

ASSIGNMENT 1

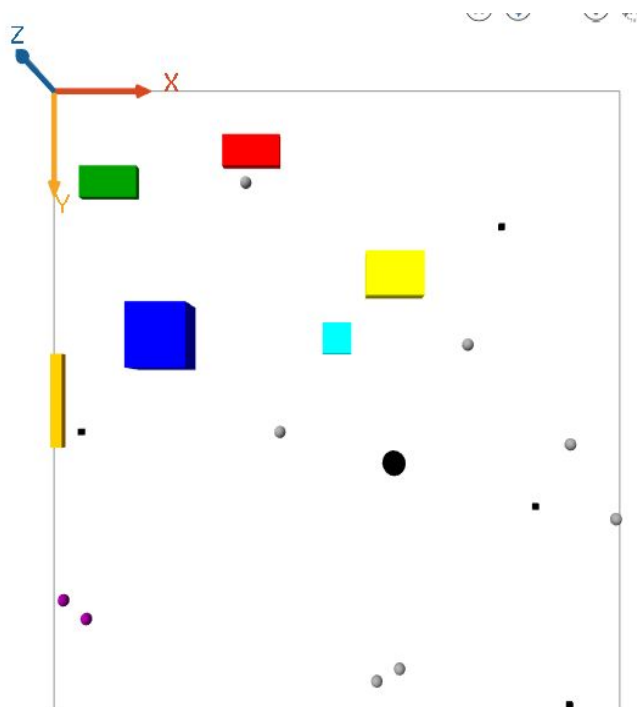
GAMA AND AGENTS

Introduction and objectives

In this assignment we had to create a festival with festival guests, an information center and stores for food and drinks. Additionally, the 2 challenges to be implemented were:

1. Implement memory creation in festival guests
2. Create bad guests and a security guard who kills(removes) the bad guests from the festival after being informed by the guests.

Implementation



Representation:

- Information center - Blue box at (20,40)
 - Entrance - Orange line at (1,50)
 - Festival guests - Black box
 - Guests with memory - Grey sphere
 - Bad guest - Purple sphere
 - Security guard - Black cylinder at (60,60)
 - Water station - Cyan box at (50,40)
 - Food truck - Red box at (35,10)
 - Vegan restaurant - Green box at (10,15)
 - Cafe - Yellow box at (60,30)
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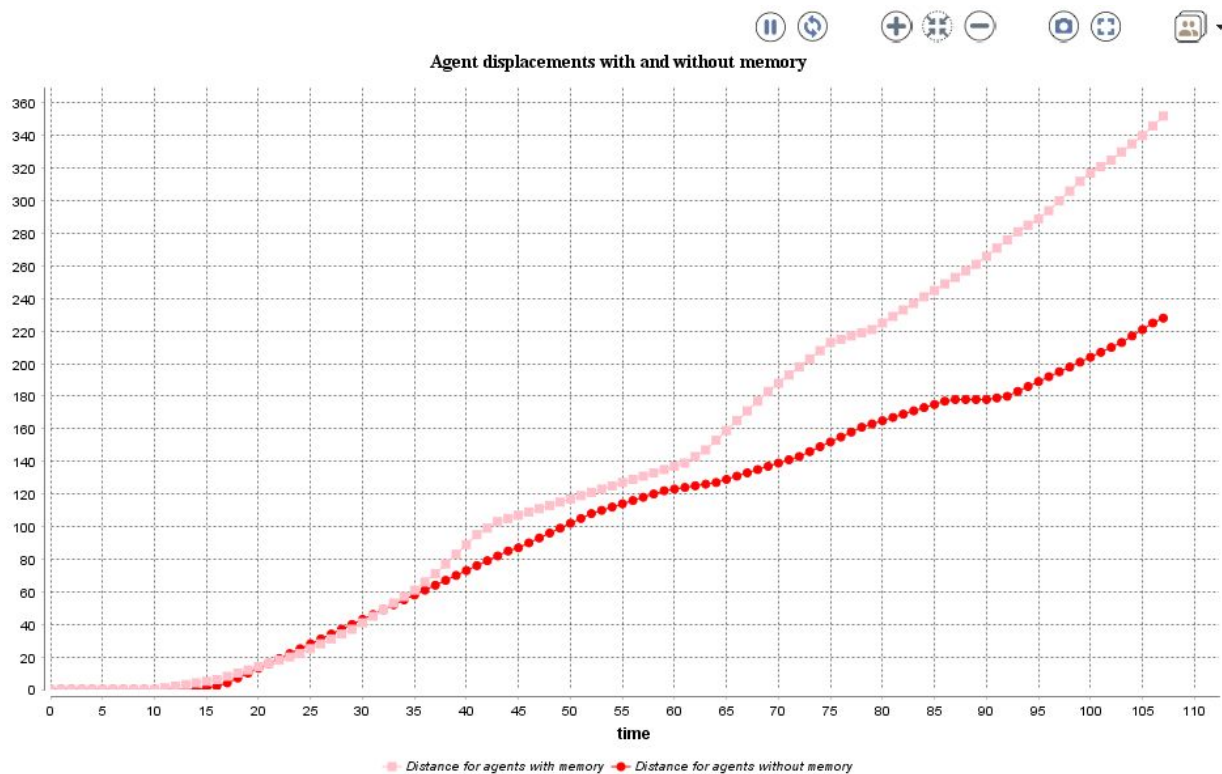
Simulation characteristics -

Guest is hungry >> **blue**

Guest is thirsty >> **red**

About to report bad guest >> **green**

Results



Explanation -

1. Guests without memory have to go to the information center every time they are hungry or thirsty and wait in the queue to get the information from them about the restaurant or water station. Hence, the distance travelled by them in the same period of time is less than the agents with memory who can go to the restaurant or water station directly, as soon as they are hungry or thirsty.
2. For guests with memory, we have added the behaviour of informing about the bad guests, which is why they have to travel additional distance to notify about the location of bad guests and escort the security guard.