

IOT project - Elderly Smart home



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GENERAL BACKGROUND / CONTEXT

Elderly people need a lot of daily assistance.

The solution today is a personal (human) individual assistant.

We live in an era in which life expectancy rises and so does technology.

Why should not we use this technology to help older people?

Why should not we use smart sensors and advanced software to make life easier for the elderly?



PROBLEM WE ADDRESS

We aim to solve daily problems for old people through voice commands.

For example: operating the TV, operating air conditioner, using the Internet for a wide range of services, etc...



OUR SOLUTION



Our solution is a smart home system.

With Android devices, voice commands will be given by the users.

The commands will transfer to NodeJS server in the localhost of your home network.

The node server will transfer tasks to the smart agents, such as a IR blaster([Orvibo](#)) that communicate with IR devices, a selenium server that will perform a variety of automated actions on the web and more.

It is important to emphasize that the users will install an Android application that **continuously listens to voice** commands around the house (without any user interaction).

In addition the voice command will be saved in the server for further learning and automations.





DIMENSIONS / SENSORS IN USE

1. Sound sensor
2. IR sensor
3. Raspberry pi
4. Monitor
5. Smart software solution



COMPETITION / SIMILAR PROJECTS

[Startup company that doing smart home](#)

[Qorvo - company that supply iot services for smart home](#)

[Interesting article for DIY Projects to Turn Your House Into a Smart Home](#)

[Github python project - smarthome-monitor](#)



TEAM AND RESPONSIBILITIES

Yehuda livnoni - Machine learning, Android application

Or Evron - Automation, Cloud integration, Backend