HOCHSCHULE
RAVENSBURG-WEINGARTEN
UNIVERSITY
OF APPLIED SCIENCES

SOFTWARE DEVELOPMENT FOR AUTONOMOUS MOBILE ROBOTS

FINAL PRESENTATION

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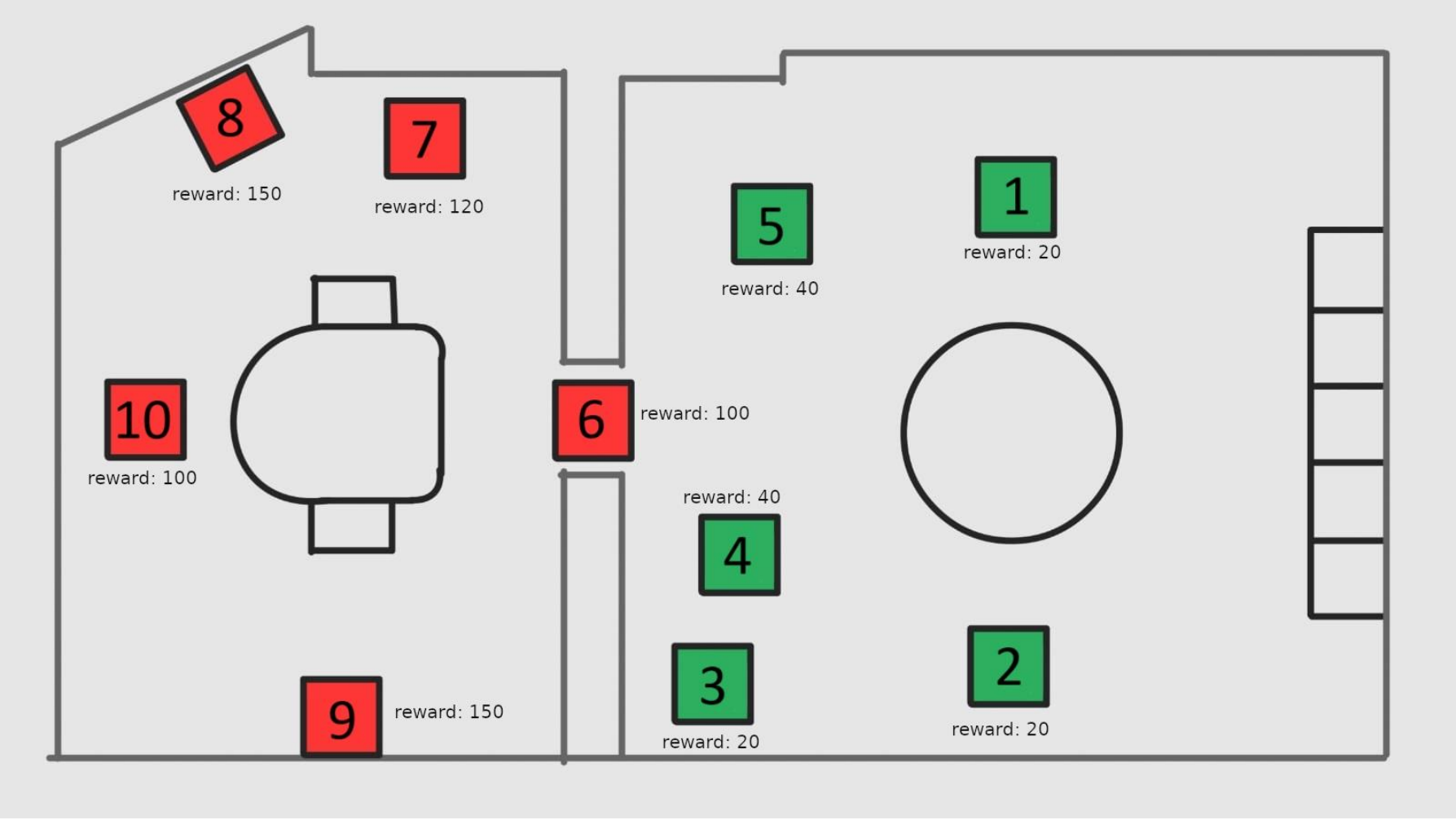
TASK

