

Task 0: Instructions

[task-0](#) , [resources](#)

[rishi](#) #1 September 13, 2021, 3:41am

Task 0: Strawberry Stacker

Welcome!

This is a comprehensive document of the things you need to do to complete Task 0, make use of the Table of Contents that appears alongside this document to navigate quickly and smoothly.

Prerequisites

Please read the [Storyline topic](#) before proceeding here.

Installation

- This task requires you to install [Ubuntu 20.04 LTS](#) on your computer. Please prefer a bare metal install (i.e. no virtual machines (VMs)) as misconfiguring your VM instance can lead to all sorts of hard to decipher errors down the line.
- Ubuntu 20.04 LTS is a great general purpose Linux distribution that is capable of being daily-driven just fine.
- We will be installing [ROS 1 Noetic + Gazebo and the PX4](#) autopilot for the future tasks (you can do so now as well if you want), hence given the support for these packages, Ubuntu is the best choice compared to other Linux distributions.
- If you face problems during install, seek help from the internet and your peers around you, that'll be quicker, after that, keep an eye on the QnA with tags `task-0` and `installation` and see if your competition peers are facing any issues, and do try to help them out.
- Conversely, use the above tags if you want to post asking for help, make sure you have put in effort to solve the problem before asking.

Learning

- This Task requires you to have or gain a certain comfort with using Python, as this will be the primary programming language used in the Theme.
- Check out the [relevant page](#), to gain access to Python resource pointers and tips.

Task

1. Installation of Ubuntu 20.04 LTS on the computer you will use for solving this theme.
2. Solving the CodeChef challenge which contains 10 simple Python problem statements, *and which will launch in the next week.*

Submission

- Results on CodeChef will be recorded and you do not need to submit anything on the e-Yantra Portal for this task.

Deadline

- The deadline for this task is **22nd October 2021 2359hrs IST (UTC+0530)**.
- It overlaps with Task 1.1's deadline, so be sure to complete this task well ahead of time.

Edit:

We're closing the topic to responses, please head over to the QnA's, we encourage you to post your doubts and questions.

23 Likes

Task 0 Upload queries

Jg-07 #2 October 9, 2021, 3:22am

I am currently using **Ubuntu version 18.04 LTS and ROS melodic** for my projects, so will there be any issue on continuing with this configuration? or is it better to move to version Ubuntu 20.04 LTS and ROS neotic.

7 Likes

zaz.kem22 #3 October 9, 2021, 5:13am

I have an arm-based mac machine(the m1), for me the metal installation of the Ubuntu 20.04 is difficult. Even for the installation on the VM, I had to install the arm server and then get the ubuntu-desktop for it.

I would prefer to stick with the VM.

So if I do so, what are the difficulties I could possibly face? What can I do in such circumstances? If it is possible to overcome such difficulties I want to do it during the installation process rather than struggling with it during the project time. It will be very helpful if I could know what all problems I need to overcome

thank you.

7 Likes

smitlesaria #4 October 9, 2021, 4:04pm

Ubuntu 18.04 + ROS melodic supports python 2 by default, whereas your future tasks as well as px4 itself requires python 3. So its better to do a clean install with ubuntu 20.04

3 Likes

rishi #5 October 9, 2021, 4:08pm

px4 has moved onto Python 3 as Python 2 reached End of Life in 2020, there's a lot of issues getting it up and running in 18.04, hence we highly recommend 20.04

5 Likes

rishi #6 October 9, 2021, 4:17pm

No major pitfalls with the actual theme if it is set up and working correctly, but you have to be careful during the setup process itself.

One thing to look out for is ensure that make sure GPU Passthrough is enabled from whichever Virtualization software you are using, since I don't know about what drivers you'll use on the m1 device, one way to check this is to see if Gazebo is outputting less than 60fps on simple scenes.

Good luck!

6 Likes

rishi closed #7 October 9, 2021, 4:18pm