

IMAS-MAI

Final Delivery

Team 5

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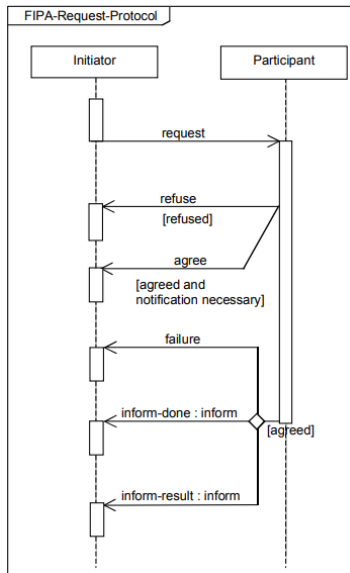
1 Implementation details

2 Results

3 Conclusions

- Use of the FIPA Request protocol.
- Communication done by the behaviours.
- The logic of the system resides in the agents.

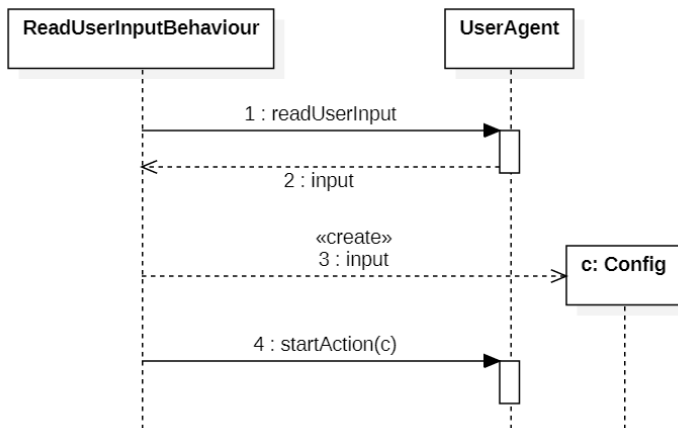
Communication



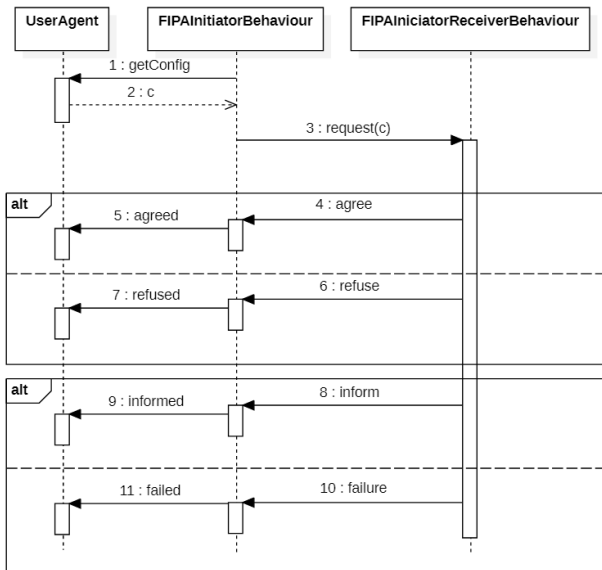
User Agent

- Two behaviours associated with it.
- Reads user input.
- Starts FIPA Request Protocol.
- Waits till system has done.

