

Fundamentals of Artificial Intelligence

Programming Exercise Logic

Yuanfei Lin, Adrian Kulmburg
Oliver Hausdoerfer, Yikai Jin

Technical University of Munich

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Logic: Cleanup-Day

Keeping the local parks in urban regions **free from litter**

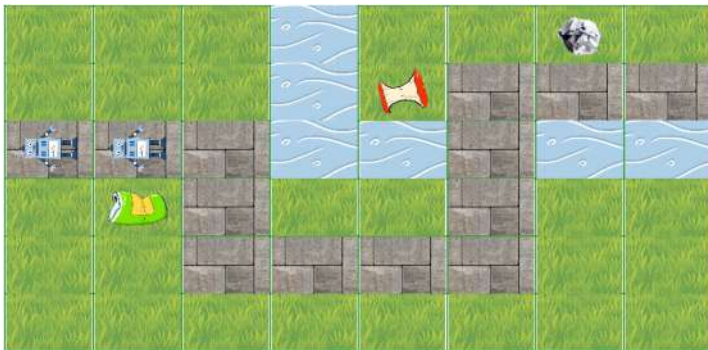


Cleanup Munich - München blitzsauber!¹

¹<https://cleanup-munich.de/>

Logic: Cleanup-Day

'**EcoBot**': autonomously navigate through the provided park layouts and clean litter on its way:



Exemplar scenario.

- **Cleaning action** (already implemented)
- **Moving through the park** (logic to be implemented by you)

General Information - Logic

Start and Deadline

- **Start: 16.12.2022, 18:30**
- **Deadline: 27.01.2023, 23:59**

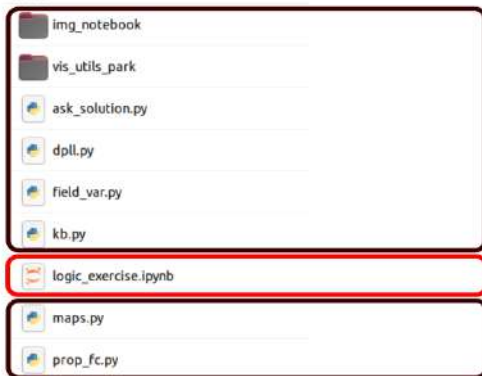
Framework:

- Publication, Guidelines, and Submission of the exercise on **ARTEMIS** (<https://artemis.ase.in.tum.de/>)
- Logic Exercise introduction on **Moodle**
- Implementation of your solution in provided **Jupyter Notebook**
- Successful submission → **1 Bonus Point**

Programming Framework - General

- Programming Language: **Python**
- Set up the exercise with **ARTEMIS** (similar to the CSP exercise)
- Exercise folder will be created in the [homework](#) folder
`foai22logic-<your_TUM_ID>`

Name



img_notebook

vis_utils_park

ask_solution.py

dpll.py

field_var.py

kb.py

logic_exercise.ipynb

maps.py

prop_fc.py

Provided Dependencies: don't modify**Exercise Notebook:** Implement here**Provided Dependencies:** don't modify

ARTEMIS - Implement and Submit Solution

- ① Start the *Jupyter* web-interface:
 - Docker: Go to <http://localhost:8888/> with your browser
 - Git: Enter `cd PATH_TO_YOUR_AIMA_DIRECTORY`, then `jupyter notebook` in your Terminal
- ② Find your exercises under `/homework/foai22logic-<your_TUM_ID>`
- ③ **Implement your solution** in `logic_exercise.ipynb`
- ④ **Submit** to ARTEMIS in your Terminal via git:
 - `git add logic_exercise.ipynb`
 - `git config user.email "<your.TUM@email.de>"`
 - `git config user.name "<Your Name>"`
 - `git commit -m "Write a commit message here."`
 - `git push`
- ⑤ **Check evaluation** on ARTEMIS

Questions

For questions regarding the exercise and/or ARTEMIS use the corresponding forum on [Moodle](#)



or attending our [Tutor Hour](#)

NOTE: Do Not post your code in the Forum