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GEA Worksheet

Goals

What might be the goals of the intelligent system?

The main goal of the system is to clean all dirt squares in the room. It should do so by following the same algorithm and not breaking on the way.

Environment

What is the environment that the intelligent system will be adapting within?

The system will be in an environment with walls and other obstacles that it cannot go through, squares that are labeled as dirty that must be cleaned and squares that are not dirty that do not have to be cleaned. There is also a “charging square” that the robot will be used to charge at.

Adaptation

How might the intelligent system adapt to the environment given the goals? How might its inner environment change?

The robot vacuum will follow an algorithm to complete its cleaning. It will adapt by noticing if it bumps into something such as a wall, table, other obstacle. It will also see if there is a dirty square in front of it and if there is it will clean it.

ACT-R Design flowchart:

