Ant Bot: Task 4 (Original Configuration)

Please find following files and folders in the folder containing this "Read Me.pdf":

1. Original Video Configuration: This file contains Supply Placement Table & Trash Placement Table for the Task and a snapshot of required arena setup.

2. SIM Placement Document: This file contains the ArUco marker (SIM) and is to be printed and markers are to be placed on the arena as per instructions given in rulebook and Task 2.

3. Title Slide: Teams will have to fill in the respective details in this file and print it on A4 sheet and use it in Video Submission as instructed below.

4. Code Submission AB: This is a subfolder for code submission. Refer to *"Read Me.pdf"* within this subfolder for more details.

Instructions for Creating Video

Note: Please ensure that the video uploaded is of good quality and conforms to the instructions given below.

1. Setup the arena before you start shooting the video.
2. The resolution of the video should be good enough for judging. You have to use an **8 Megapixel** or higher camera to shoot the video.
3. The video will consist of three parts: Introduction part, Demonstration part and Console part.
4. **Introduction part**: The video **should start with a brief introduction**. Please follow the instructions below:
   - Opening screen of the video should be a shot of "Title_slide.doc" printed on A4 sheet with the team details. Hold the sheet still for 3-5 seconds along with all the team members.
   - This should be followed by an introduction limited to a maximum of **TWO minutes**:
     - Short introduction by each team member: Each team member can say his/her name and their department in college. This should take a maximum of **30 seconds**.
     - A **30 second** introduction by the team leader highlighting any interesting aspect of the theme's implementation.
     - A **1 minute** description by the team leader highlighting any additional components like power supply, power distribution circuit, PiCam stand, robot chassis and pick and place mechanism.

5. **Demonstration part**: Demonstration part **MUST** be a **one-shot continuous video**. It should **not be edited** in any manner. Teams uploading an edited video will be **disqualified** from the competition. e-Yantra reserves the rights to disqualify any team if any foul play is suspected.

6. The video should be taken by keeping the camera in the top such that the entire arena is visible to the viewer. Here are a few tips for shooting good quality video:
   - Camera should be kept stable while recording.
   - Light the arena such that there is no reflection into the camera.
   - Keep the background, lighting in background, etc. constant during the video shooting so that it doesn't show as a discontinuity in the video.
   - There should be no interference in terms of background noise or movement while shooting the video.
   - Shoot the video from top and middle of arena.

NOTE: The video MUST show full arena during the course of its traversal in a run. See Figure 1 for reference.
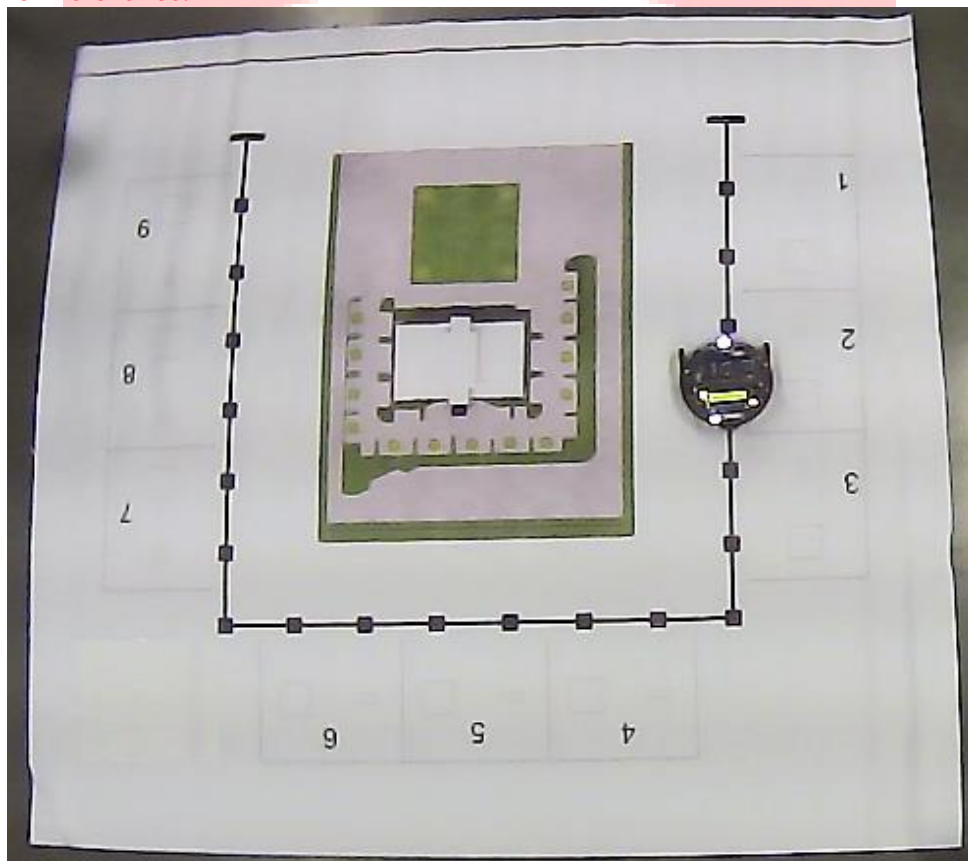