User Agent



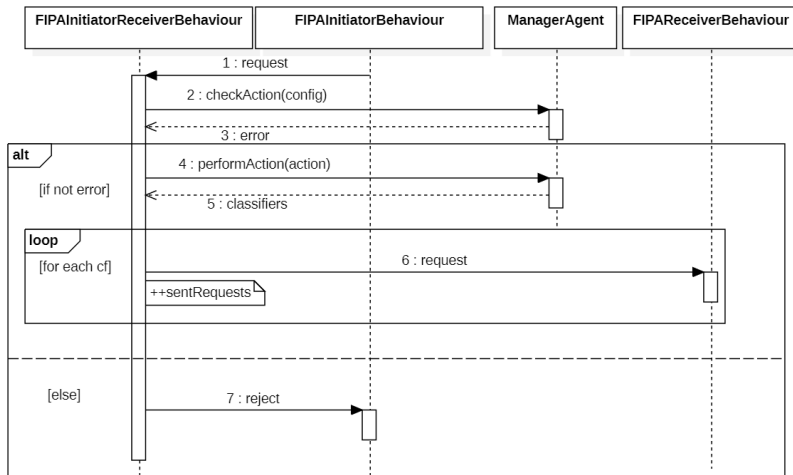
User Agent



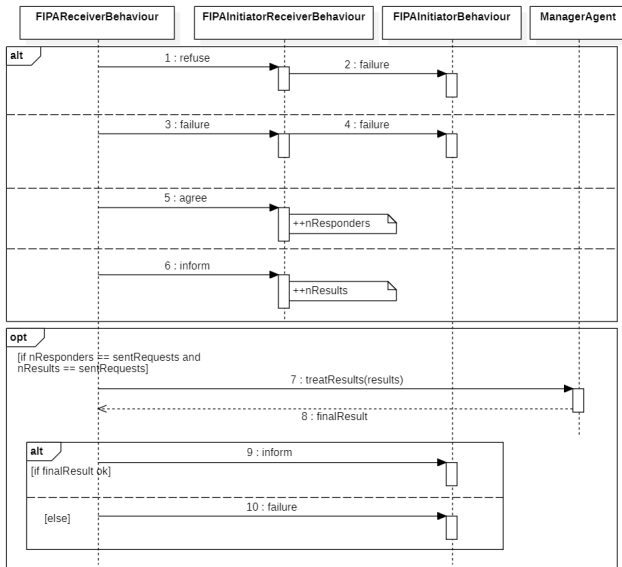
Manager Agent

- Interfaces User with Classifiers
- Works with FIPA Initiator/Receiver Behaviour
- Aggregates results with a weighted voting (with number of instances for training)

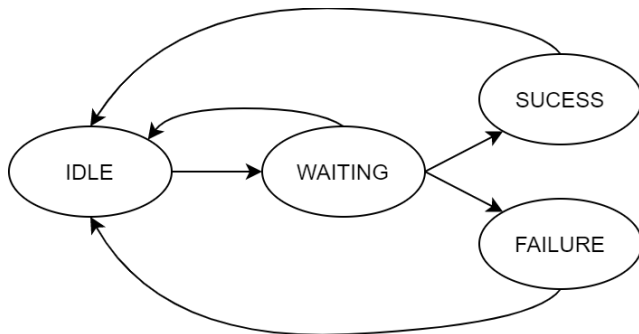
Manager Agent



Manager Agent



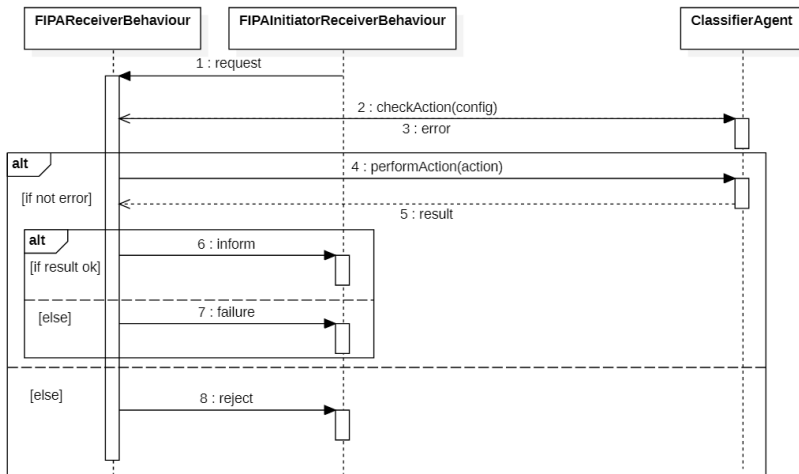
Manager Agent



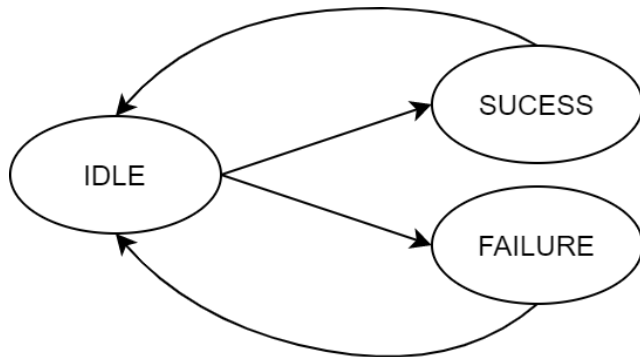
Classifier Agent

- Builds and uses a ML model based on received instances
- Works on FIPA Receiver Behaviour

Classifier Agent



Classifier Agent



Changes from initial expectations

- Agent-oriented development proved to be a natural fit
- Behaviour refactoring

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Conclusions

- Useful ensemble classifier
- Reusable code for new MAS (FIPA protocols)
- Extensible into MAS with interesting behaviours
 - Leasable classifiers
 - Reputation/currency systems
 - Distributable all purpose ML for hire with Information agents
- Discovered improvements of Agent paradigm over OOB, as well as limitations.