Task

Arena

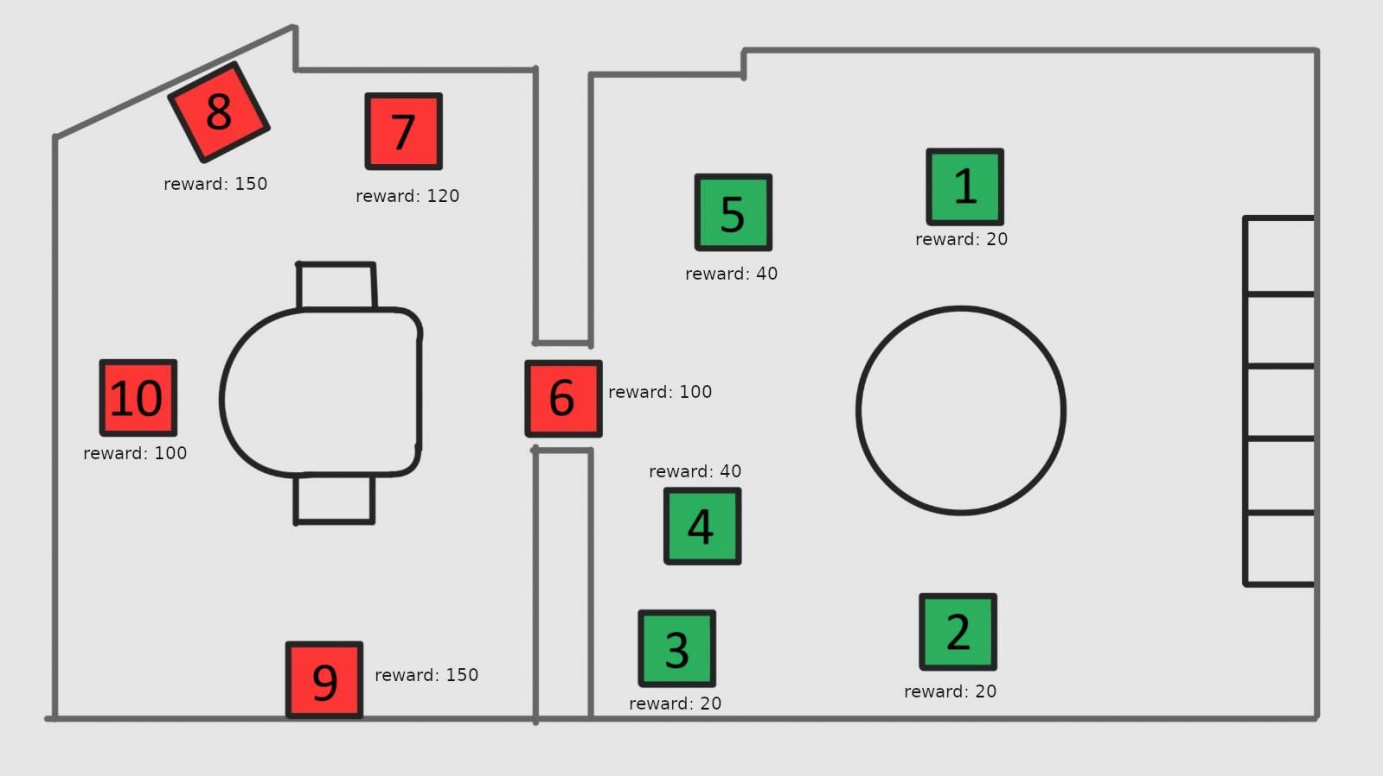

8
reward: 150
7
reward: 120
5
reward: 40
1
reward: 20
10
reward: 100
6
reward: 100
reward: 40
4
3
reward: 20
2
reward: 20
9
reward: 150

