

T29: Equipment Request

Team: T29

Project: Smart Warehouse Inventory Tracker

Requested Equipment:

- 1) M5StickCPlus – **4pcs**

Equipment used:

- 1) M5StickCPlus – 6pcs
 - Sensor Nodes/Object
- 2) Raspberry Pi – 1pc
 - Base node/Gateway device

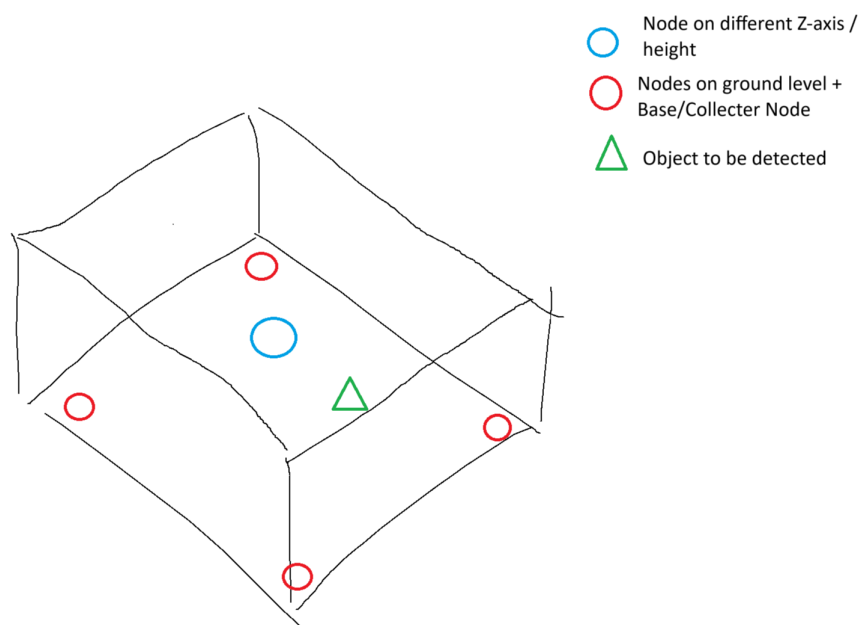
Justification:

Our team project focuses on the tracking of items in an indoor space. (Vertical and horizontal positions)

