Hanyang University Introduction to Intelligent Robot Control Project Mission Statement

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Ideas : Wake up robot Old people robot Gym robot

Group name: The prototype

The general Application domain of the wake-up robot is the user's home environment. The focus is on making the robot an everyday object.

However, it can also be used in all other domains where an alarm clock is needed.

The group of users can be possibly everybody because this is for people that have to follow a specific routine and need the help of an alarm to complete that routine on time. It can be a student, a worker or even old people who needs to take their medicine on time so that's why the group of users is almost everybody. Although by detailing this idea we can select a small group to focus on them so in that way they are going to have a perfect wake-up robot for their needs.

Context of use: It can be used in close spaces where people need to set an alarm to start an action. It can be in a room, an office or even a house.

Unlike a normal alarm clock that can be muted with a simple click, our robot will be persistent. It will prevent the user from simply turning off the alarm clock while half asleep by using various features. For example, by posing riddles to the users or by moving from one place to the next, so that the user also has to move.

Initial questions:

We wanted to work on the subject of connected houses. With devices which can communicate with each other and to have the possibility to have an application controlling different connected objects of the house of a person.

How are we going to build it?

We have some ideas about how to create this robot. We are not going to go into details but we are thinking about the creation of an application or a website which can set-up the wake up robot. We could have the possibility for example to decide what time the alarm will be triggered or other aspects like how it will behave.

What do we need to build it?

We will need an arduino card with motors or other types of electronics which can modify the environment, indeed we want it to have "funny ways" to wake up a person. For example by throwing water on his face.

Does it need an app?

Yes or a website.

What is the simplest and hardest way to create it?

What parameters is going to need?

It will need

Do we have to use sensors?

For now we think that the sensors that it will use will be related to the application or website which will be developed to set up the different parameters of the wake up robot. So it will use a connection like wifi or bluetooth to be able to communicate with the online tool which will be developed.