PLANNED STRATEGY

Planned Strategy

Zones

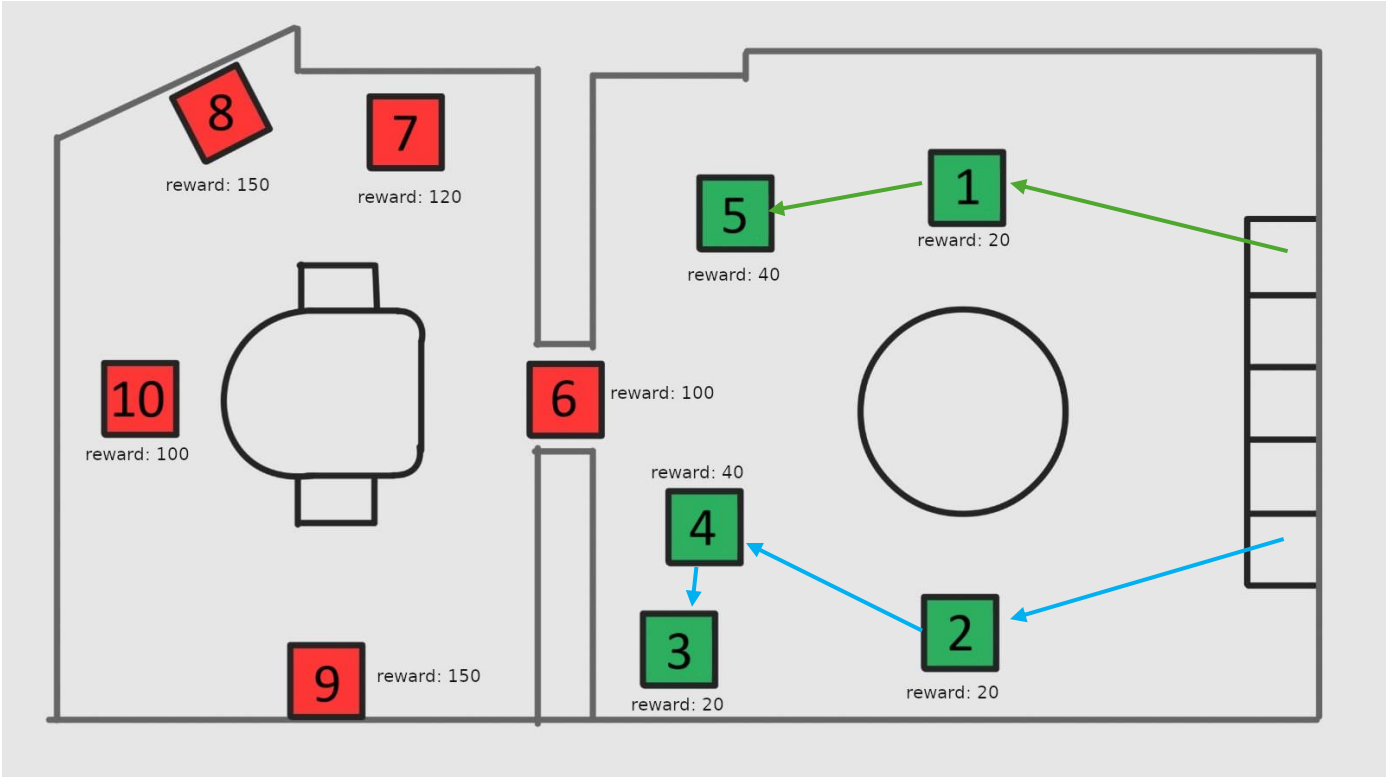
- Easy zone first
- Hard zone second
- Only one zone change



