

Lab 2

Download the pset files in a .zip

[Download here a .zip file with the python files that you will need. \(lab2/lab_2.zip\)](#)

Introduction

There are two types of files in this lab.

- Some .py file(s).

These files contain the implementation of the functions used to control the robot. You will be completing/modifying certain parts of these files.

- Model/resource files.

.sdf, .obj and .npy are used to represent robots and point clouds.

.pddl files are used to encode symbolic planning problems.

How to do this Lab

There are two parts to this assignment. You should finish both of them by the start of your lab session next week. Both parts, including code you write before and during the lab, are due on Gradescope by **Monday November 19 at 10 pm. You only need to submit your code after the lab sessions.**

First, you will be implementing parts of the PDDLStream planner. **Use folder lab2_pddl in the provided zip file for this part of the assignment.** Please follow the instructions here:

[PDDLStream Planner \(lab2/pddl_stream.html\)](#)

Next, you will design a controller for opening the cabinet doors. This runs in a jupyter notebook in a docker container like Psets 1 - 3. You can view a static version of the notebook instructions [here \(lab2/lab2_open_cupboard.html\)](#). **Use folder lab2_opening_door in the provided zip file for this part of the assignment.**

To run the code, do this. (Make sure to have the bash script in your terminal's working directory, and specify the path to the lab_2 unzipped folder)

```
## use the notebook script for your system
./docker_run_notebook.sh drake-20181110 /path/to/lab2/lab2_opening_door/
```

For example if you have the lab_2 directory in the same parent directory as the docker_run_notebook.sh script, you can run:

```
## use the notebook script for your system
./docker_run_notebook.sh drake-20181110 lab_2/lab2_opening_door/
```

How to submit this Lab

Please go to 38-530 at the beginning of your scheduled time with your completed code. Bring your computers. The course staff will give you a checkoff for your assignment.

We will also use [Gradescope \(https://www.gradescope.com\)](https://www.gradescope.com) for collecting your code. There are no automated tests for this lab, but we will use Gradescope to view your code and give your checkoff grades.

Please note that you need to make **only one** submission for the lab.

Good luck and have fun!