

Home & Building Automation

Session 6

Project 3 (final project)

- Integration of several domains (including mobile and voice control)
- Minimum four scenarios (you have to play at least four reasonable situations how your system setup is used) → combine in one big scenario
- Present hardware, but can be presented from video (have in any case video backup)

Repetition

- Homeaut definition
- Communication busses
- Gateway setup
- Node-Red/openhab/home-assistant
- MQTT + Simulators/Drivers
- Leds, outputs
- Buttons, inputs
- Solenoid/Lock
- NFC-Reader
- LCD-Display (i2c)
- Distance/Motion Sensor
- Single RGB-Led
- Temperature/Humidity
- Servo motors (also 360 degree motor)
- Voice trigger
- Speech output

Today

- Presentation
- Use snowboy on pi or laptop to create your own voice controller → build it as mqtt-driver
- Philips Hue
- RGB-Strip (single and multiple)
- sonoff pow (using tasmota firmware)
- Use voice controller to control rgb-”lamps”, their color, and brightness
- Use voice to select from music in kodi and control sonoff
- Use voice to ask for status

- Scenario planning and assessment

Presentation

- 20-30 min per team
- Non presenters: write down at least two remarkable things per presenting team and one question (→ portfolio)
- 1-2 questions by me
- 2 randomly picked questions