

Read Me - Task 2: Path Planning

The objective of this task is to help understand thoroughly the use of image processing to interpret the given image to find useful information.

The task is divided into 2 sections.

Section A: Theory

Please find the *Tutorial_PathPlanning.pdf* file in the folder *Task2_Theory*. This file contains an introduction to path planning for robot. Please read through it to understand the problem proposed. Please find the *Template_Task2_PathPlanning.doc* file in the folder *Task2_Theory*. This file contains questions pertaining to image processing and path planning.

- The first section contains questions that the teams are expected to answer in the format as explained in the file *Template_Task2_PathPlanning.doc*
- The second section contains questions that require the team to modify the code snippet in the file *Template_Task2_PathPlanning.doc* to implement the function in python and provide a description as inline comments on how the code works

Section B: Practice

Please find the *Task2_Description.pdf* file in the folder *Task2_Practice*. This file contains a description of the task and the problem statement.

- Teams should use image processing and path planning algorithms to find a solution
- The solution must be in the form of a Python script file (.py). Teams must use the *task2_code.py* and modify it to solve the proposed problem.

Submission Instructions

The teams are expected to upload the solutions to Section A and Section B as follows:

- Section A – Please save the modified *Task2_Template.doc* file as **#TeamID_PathPlanning.pdf**
- Section B – Please save the modified *task2_code.py* file as **#TeamID_PathPlanning.py**.
- Then put the above files into #TeamID_PathPlanning folder and compress into zip format.
- Upload the #TeamID_PathPlanning.zip at the “Upload” tab on the Portal Interface. The deadline for uploading the solution to Task 2 is **Midnight of 29th December 2014**

Warning:

- **IMPORTANT:** The document you submit should be 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.
- e-Yantra WILL NOT entertain any request for extension of deadline for uploading the task.