Figure 1: An Example of Demonstration part

7. Please follow the steps below:
   - Place the robot at the Start as explained in Rulebook.
   - Make sure the robot is not moving at all.
   - The timer starts at the point you start the robot by executing your RPi code.

8. In a successful run, the timer is stopped when the AB returns to the Start position and it turns ON the buzzer for 5 seconds to denote that the task is complete.

9. In case you have any problem with the robot during the task (e.g. it goes out of the arena or loses track) and want to reposition the robot, you can do so subject to the rules given in the rulebook.

10. You are allowed to capture only ONE run during the demonstration; this should be a continuous video recording. Any repositions (if made) should also be a part of the one shot video.

11. It is mandatory that you upload the demo video even if your task is not completed. You may record the video of best run of the bot on the arena.

12. The demonstration part should end either
    - When the task is completed successfully or
    - If you exceed the number of repositions or
    - The maximum time (10 minutes) given to complete the task has elapsed - as mentioned in the rulebook.

13. **Console part:** Just before your robot begins the run, you have to start screen recording on your system. In this screen recording, the console of the RPi should be clearly visible and any prompt on the terminal should be clearly readable (you may change terminal settings to adjust font size so that it is readable).

14. This recording should contain the start of execution of code and should end after your robot performs the whole task successfully (Basically, record your screen while robot is performing the task).

15. Console part **MUST** be a **one-shot continuous video**. It should **not be edited** in any manner. Teams uploading an edited video will be **disqualified** from the competition. e-Yantra reserves the rights to disqualify any team if any foul play is suspected.

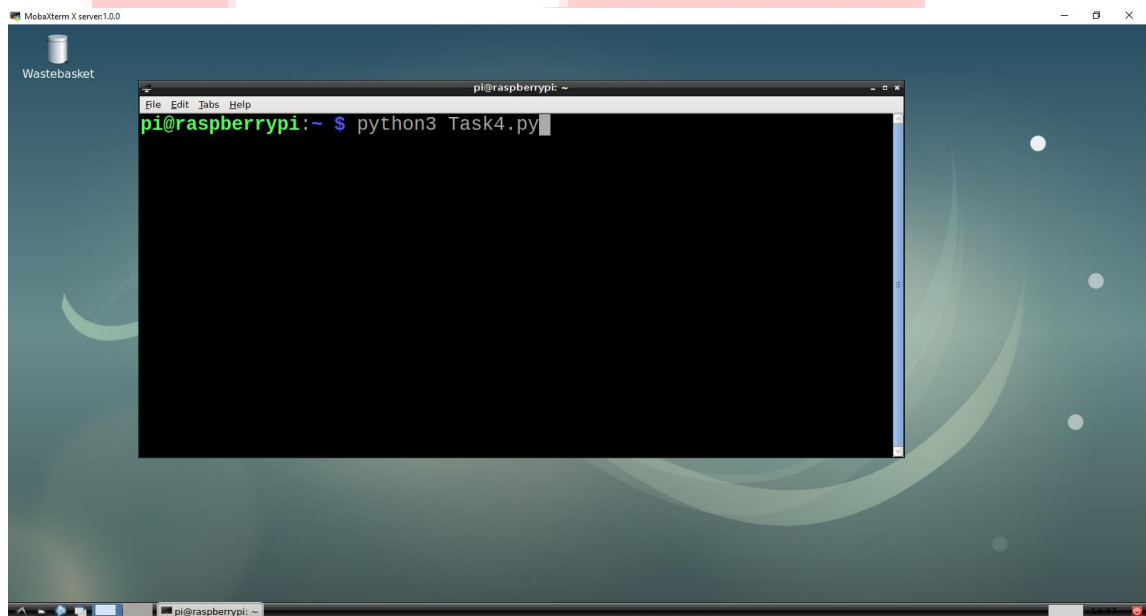16. Below is a snapshot of how your console part of video should look like:

Figure 2: An Example of console part

17. **NOTE:** The Demonstration part and Console part of the videos **MUST** be recordings of the same run. There should be NO WATERMARKS in any part of the video submitted. e-Yantra reserves the rights to disqualify any team if any foul play is suspected.

18. **Uploading video/s on YouTube:**
    - Merge the three parts, Introduction, Demonstration and Console part end to end in the sequence Introduction, Demonstration and Console.
    - Upload video using the given Configuration with the title **eYRC-AB#<Team ID>_Demonstration-original**
      (For example: If your team ID is 6001 then, save it as eYRC-AB#6001_Demonstration-original)
    - Please note that while uploading the video on YouTube select the privacy setting option as **Unlisted (Refer to Figure 3).**

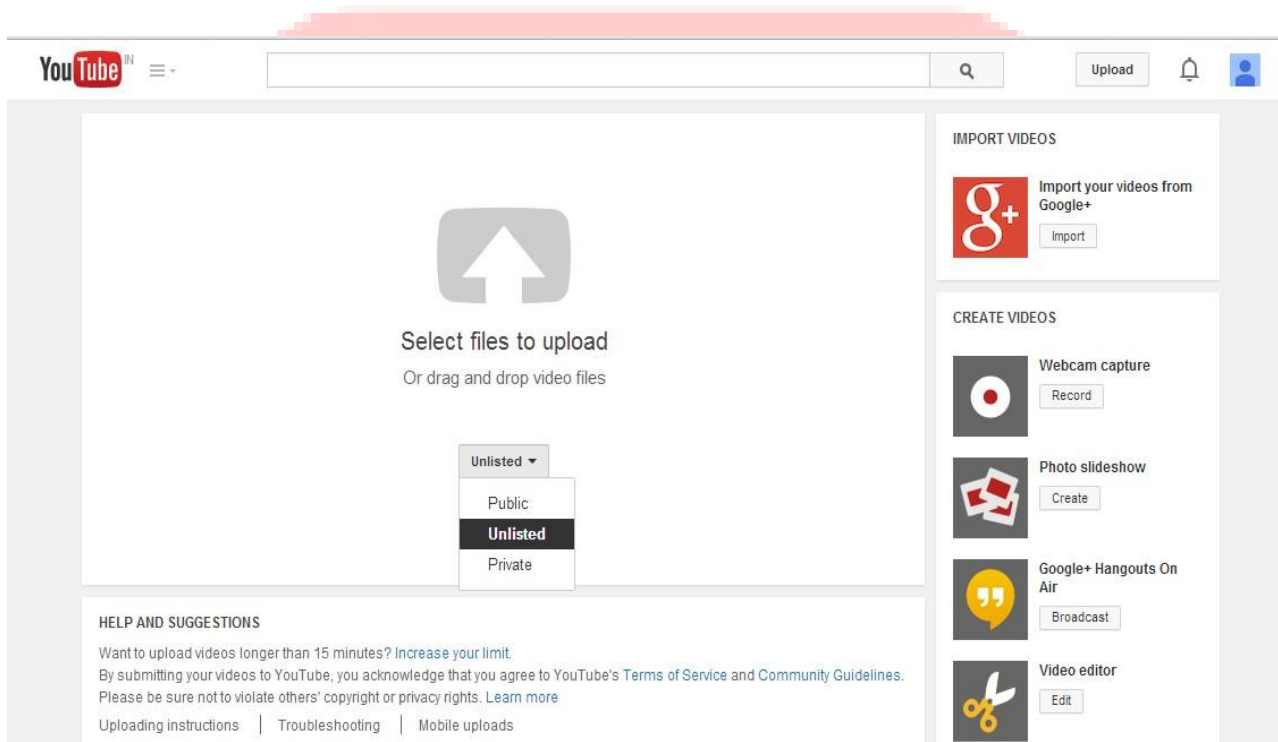You need to upload the video as instructed on the portal.

Figure 3: YouTube page – "Unlisted" Option Selected