Planned Strategy

Goal Sequence

- Nearest Goal Next
- Advantage:
  Independent of start position

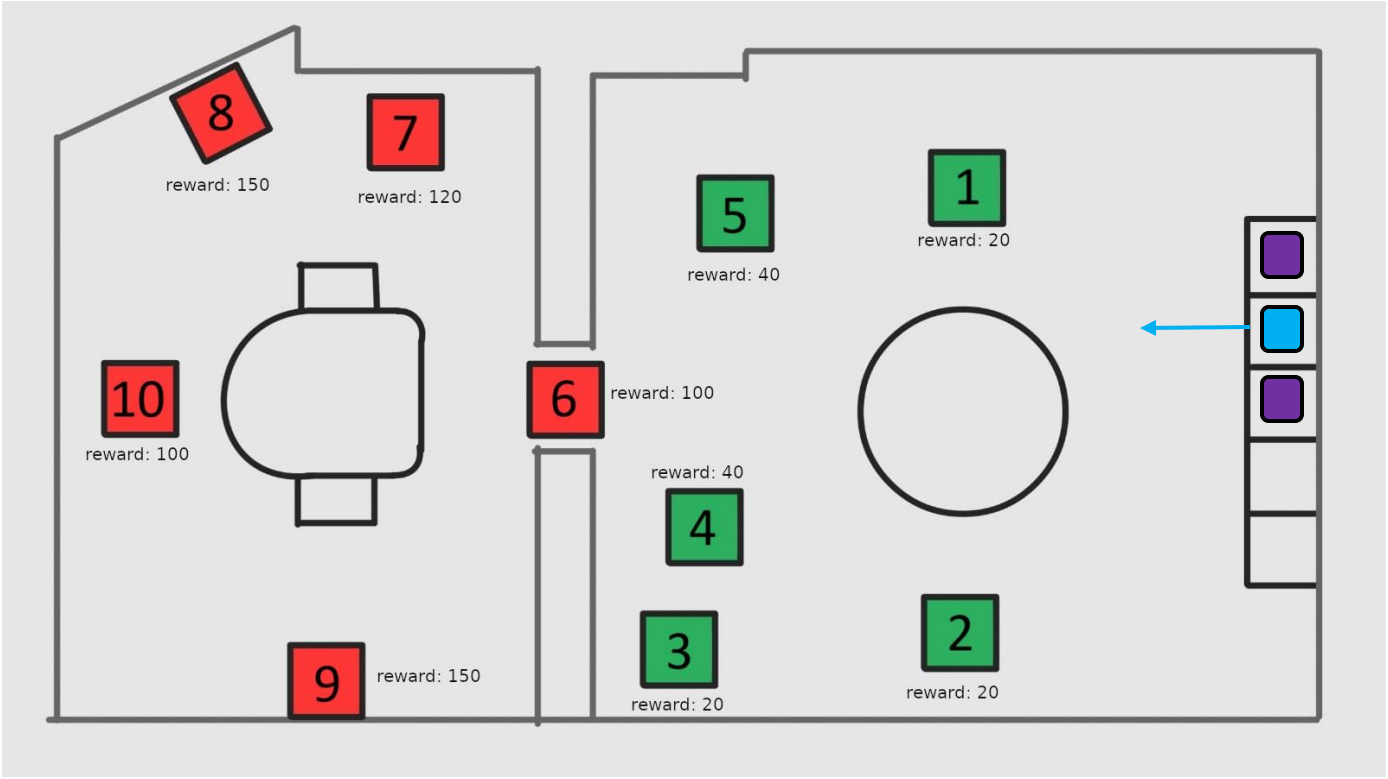


PROBLEMS

Problems

Start in the middle

- Move base doesn't want to start in this narrow space
- Drive "manually" forward

