# Kinect Control
## Controling home devices with Kinect

A project proposal

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**Abstract**

Today's technology is getting smarter producing amazing new opportunities and making our lives easier. This project provides an easy way to control home devices using Microsoft kinect sensor and a home automation device by using kinect's voice recognition, Skeleton tracking and depth tracking. It also provides an interface the user can interact with to edit and show the statuses of the controlled home devices.

Some might think you can just get up an shut the light or the device off manually, but that's not the point, people are lazy, it's all about removing obstacles. What if when you enter a room the lights turn on and when you go to bed everything turns off. You can have certain lighting configuration for studying, watching t.v, reading, etc... saves energy, time, effort and removes obstacles.

## Project data

**Supervisor name:** Dr. Georg Jung

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## Tasks

- Install the needed sensors if any and make the connection between the devices and the home automation device, If no rooms could be used then show a visual simulation of what happens or use an arduino board to turn on certain output devices instead (examples: LEDS, Motors, LCD).
- Implement a gesture recognizer to recognize certain body/hand gestures.
- Implement voice recognition.
- Implement a screen manager to switch screens and add them on top of each others to be able to implement the interface.

- Implement an XNA application which is the user interface the user can interact with directly.
- Implement how the interaction between the kinect sensor and the home automation device or the arduino board will be done.