

Intelligent garbage truck

Agent environment and knowledge representation

The truck is being moved via keyboard arrows by the user on a grid with icons depicting garbage bins, houses and landfill bins. The truck can store waste from only one bin at a time. Waste is being collected by moving through the bins themselves. User gains a point if trash is left at a correct landfill bin and the slot will not be emptied until the waste is in the correct place.

The environment is created with the means of object oriented programming. Agent interacts with bins when bins and agent's coordinates are the same. For movements, text and the environment pygame was used as well.

In the project Pyke was implemented as means of knowledge representation. Pyke is a form of logic programming inspired by Prolog. When the user collects waste, agent deduces thanks to Pyke to which category the trash belongs: plastic, biodegradable, paper, glass.