

## Group 5

### MEETING AGENDA

Meeting Time: 11:00 AM	Location: AQ, SFU Burnaby	Date: 2019/05/21
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Meeting called by	Jeffery
Kind of Meeting	Topic Decision
Facilitator	Jerry
Note Taker	Keith
Time Management	N/A
Attendees:	Keith, Scott, Ryne, Jeffery, Jerry

### Topics

Time	Discussion Topic	Presenter	Deadline
11:00 AM	Methods on documentation (5 min)	All	
11:05 AM	System Architecture (1h 15 min)	All	
12:20 PM	Integral Group Meeting (40 min)	All	
1:00 PM	Final Thoughts (5 min)	All	

Notes: Test with Latex documentation on Requirements document

# MEETING MINUTES

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Agenda Item: Documentation methods, System Architecture, Integral Group Meeting

Presenter: All

Discussion:

1. Introduction
2. LaTeX Discussion:
  - a. Agreed to test LaTeX
  - b. Research for LaTeX document processing software with live previewing
3. System Architecture (1st Idea)
  - a. Objective: To provide more accurate victim location & number estimation to first responders
  - b. Use Triangulation and/or Trilateration
  - c. Decawave chip contains transmitter/receiver/antenna
    - i. OTA: BLE (Bluetooth Low Energy) **(2nd Choice)**
      1. RSSI - Licensed
    - ii. UWB **(1st Choice)**
      1. TOF (Time Of Flight)
      2. Higher power output
      3. Lower power consumption
    - iii. Uses UDP
  - d. Cellular network **(Last choice)**
  - e. Requires 3 hubs for triangulation/trilateration
    - i. Server
    - ii. Wireless communication/Battery-powered
4. System Architecture (2nd idea)
  - a. Objective: To locate victims on-the-fly when first responders go into the building
  - b. A device that contains (hub + server + display)
5. Integral Group Meeting Discussion
  - a. Mainly ML implementation; Barely physical implementation
  - b. Agreed to go to meeting
  - c. Likely to reject offer
6. Determine to use Apple macbook for packet sniffing

## Actions for Next Meeting (Thurs May 23):

- a. Confirmed to focus on System Architecture (1st idea)
- b. Go to workshops on Thursday
- c. Buy NRF24L01 chips for testing purposes(Jerry)
- d. ~~Buy 2x decawave module chips (Ryne)~~
- e. Research more on Decawave/UWB chips