

# ASSIGNMENT 2

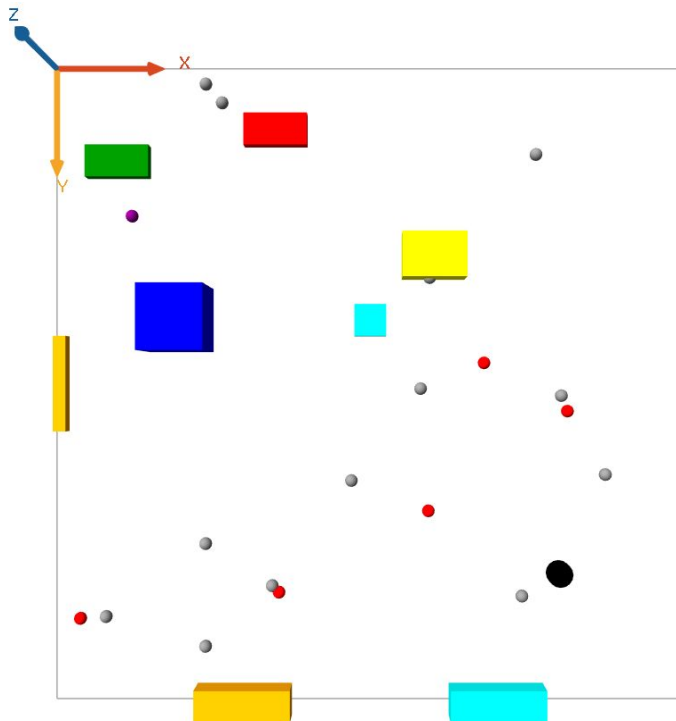
## NEGOTIATION & COMMUNICATION (FIPA)

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### Introduction and objectives

In this assignment we had to create a festival with festival guests, and auctions with signed merchandise. The challenges were:

1. Multiple auctions at the same time;
2. Make use of FIPA for the negotiation between the auctioneer and the participants;
3. Implement auctions other than the Dutch auction.



### Simulation characteristics -

Guest is hungry >> **blue**

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Guest is thirsty >> **red**

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

Interested in books >> **orange**

Interested in CD >> **cyan**

## Implementation

In the implementation, when the auctions are opened, what happens is that the guests, depending on their interest in buying books or CDs, will go to the opened auctions accordingly. Once there, a timer starts and the agents are killed, thus creating the Participant agents; when the timer finishes, the auction and the communication (through FIPA) begins.

Once the auctions are both finished, a winner may be decided depending on the offers and on how the negotiations evolved, the results can vary since some parameters are randomized. After that, the guests are re-created accordingly and they will restart their own activities as before when the auctions were still closed.