

Report: Assignment 2

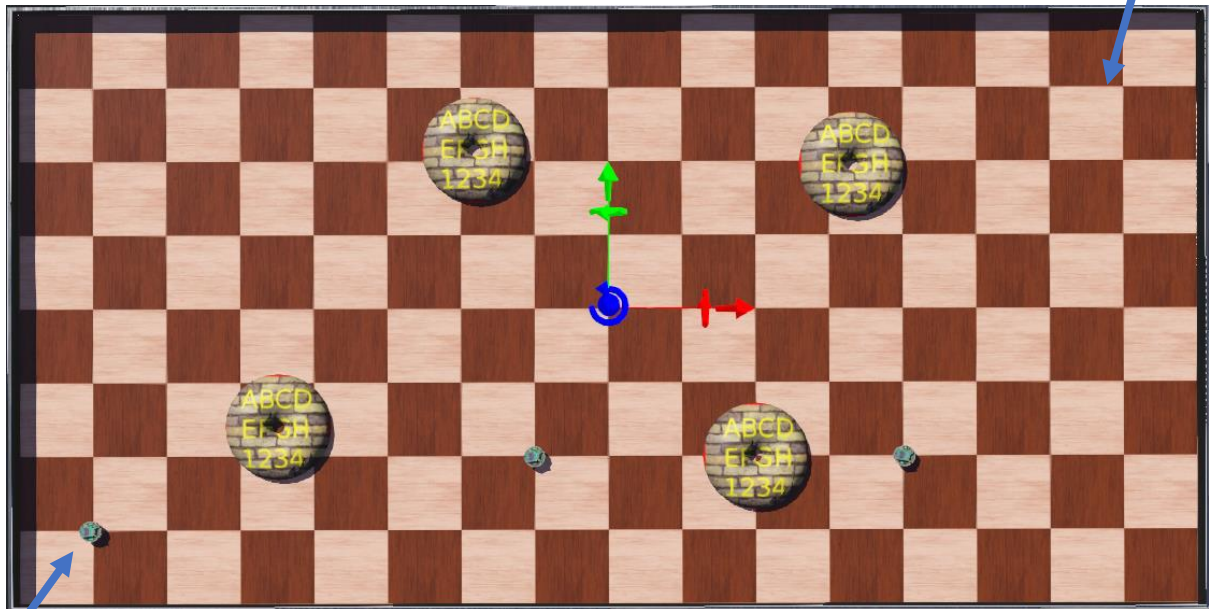
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Intelligent Robotics – Fall 2022

Overview

Implemented the given task on Webots where two e-puck execute carrot chasing algorithm in the environment while another e-puck executes BUG-0 algorithm to traverse from a start to a goal point. The work is solely completed by me and the codes to the implementation are uploaded to the shared GitHub repository.

Environment



Start

Parameters

For carrot-chase algorithm implementation, different parameters are used. Listing the relevant ones:

1. K = it is the gain.
2. Δt = timestep.
3. Δ = epsilon distance from the point of intersection on the line
4. β = Difference in orientation between the current heading and goal heading.

Results

The e-puck at start moves towards the goal by encircling the obstacles whereas the other two robots execute the carrot chase algorithm following a line.