

e-Yantra Robotics Competition (eYRC-2016) Task 2 - Launch a Module

In Task 1, you have learnt the basic concepts of image processing such as reading image, detecting objects based on colors, finding shape and size using contours and image moments. In this task we will extend the knowledge gained in Task 1 to learn the concept of path planning.

The objective of this task is to help you:

- Learn and understand various algorithms used for path planning and finding shortest the path.
- Extend the concepts learnt in Task-1 to find the shortest path between objects.

Please find the following folders within the folder that contains this Read Me file. The folders have been numbered.

1. **Resources:** You will find *Reading_Material.pdf* file in this folder. This file consists of pointers to relevant tutorials and practice exercises.
2. **Task_Description:** Please find the *Task2_Description.pdf* file in this folder. This file contains a description of the task and the problem statement.
 - ✧ Teams are expected to understand the problem and use image processing to find a solution.
 - ✧ The solution must be in the form of a Python script file (.py). Teams are given a code snippet which they must modify to solve the given problem.

Submission Instructions:

Teams upload their solutions as follows:

- ✧ Please save the modified code file in the folder Task_2.
- ✧ Compress the folder into zip format. Upload the **Task_2.zip** on the Portal.
- ✧ The deadline for uploading the solutions to Task 2 is given on portal.

Warning:

- **IMPORTANT:** The document you submit should be YOUR work in YOUR WORDS. To avoid any copyright violations, you must NOT copy phrases directly from manuals or web.
- The team should NOT mail or upload the document anywhere else, except on the portal.
- Teams failing to submit the document by the deadline will lose the marks for this task.
- e-Yantra WILL NOT entertain any request for extension of deadline for uploading the task.

- e-Yantra holds complete discretion to disqualify a team if any foul play is suspected.

Note: Check that you have downloaded the correct folder. After extracting the zip file, check the name of the folder. In case you have received incorrect theme, write to us at helpdesk@e-yantra.org or submit a query on piazza forum.

