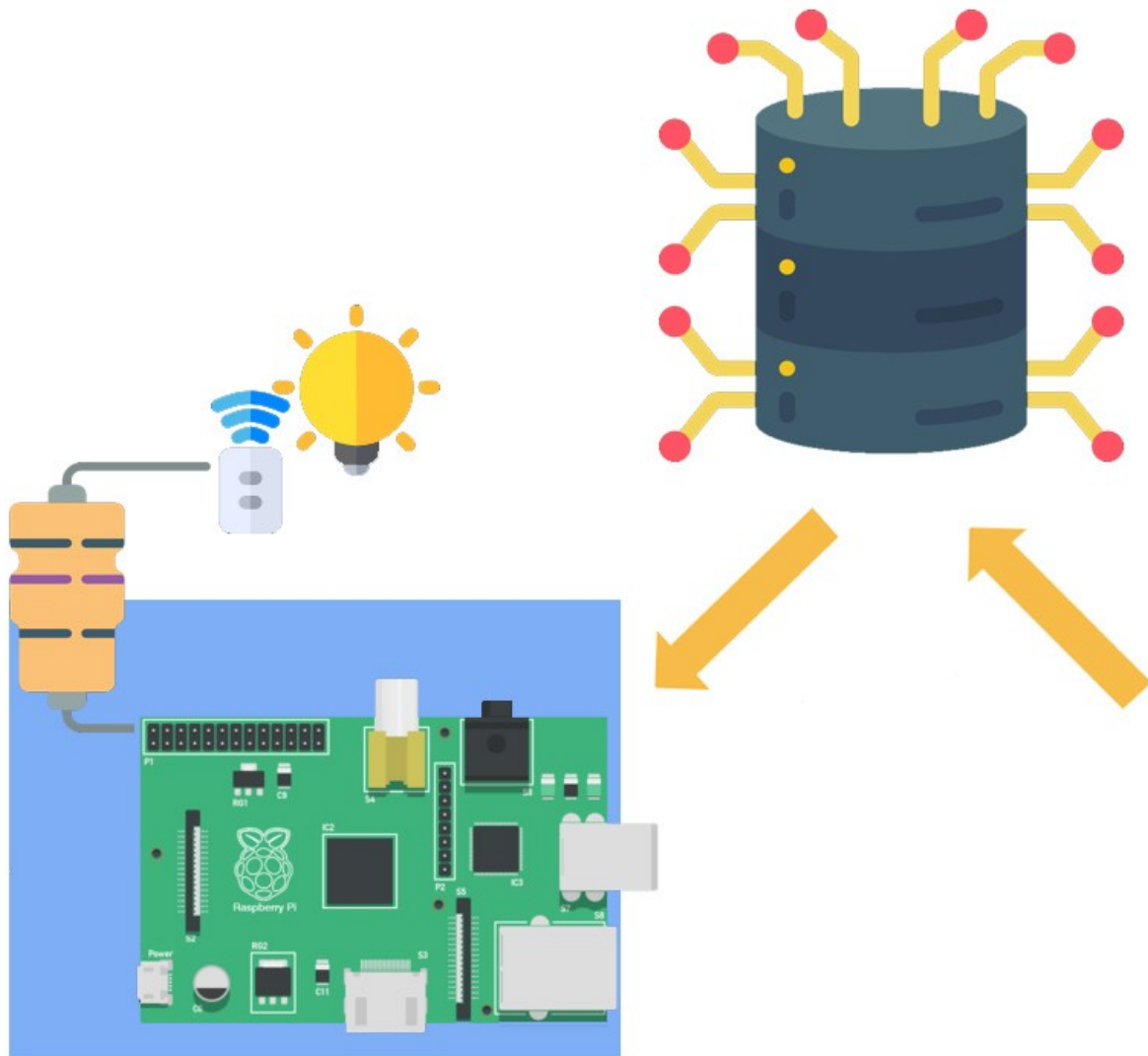
- ♦ **Objective:**

- **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

