RoboCup Project

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SYSC 5103 Group FC 7

The challenge

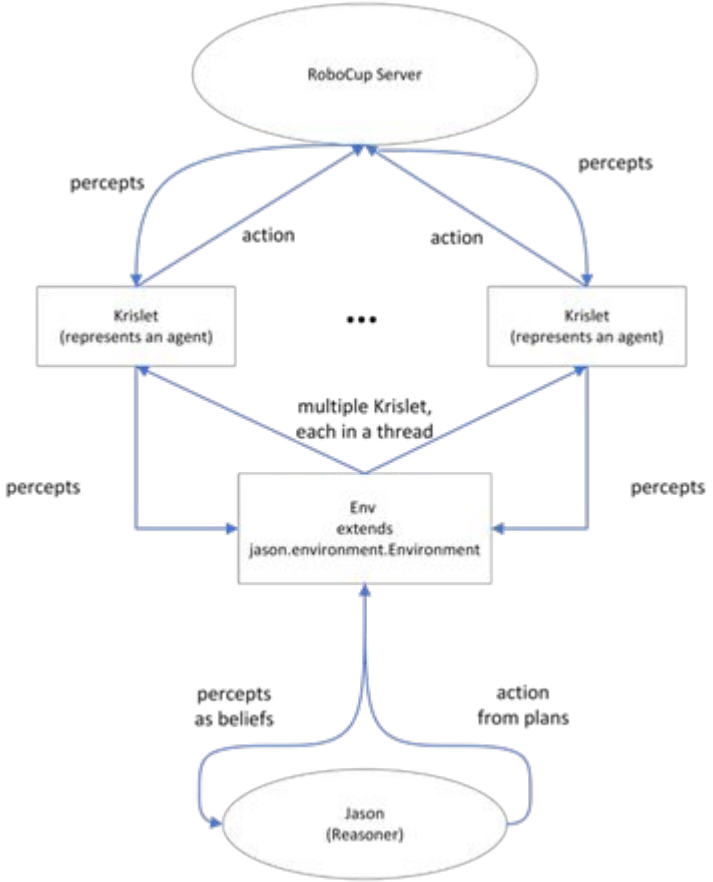
Integrating Jason BDI Framework with Krislet in Robocup to develop intelligent agents

Our Plan

How to tackle this problem.

Architecture

- Env class extend jason.environment
- Override init and executeAction
- Krislet and Brain receive info and generate percepts
- Percepts are passed to Env class
- Percepts are taken as beliefs and reason accordingly



Percepts and Actions

- ball(D, A)
- ball(lost)
- goal(S, D, A)
- goal(lost)

- turn(<angle>)
- dash(<power>)
- kick(<power>, <direction>)

Plans in ASL

```
/* Initial beliefs and rules */

out_of_net.
```

```
+goal(S, D, A) : facing(goal) & out_of_net
    <- !move_forward.
```

```
//dash towards goal if facing it.
+!move_forward : not(close(goal)) & facing(goal) <- dash(25); !move_forward.
```

Running the Agents

Differing behaviour among agents.

What can we do next?

- Use of Krislet’s hear() and Jason’s .tell for communication
- The goalkeeper agent could be improved with clearing and challenging behavior
- More roles could be added to imitate a real game