

Applied Robotics and AI Project

ASSIGNMENT2 – Project Part 1

Assignment Brief

In certain environment settings, sending a robot to carry out a search operation could be more beneficial than sending a person.

In the Webots simulation, set up the environment provided to you and add three blocks at random locations:

- a. Red block
- b. Blue block
- c. Green block

All the above blocks should have the same size of 0.3m length, 0.3m width, and 0.1m height.

You are to program the e-puck robot to search for the following items and provide a response upon the first encounter.

1. When the red block is found, display the message “I see red”.
2. When the blue block is found, display the message “I see blue”.
3. When the green block is found, display the message “I see green”.

After each response, provide a summary of which of the above three items have been encountered before.

Submission Requirements

Please submit an interim report for the Part 1 of this project. Your report should contain the following sections:

1. Introduction
2. Methodology
3. Project Plan
4. Bibliography and References
5. Appendix

The codes for the controller should be inserted in the Appendix. You do not need to submit your Webots program for the interim report.

Submission Due Date

The interim project report is to be submitted by **9th July 2025, 11.30pm.**