

ID2209

Distributed Artificial Intelligence and Intelligent Agents

Homework 3

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Homework3 Introduction

- Topics covered in this session:
 - Agent Mobility
- Complementary materials:

Guide on JADE Agent Mobility

<http://www.iro.umontreal.ca/~vaucher/Agents/Jade/Mobility.html>

Programming agent mobility in JADE

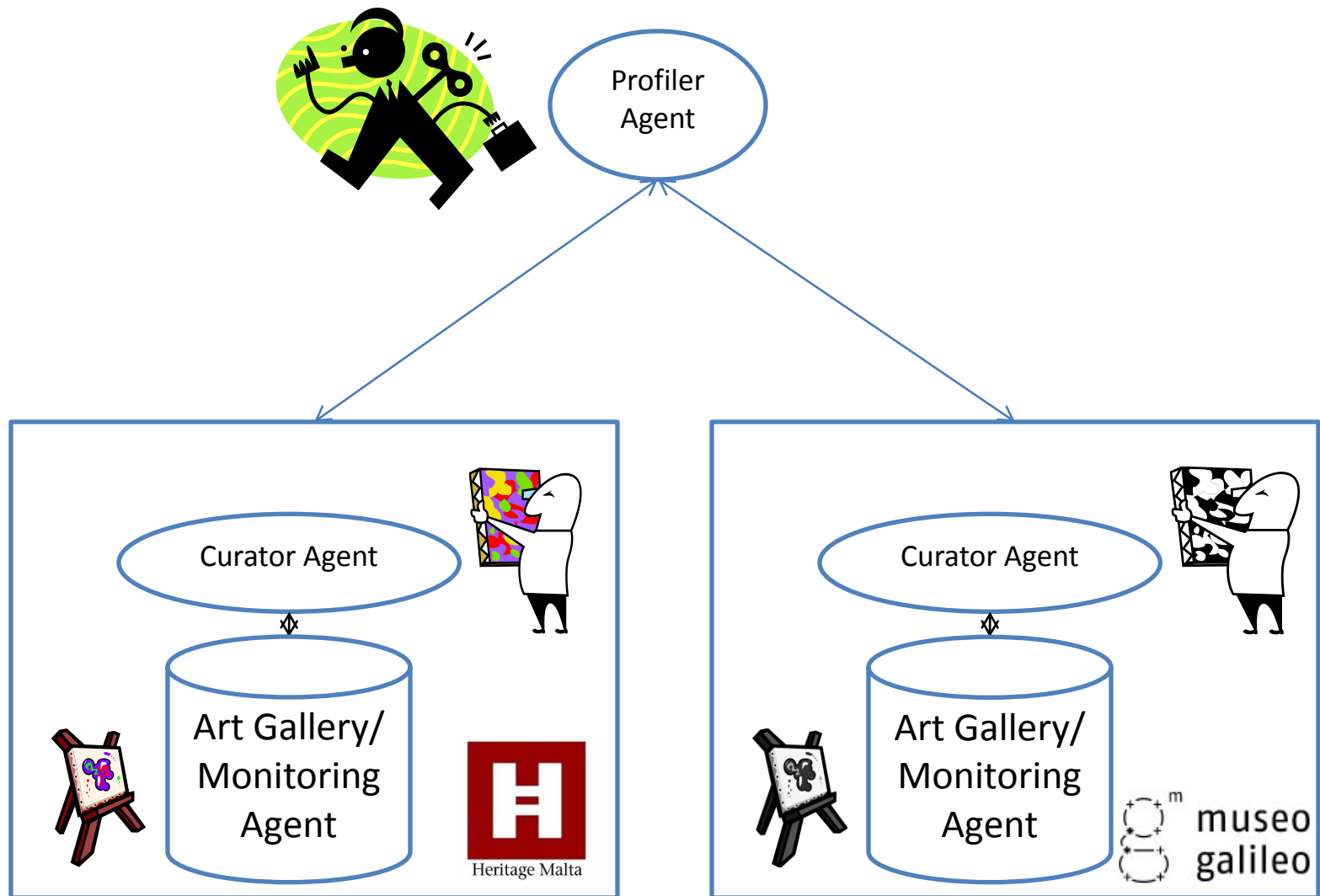
Programming guide (should be very easy to follow):

<http://www.iro.umontreal.ca/~vaucher/Agents/Jade/Mobility.html>

Task 1



- Goal:
 - Hands on experience with Agent Mobility
- Extending (**Dutch Auction**) for intra-platform **mobility**.



Scenario described

- Consider a **auctioneer** agent in a auctioneer-Agent-Container

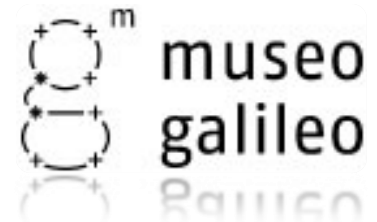


And

- Two separate containers for two separate/different **participant types**
 - (e.g. **participants** from HM and **participants** from Galileo Museum).



