

Robotics Competition

2019-20

Task 3 – Read Me

Welcome to **Task 3** of **Rapid Rescuer!** This task is divided into two sections:

Task 3A and Task 3B

Before proceeding for implementing Task 3, make sure you change the default SSID and Password of ESP32 hotspot by updating the config.txt file on the eYFi-Mega File Server. Refer to the section: Set Wi-Fi SSID and Password of Software Manual of eYFi-Mega board.

You will find the following files/folders in Task 3 folder along with this Read Me file.

Task Submission Instructions.pdf: This file includes instructions for submission of Task 3.

Task 3A:

Please find the following folder/files in this folder:

- **Libraries for Reference** folder:
 - MCP23017: This folder contains the .c and .h files of the MCP23017 IO Port Expander IC library and of I2C protocol. It also contains Description for MCP23017 Library.pdf document which describes the important library functions.
 - VL53L0X: This folder contains the .c and .h files of the VL53L0X TOF senor library, and of I2C, UART protocol. It also contains the **Application** note for multiple TOF Interfacing.pdf provided by ST which one can refer to understand how to interface more than one VL53L0X sensors on the same I2C Serial Clock and Data lines with micro-controller. The Description for VL53L0X Library.pdf document describes all the important library functions.
- **Problem Statement.pdf:** This file explains the Problem Statement of Task 3A.
- rr t3 client.py: This Python file is to be used by teams while implementing the task.
- task 3a cardinal.pyc: This is a supporting file for Task 3A. Do not play with it.



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Task 3B:

Please find the following file in this folder:

Theme analysis and Implementation.docx: This document consists of questions that needs to be answered by teams. Teams have to edit the document by filling in the answers of the questions asked.

... Best Wishes! ...