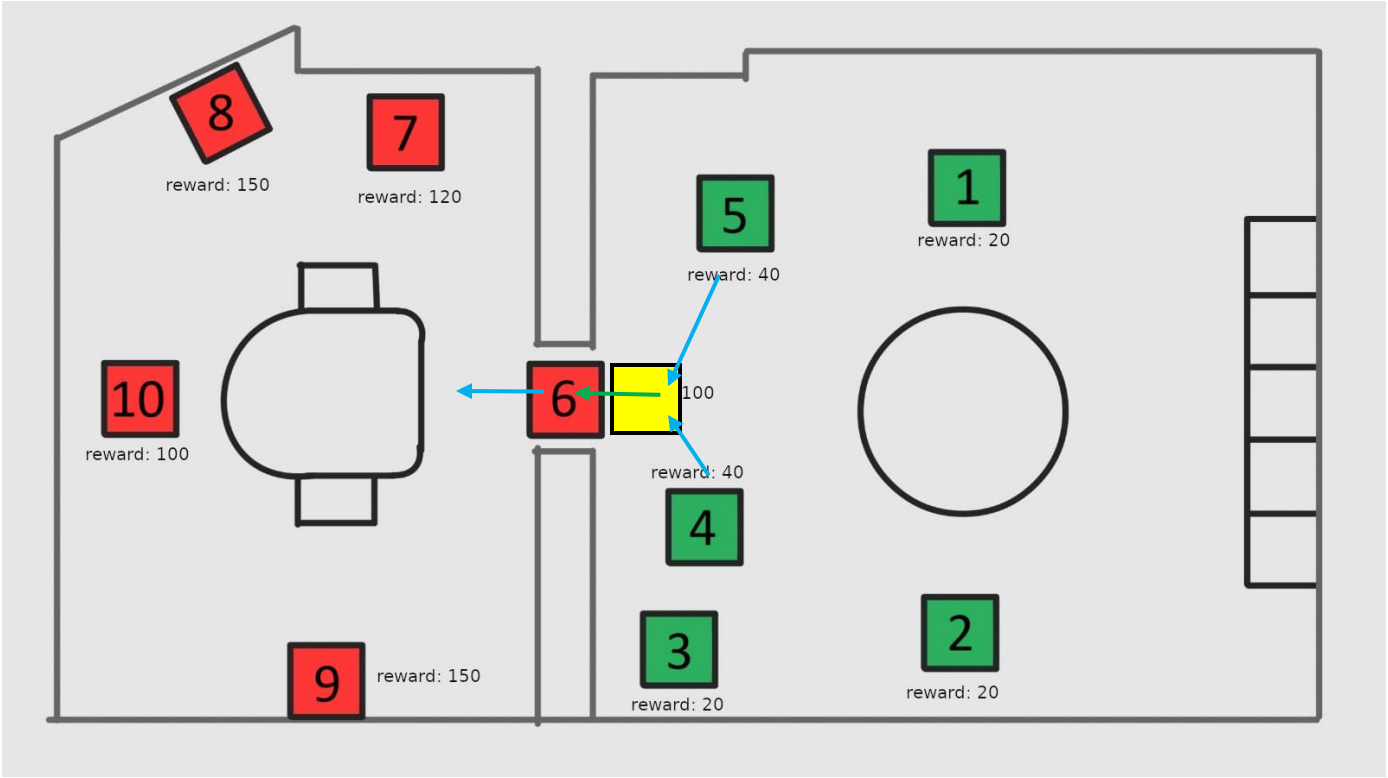


Problems

Zone change (Plan A)

Three steps

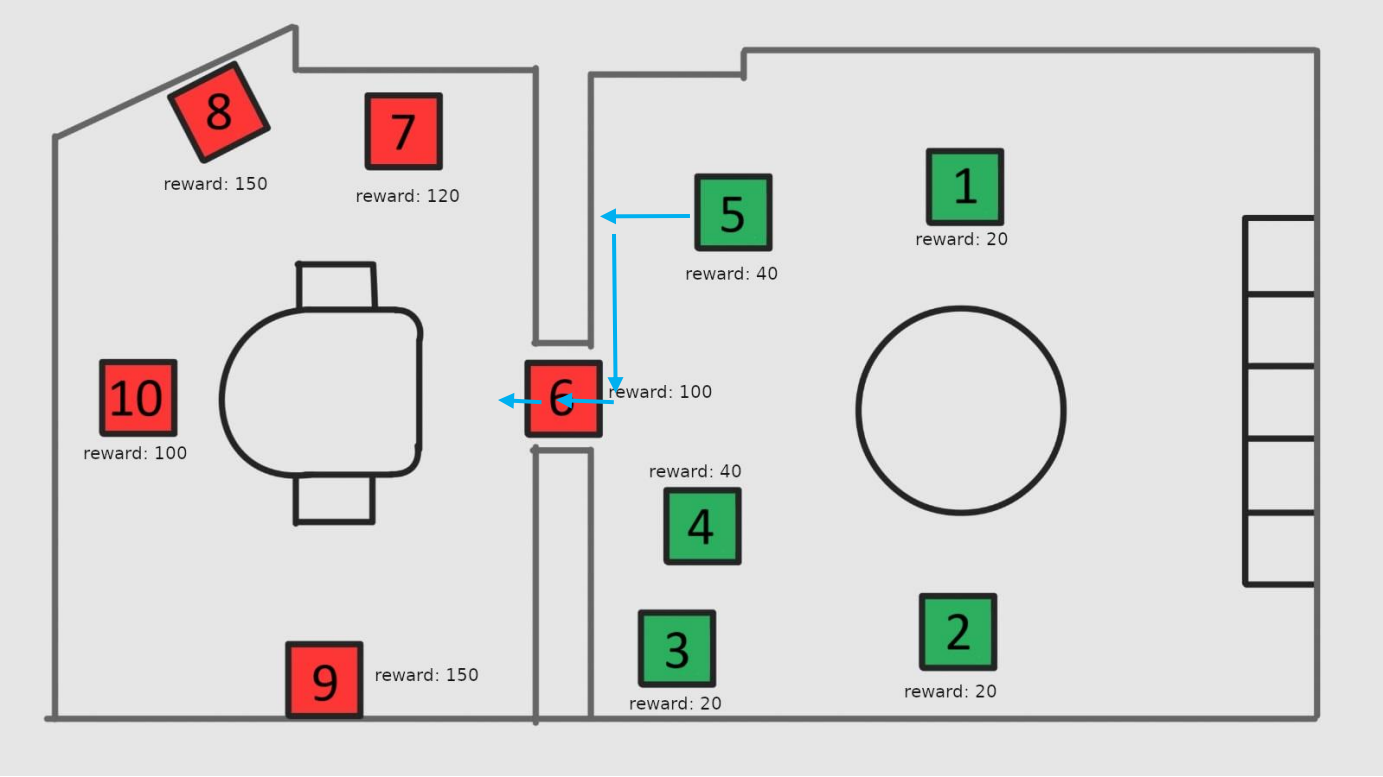
1. Move base
   to helper Goal
2. Drive "manual" to goal 6
3. Switch back to Move base



Problems

Zone change (Plan B)

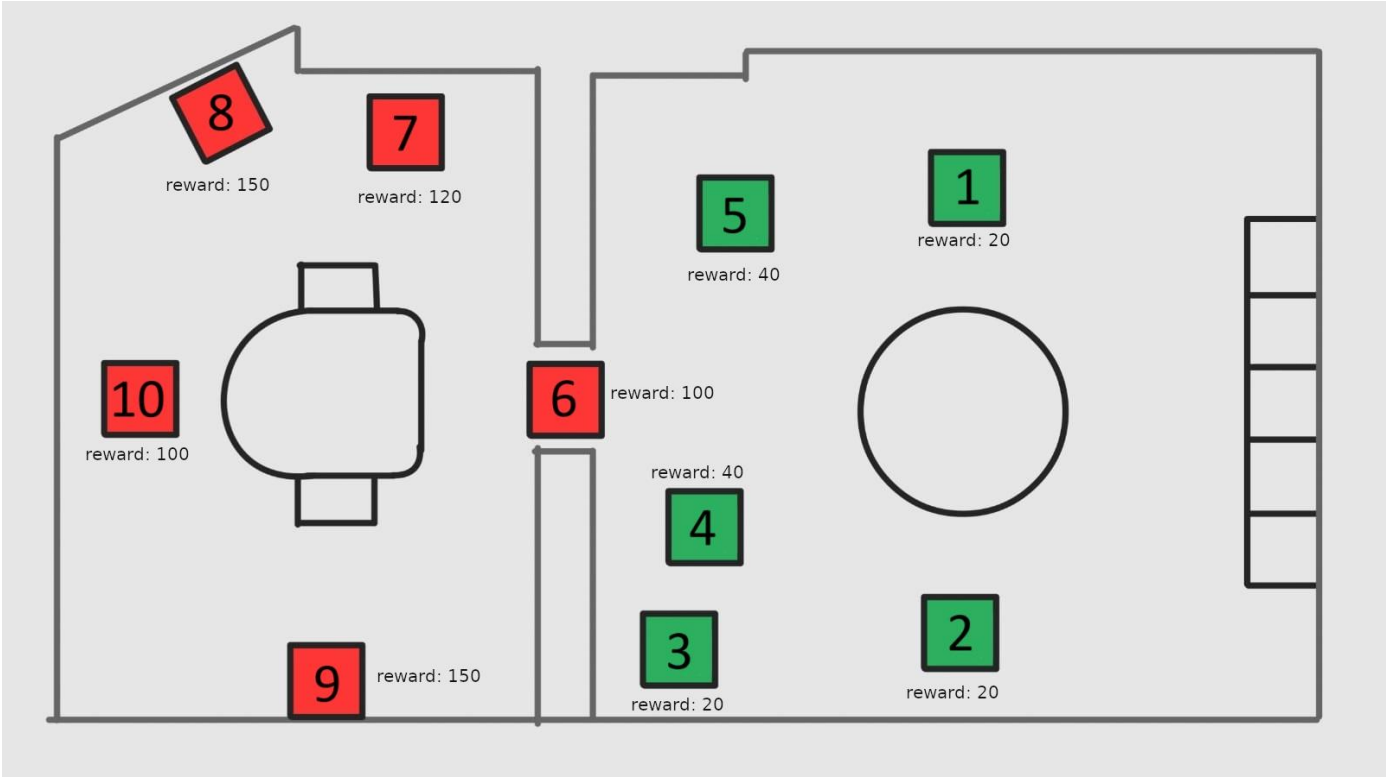
- Follow-The-Wall



Problems

End behavior

- After the last goal, the bot should free the last goal, that it isn't blocked



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