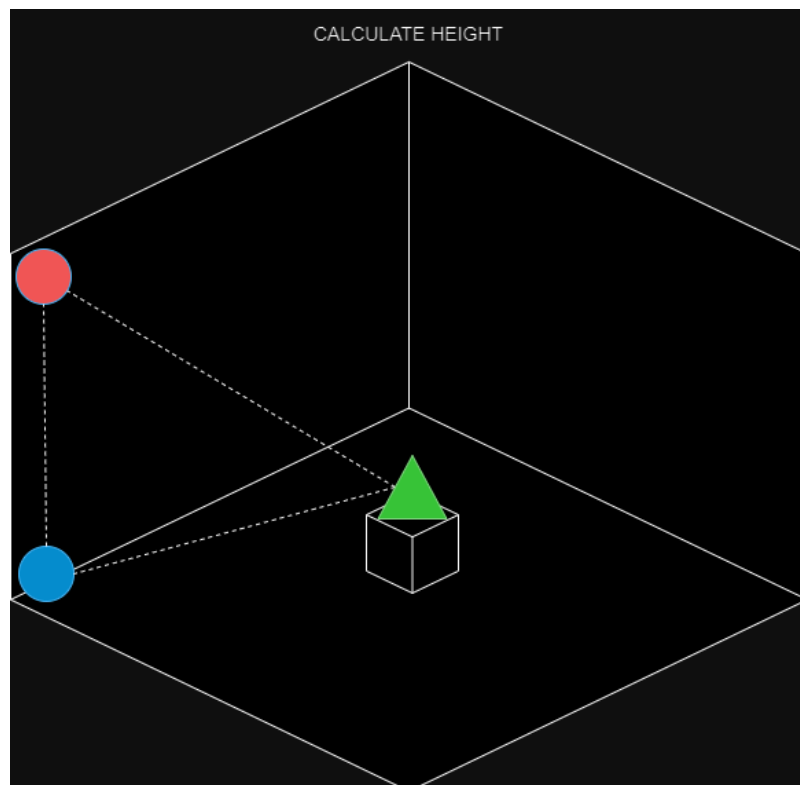
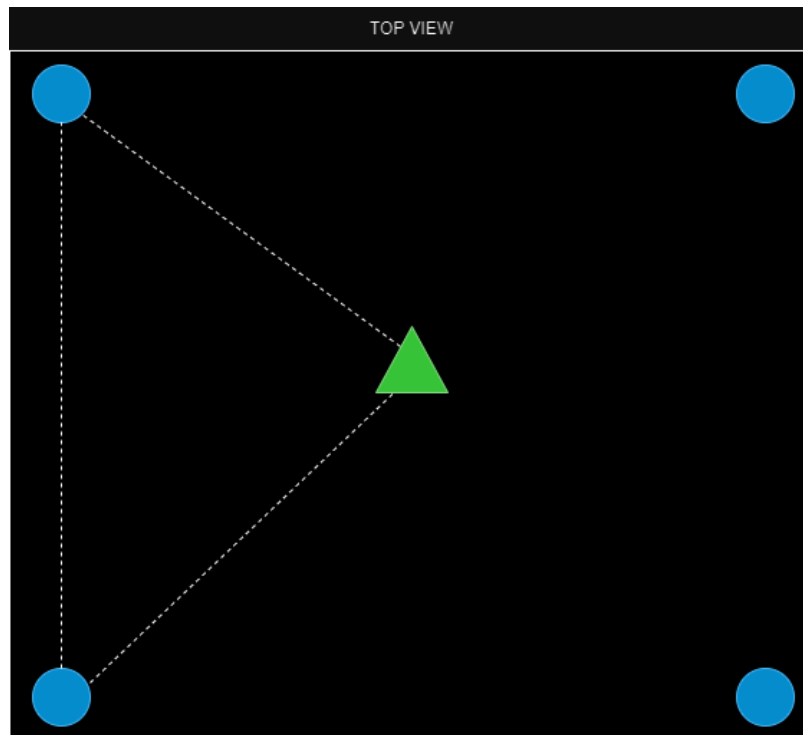
Currently, each member only has 1 M5StickC. We need more M5StickC so that members can test and work on the project without having to borrow M5StickC from teammates.

We will be using the RSSI of the Bluetooth module in the M5StickCPlus to detect the distance between nodes and triangulate the object. The **blue** node represents a node that will be placed on the ceiling for calculation of z-axis positioning.

We came up with the model below based on Prof Malcom's suggestion and advice during Week 6 lab consultation.




We added 2 other diagrams below to further clarify the idea. The nodes will determine the object's position via triangulation.



Feedback From Professor Fauzi:

[Assignments](#) > [View Feedback](#)

Feedback for Equipment Request

 Add to ePortfolio

Dropbox Feedback

Overall Feedback

Thanks for the diagram, but I am still a little lost. Can find me in lab so we can clarify it.

Feedback Date

Feb 27, 2024 7:41 AM

Folder

Equipment Request

Group Category

Project Work

Group Name


T29

[Discussions List](#) > [View Topic](#) > [View Thread](#)

 Settings


 Help

Search Enquiry: ... 



Enquiry: Object tracking

▼

WONG KAR LONG KEAGAN . posted Feb 28, 2024 1:27 PM to T29  [Subscribe](#)

Dear Prof Fauzi,

We would like to clarify when doing triangulation for object tracking, would WiFi or Bluetooth or a combination of the two be used primarily?

Thank you for the clarification.

Reply to Thread

Filter by:


All Posts

 ▼ | [Clear filters](#)

Show:

Threaded

 ▼





Muhamed Fauzi Abbas

▼

February 29 at 11:55 AM

you would most probably use rssi to get the estimated distance. Thus Bluetooth would make sense as WiFi would require you to connect to an AP point

 [Reply](#)




WONG KAR LONG KEAGAN .

▼

February 29 at 1:50 PM

Okay noted, thank you for clarifying our doubts.

 [Reply](#)

Bin