

# Smart Home (Group C)

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## Background

Imagine yourself in a warm bus crowded by people on your way back home from your job. How nice would it be to turn on your air conditioner now so it gets cool and chill by the time you get home? Or maybe you have experienced worries about if you closed your door or turned off your stove when you left your home. The mission of this project is to create a system that will solve similar problems and will facilitate your interaction with your home.

## Goal

The goal of the project is to create a working model of a smart house and to give the house owner the possibility to have a total control over his or her house from a single device including possibility for long distance control.

## Functionality

The system shall have these functionalities:

- The system shall have the ability to control the following home equipment: microwave, oven, stereo, light, washing machine, refrigerator, air conditioner, coffee machine, windows and door [locks?] etc.
- The system shall provide an interaction interface which can be supported by android, iOS, other platforms as well as accessed through web interface.
- The system shall allow the users to schedule the functioning of the home equipment.
- There should be a device acting as a central station to communicate with both the equipment and the cloud.
- Since the system allow to control all the home equipment from remote devices, it has to demonstrate a high level of security. The system shall provide an backup system in case the remote devices are lost, discharged or lose reception.
- The system must be able to get synchronised with the calendar where the management application runs, so it can automatically regulate itself according to the calendar.
- The system shall be able to recognize upcoming timed events and post them to the calendar of the device where the management application runs as reminders.
- The system should consider possibility of having multiple users accounts, including the administrator user who will be able to manage all other accounts, including allowing/restricting other uses access privileges to the equipment.

## Roles

Our group members are product owners and we solicit you to develop project requirements that we will later on present on an open tender.