

## Project 1 (Exploration):

Besides the kind of environment (city after an earthquake, Mars planet, etc.), you can consider different architectures for the multiagent system and different strategies for the individual or collective exploration.

Regarding the architecture, you can chose among:

- a master-slave (similar to military architectures with heterogeneous or homogeneous agents, with single or multiple chiefs/masters, and several slaves — install Mason as well as the application of the previous implementation described in the attached paper macedo et al 2011)
- flat (with no masters).

Concerning the individual and collective exploration strategy, you can use map sharing or not, agent clustering, as well specific information measures such as surprise, entropy, etc. (see the previous implementation).

The goal is compare different approaches.