2 JantraEngineering a better tomorrow

Rulebook)

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eYRC 2020-21: Nirikshak Bot (NB)

Task 0 Task 1

CoppeliaSim Tutorials

Welcome to NB theme!

- 1A Explore OpenCV
- 1B Detect and Encode Maze
- 1C Design Ball Balance Platform

Task 2

Task 3

Task 4

Task 5

Practice Task

Instructions for Task 6

Task 6 Scene Details

Coding Standard



Live Session 1 - 24th October 2020

Live Session 2 - 21st November 2020

Live Session 3 - 12th December 2020

Live Session 4 - 10th January 2021

Changelog

Task 1

[Last Updated on: 14th October 2020, 16:44 Hrs]

Welcome to Task 1 of Nirikshak Bot.

The aim of this task is to familiarize you with important concepts of Image Processing, 3D Designing Algorithm Building and Python Programming.

This task is divided into **three** parts:

• (1) Task 1A

- This task is divided into two parts based on Image Processing which makes use of concepts of OpenCV. These parts are as follows:
 - Determine different shapes in a given image.
 - Determine coordinates of a red moving circle in a given video.

• (2) Task 1B

• This task is based on detecting a maze from a given image using OpenCV techniques and encode it in a given format.

• (3) Task 1C

- This task is divided into **two** parts. These are as follows:
 - Learn important concepts of CoppeliaSim software from Video Tutorials created by
 e-Yantra Team.
 - Design your own Ball Balancing Platform in CoppeliaSim software.

ALL THE BEST!!

welcome to NB theme!	
Rulebook	>
Task 0	>
Task 1	~
CoppeliaSim Tutorials	
1A - Explore OpenCV	
1B - Detect and Encode Maze	
1C - Design Ball Balance Platform	
Task 2	>
Task 3	>
Task 4	>

Practice Task

Task 5

Instructions for Task 6

Task 6 Scene Details

Coding Standard

Git and GitHub

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