Heritage Malta

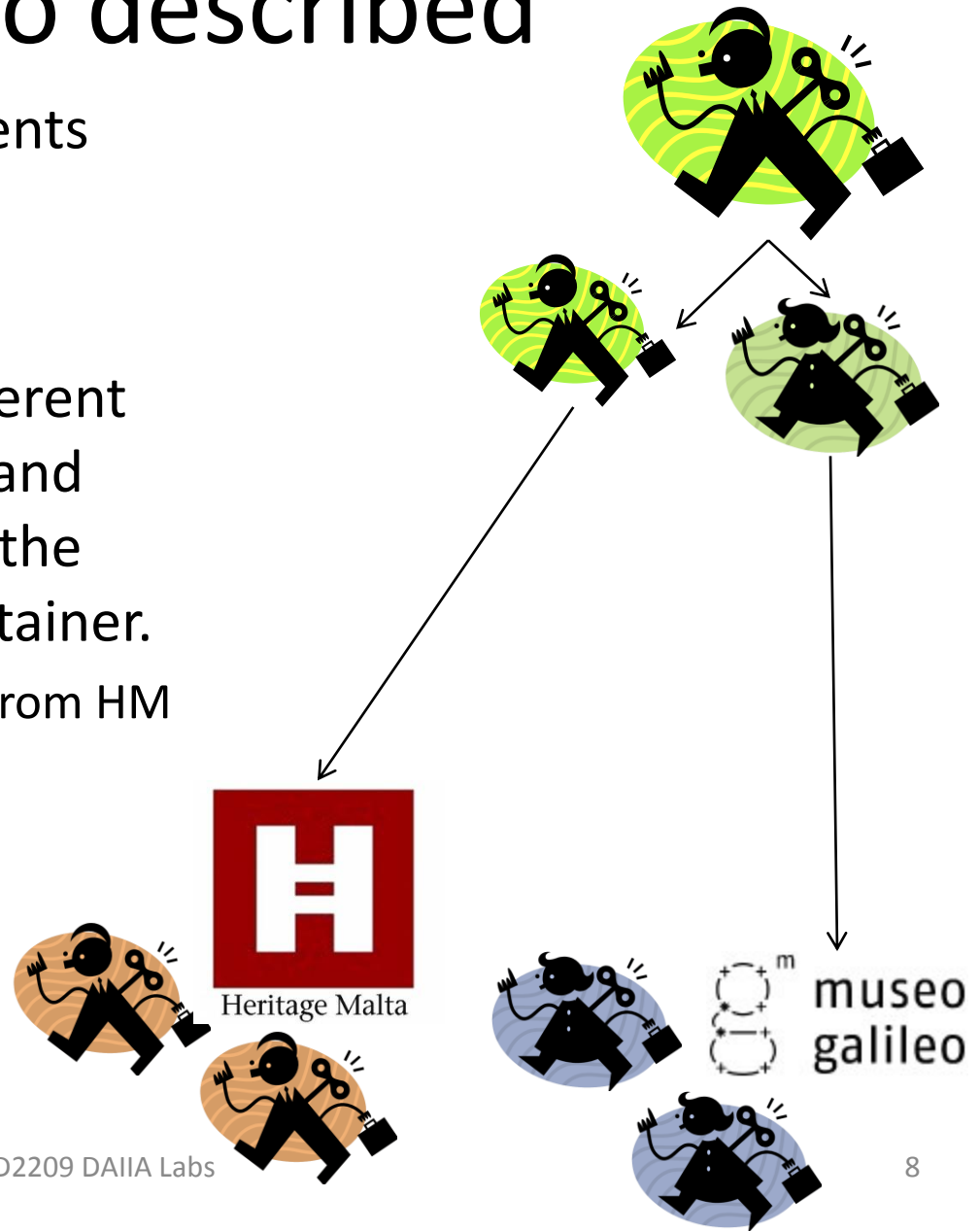


<http://www.museogalileo.it/en/index.html>

<http://www.heritagemalta.org/museums/museums.html>

Scenario described

- auctioneer agent **clones** 2 agents
- each of which moves to a different 'participant agent container' and executes **Dutch Auction** with the participant agents in that container.
 - (I.e. one clone for participants from HM and one for Curator/GM)

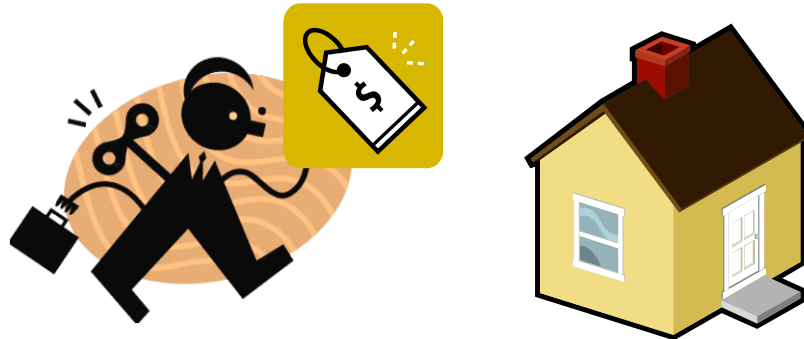


Assumptions

- Consider only two participants in each ‘participant agent container’.
 - For simplicity
- These two participants
 - One being the actual participant agent and other being its clone.

Scenario continued

- Upon the end of execution
 - the clones migrate back to their home container, share best price obtained among them and announce the best price offered from any of the participants.
(I.e. participant X from XYZ is offering best price XYZ)



Deliverables

- Deadline: **November 20!**
- Demo: November 21
- Documented **Source Code** (with instructions for execution) to nimad@kth.se , shahab.mokari@gmail.com with Subject **“DAIIA12 HW3”**.
 - Don’t forget to write full names of group members in the email.

Time Slots for Demo:

- Slots sheet will be announced on mailing list.