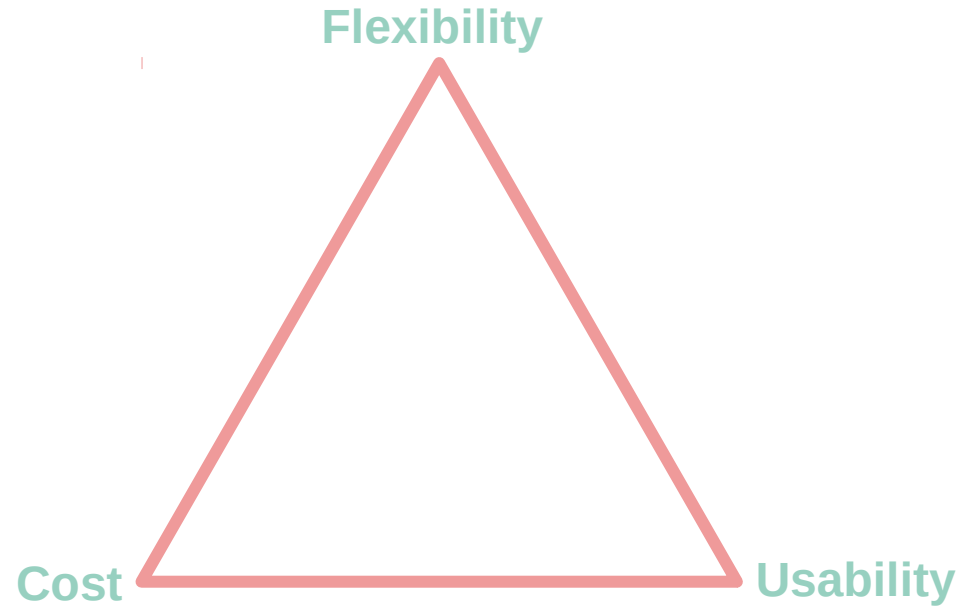




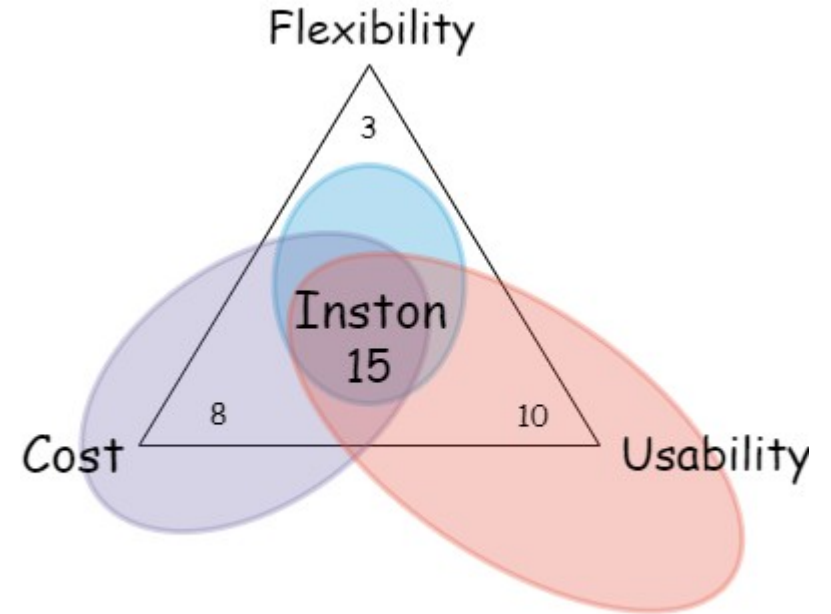
# Related Work

- ♦ Some examples of similar applications:

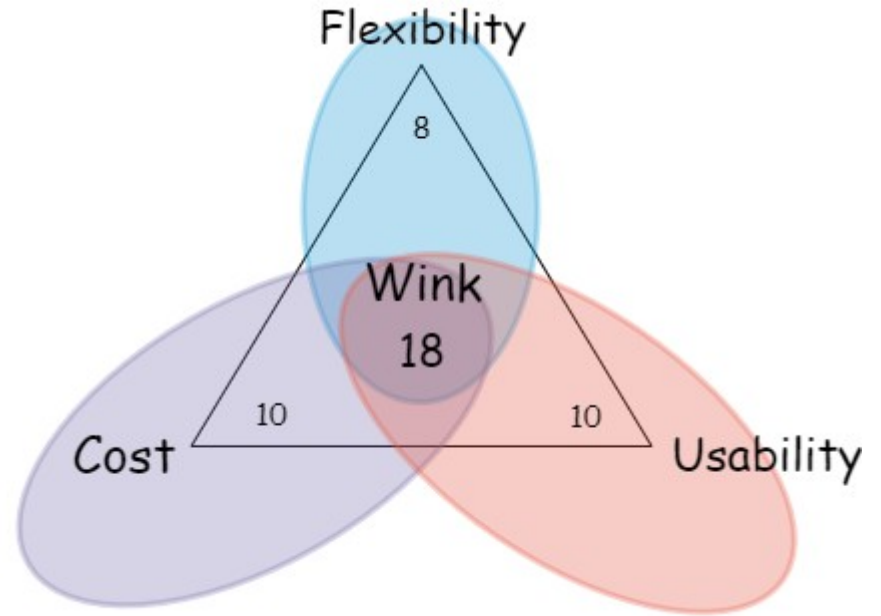
- Insteon
- Wink hub 2
- Samsung smart things



