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CSE 3521

Homework #6

Pick an interesting task (not discussed in class!) that “appears” simple for humans to perform and requires some form of “common sense”.

Build Lego sets

1. What types of “common sense” knowledge do you think must be required to perform that task? (2 pts)
 - a. Able to find the correct breaks.
 - b. Able to understand the instructions and alignment with two break/parts.
 - c. Able to connect two break/parts.
2. Propose a connected organization of several agents that break the task into smaller parts. Draw the hierarchy/graph with at least 4 levels total. (This means 3 more levels below the root, your original task.) (4 pts)
 - a. Planning agents: Go through the building instructions.
 - i. Scheduling agents: Split works to multiple parts.
 1. Finding agents: Find necessary breaks for each step.
 - a. Building agents: Build everything up as whole.
3. Do you think that a computer or robot of TODAY could implement these subtasks, why or why not? (1 pt)
 - a. Yes, because each break has its unique identification number and the building instructions are digitized. In addition, each break has holes which can be used to alignment the correct position; Therefore, I believe it could be implemented TODAY.