Task 5 - Biped Patrol

Original Configuration

Greetings from e-Yantra!

Welcome to Task 5 of Theme Biped Patrol.

In this Task you will perform a full theme run according to the rules given in the Rulebook. There are three steps in this task as follows:

1   Preparing the Medbot

Before you start recording the video for the Taks 5, you need to prepare the Medbot for final recording. Print the file named **Marker.pdf** on an **A4** sheet. This file contains a 10cm X 10cm ArUco marker. Refer Figure 1 given below:
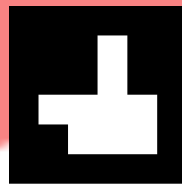

Figure 1: ArUco Marker

Paste this ArUco marker on a 10 cm X 10 cm thin-lightweight sunboard/cardboard and place it **firmly** on top of the Medbot. Refer Figure 2 below:
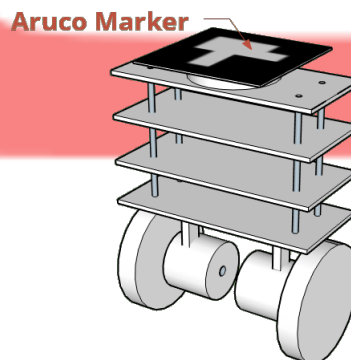

Figure 2: Medbot with ArUco Marker

2   Preparing the Arena

- Place **two (2)** First Aid Kits, **six (6)** Medical Kits and **six (6)** Chlorine Tablets in on the racks of **Medical Store** as shown in following Figure 3:
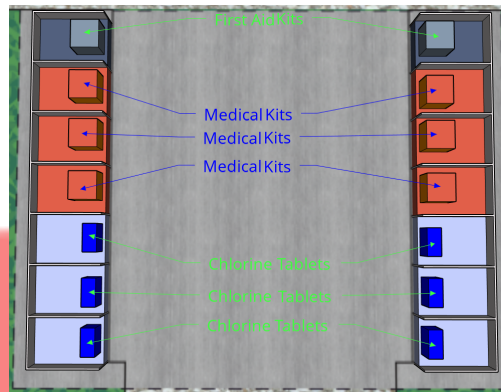