# Related Work - Insteon

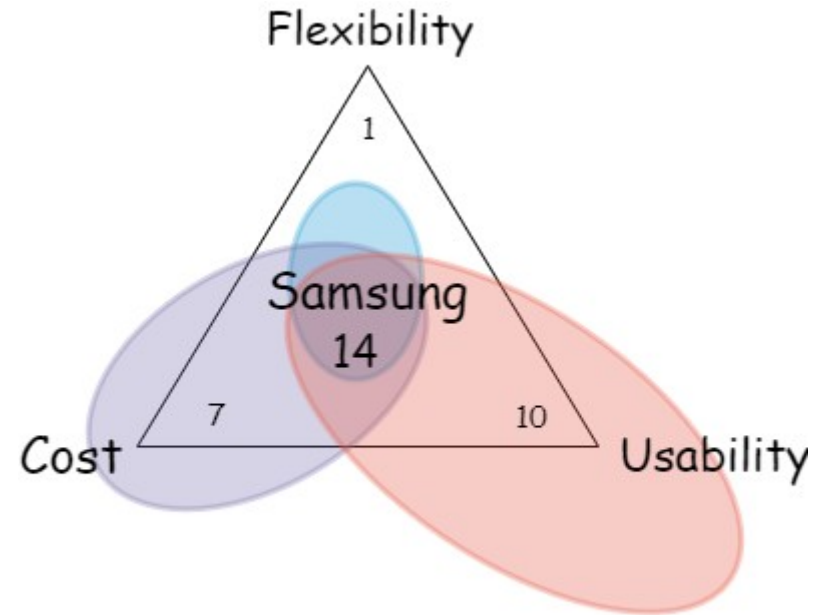


# Related Work - Wink

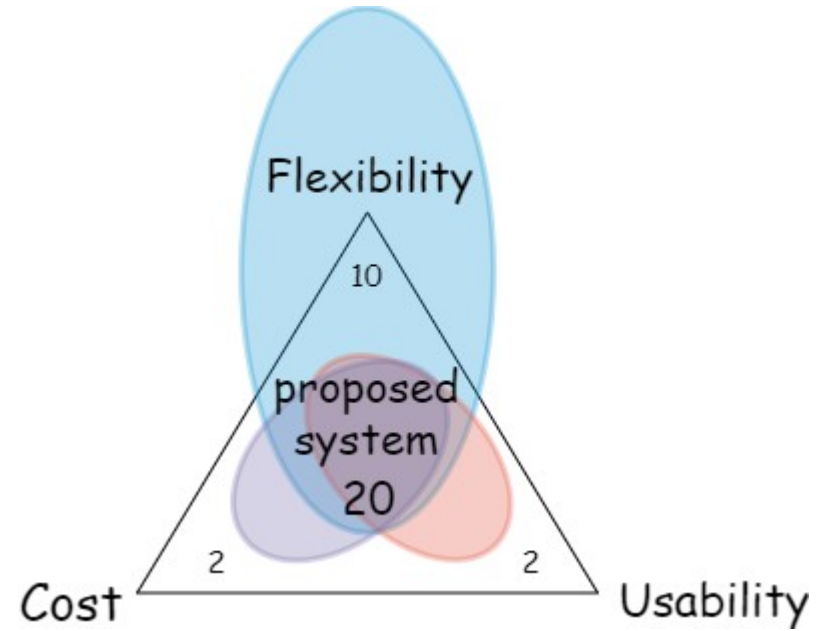




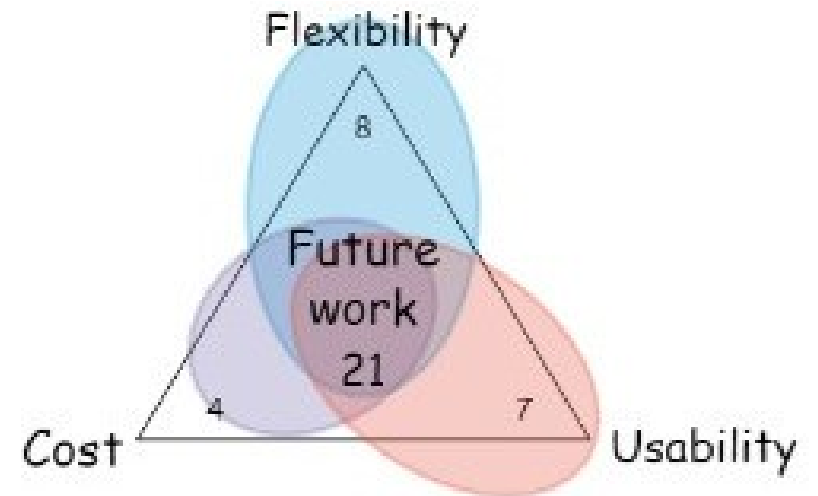
# Related Work - Samsung



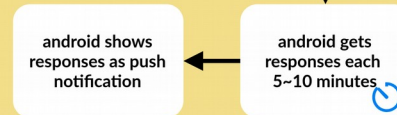
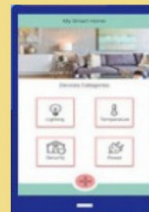
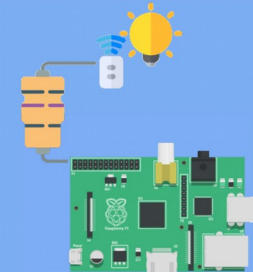
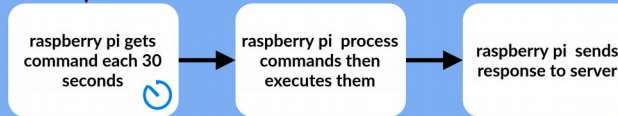
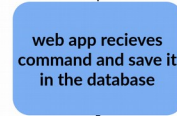
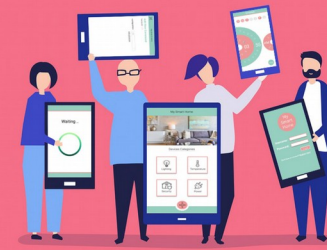
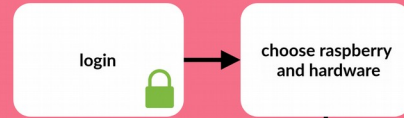
# Related Work - Proposed



# Related Work - Future



# Methodology



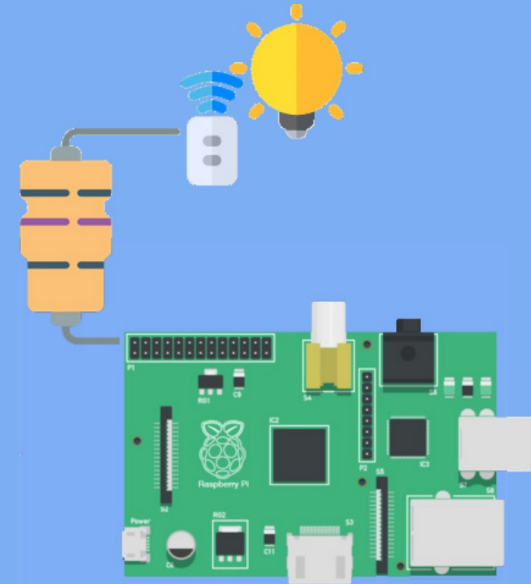
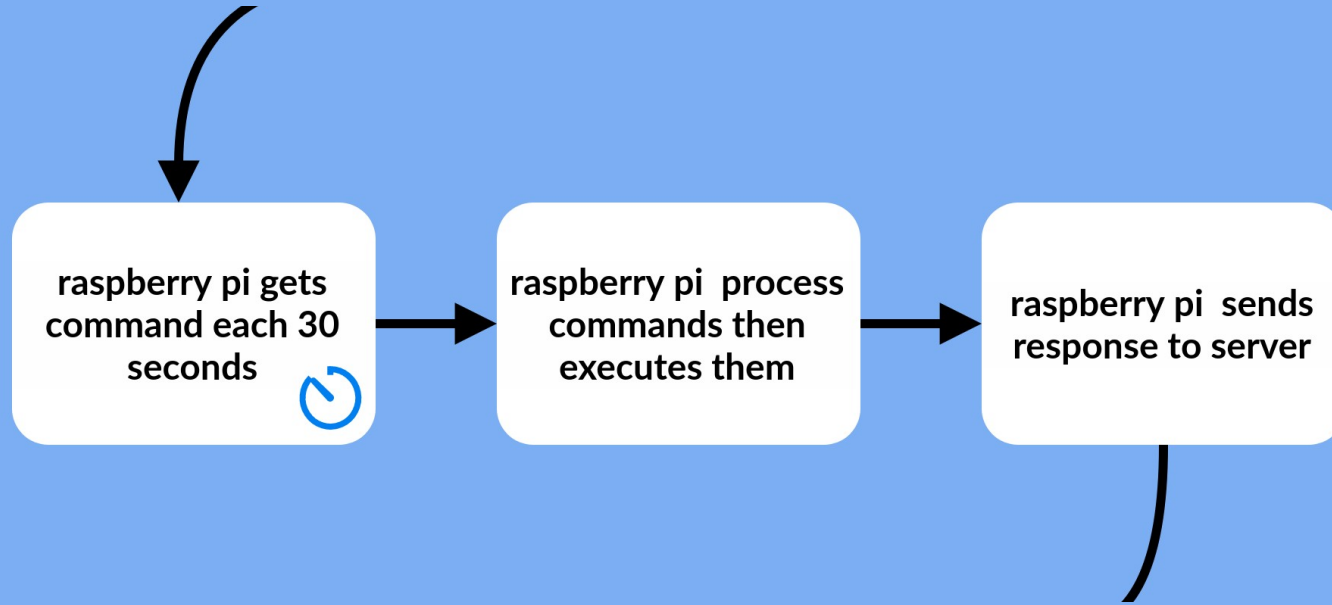
login



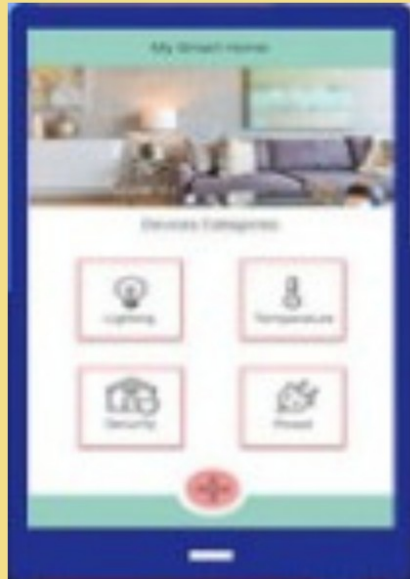
choose raspberry  
and hardware











android shows  
responses as push  
notification

android gets  
responses each  
5~10 minutes



The background is a stylized illustration of a modern kitchen. On the left, there is a grey range hood and a blue oven. In the center, a pink pendant light hangs above a white countertop with a laptop and a plant. To the right, there are shelves with books, a monitor, and a small table. A large window is visible in the background. The overall color palette is light and airy, with pastel tones.

# THANK YOU!

436200058 Abeer Ahmed Ezzat  
436200063 Doha Nidal AlZouhbi  
437004005 Mona Saud AlKhathlan  
437004100 Nouf Abdullah AlDajani  
437004875 Reem Ali AlGhamdi  
436006939 Sarah Khalid AlHussain

