@Home Project: Storing Groceries

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Agenda

1. Project Overview and Problem
2. Planner
3. Planning strategy
4. Results
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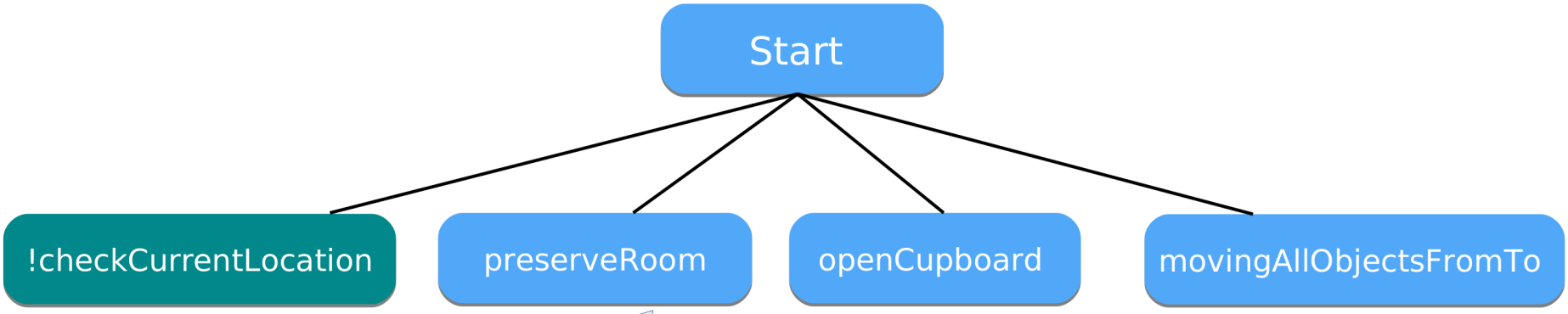
Project Overview and Problem

- Project: Storing Groceries
  - objects are on table
  - cupboard has shelves
  - cupboard door is closed in the beginning
- task
  - model domain
  - model initial state for each of the four test cases
  - case 1: one object on table
  - case 2: *n* objects on table and location of table/cupboard is necessary
  - case 3: *n* objects on table and location of table/cupboard/objects is necessary
  - case 4: *n* objects on table, objects have categorie and location of table/cupboard/objects/shelves is necessary

Planner

- SHOP2: 2.9 (lisp version)
- sound and complete
- run with quicklisp

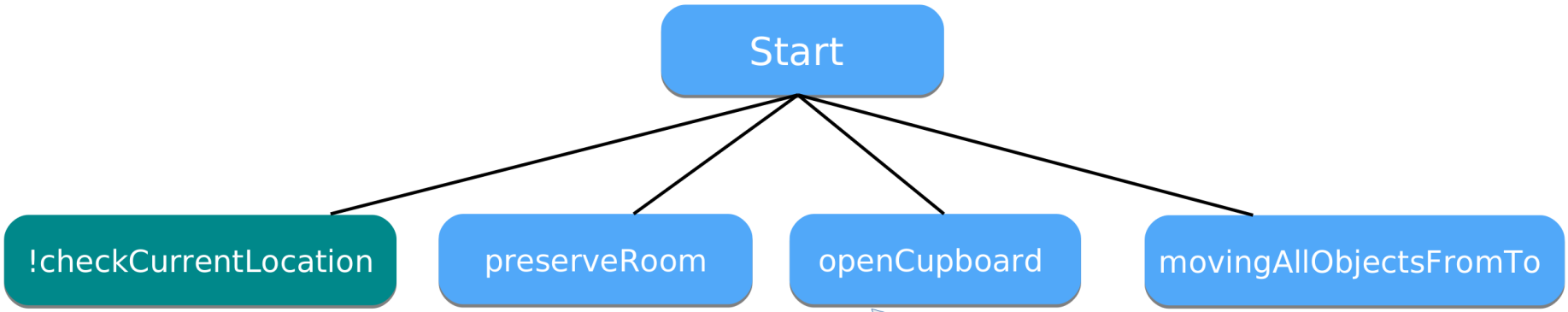
Planning strategy



Method decomposes to:

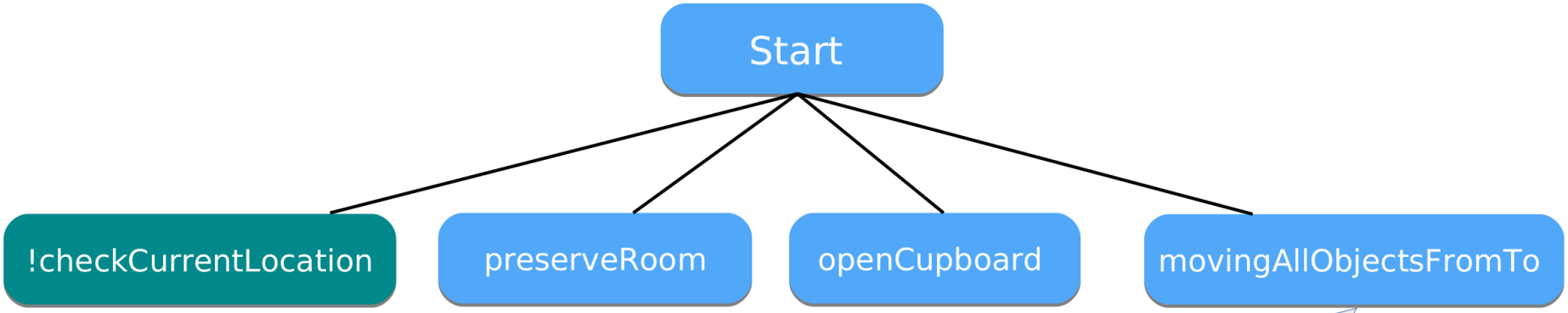
- if necessary: find table
- if necessary: find cupboard

Planning strategy



Method decomposes to:
- walk from current location to cupboard
- if necessary: open cupboard
- if necessary: explore cupboard
  (find all shelves recursively)
- walk from cupboard to table

Planning strategy



Method decomposes to:

- call method takeObjectFromTableToShelf
- call method movingAllObjectsFromTo (recusion)

or

- end of recusion

Results

First plan found is returned:

	Plans	cost	Expansions	Inferences	CPU time	Real time
case1	1	10.0	37	112	0.001	0.001
case2	1	32.0	78	330	0.002	0.002
case3	1	37.0	84	362	0.003	0.003
case4	1	30.0	74	409	0.002	0.002

Demo

Enjoy the short demo!