Figure 3: Medical Store Arrangement

- After firmly mounting the Aruco Marker on the Medbot and preparing the Medical Store, place the Medbot in the parking area of the arena as shown below in Figure 4 and Figure 5:
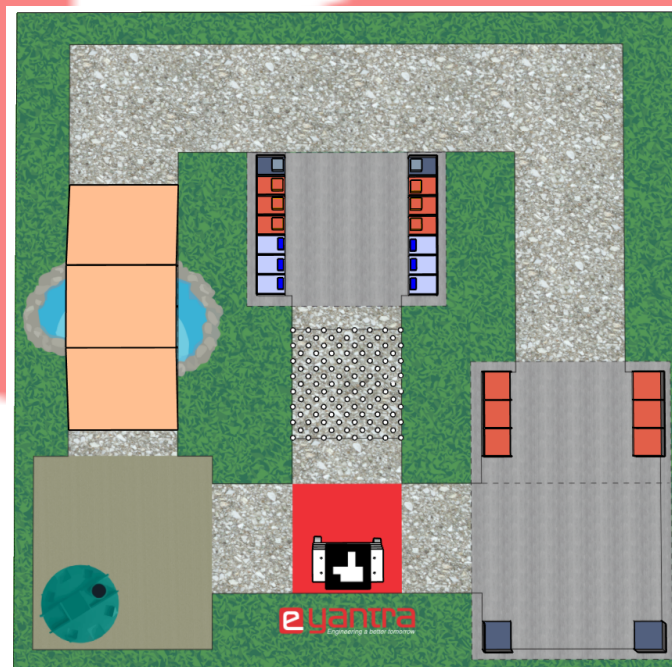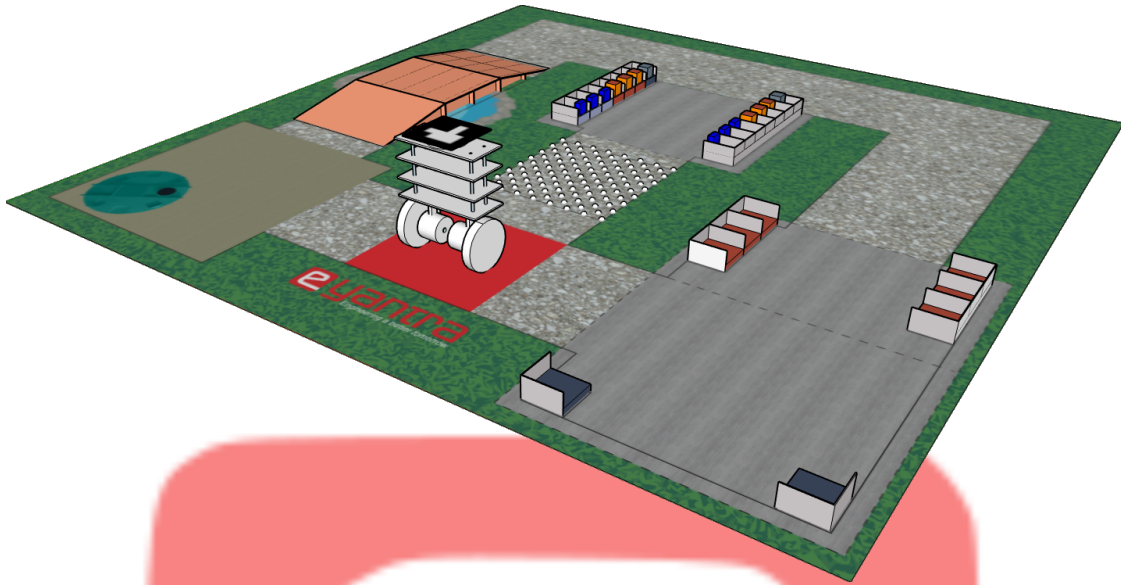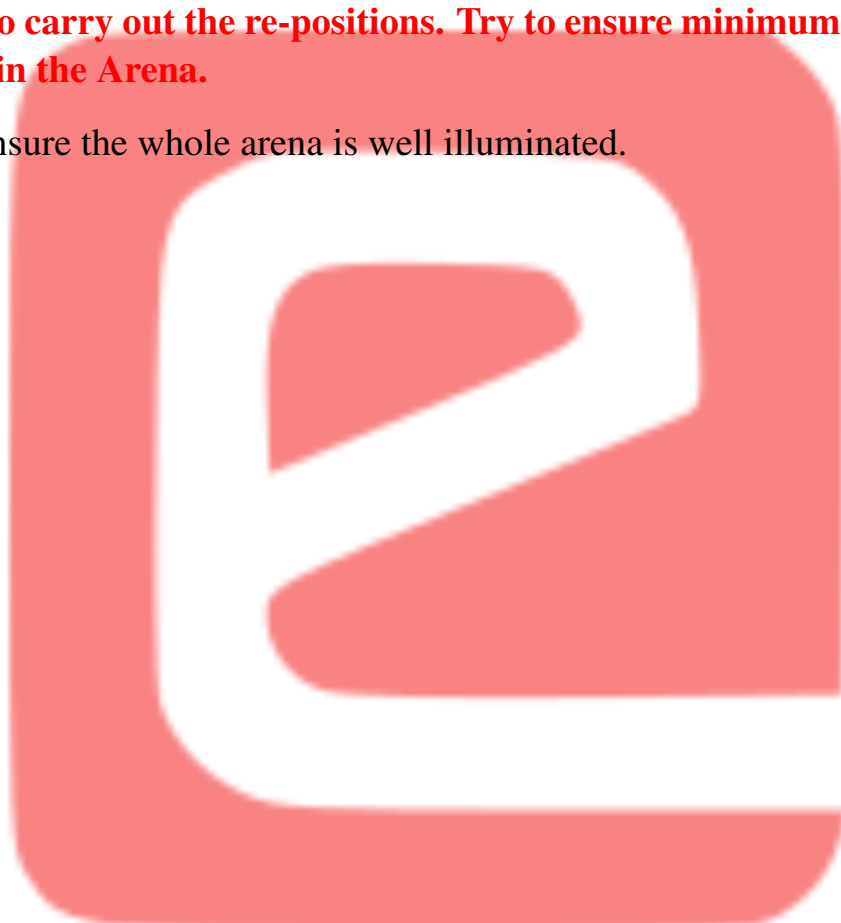

Figure 4: Top View of Arena before starting the run

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Figure 5: Side View of Arena before starting the run

3   Theme Run and Video Recording

- The video will consist of two parts: **Introduction** part and **Demonstration** part.

- **Introduction:** The video should start with a brief introduction.

  - You will find the **"TeamID.pdf"** in the Task 5 folder. Print it on an A4 paper and fill the team details in it.

  - Hold the sheet still for 3-5 seconds along with all the team members.

  - This would be followed by an introduction limited to a maximum of **ONE minute**:

  - A **30 second** introduction by the team leader highlighting any interesting aspect of the theme's implementation.

  - A **30 second** description highlighting any additional components like power distribution circuit, algorithm etc.

- **Demonstration:** It **MUST** be a **one-shot continuous video**.

  - You need to record a video of the whole theme run according to the **Theme Rulebook**.

- In the theme run, you need to maximise the points you can gain according to the Scoring Criteria given in the Rulebook.
- The video must be recorded according to the instructions given in the **Video Recording Instructions** PDF document.

● Please make sure the whole arena is in view and no part is getting cut.

● **Please step back from the arena and make sure stray furniture is not visible in frame. Nominate one person to control robot using robot and another person to carry out the re-positions. Try to ensure minimum manual intervention in the Arena.**

● Please ensure the whole arena is well illuminated.

Submission Instruction

- The video should be named **"eYRC-BP#<Team_ID>_Task5_Original _Configuration"**. If your Team ID is 16, the video should be named as **"eYRC-BP#16_Task5_Original_Configuration"**. Upload the video on Youtube. The video should be uploaded under **Unlisted Category**. Refer to Figure 6:
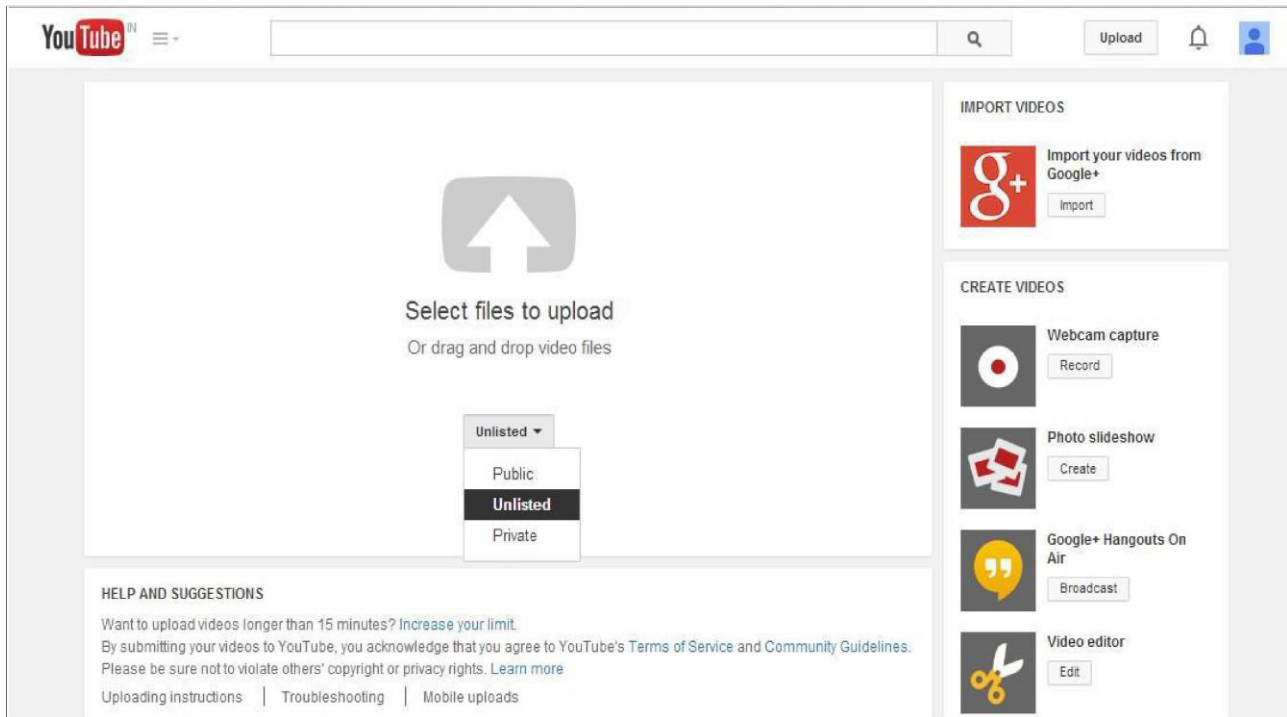

Figure 6: Unlisted video category

- Upload the **Youtube link** of the video uploaded on the eYRC Portal under the space provided on Task 5 page.

- Create a new folder named **"eYRC-BP#<Team_ID>_Task5_Code"**. Clean up your final working code. Make sure to refer to the **Coding Standard of eYRC**. Copy your code in the folder.

- Compress the code folder into a zip archive. Upload the zip file on the eYRC Portal.

Best of Luck!!!

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