MILESTONE 5

TASK MATRIX

Task	Completion	Ian	Dylan	Todo
Implement, test, and demo the Container Creation wizard	0%	0%	100%	
Implement, test, and demo the ability to delete and rename containers	100%	100%	0%	
Implement, test, and demo Test Suite based on requirements	75%	75%	0%	Add more edge-case tests
Conduct evaluation and analyze results	50%	50%	25%	Wait for user feedback to come in
Create poster for Senior Design Showcase and eBook page	50%	50%	50%	

CONTAINER CREATION
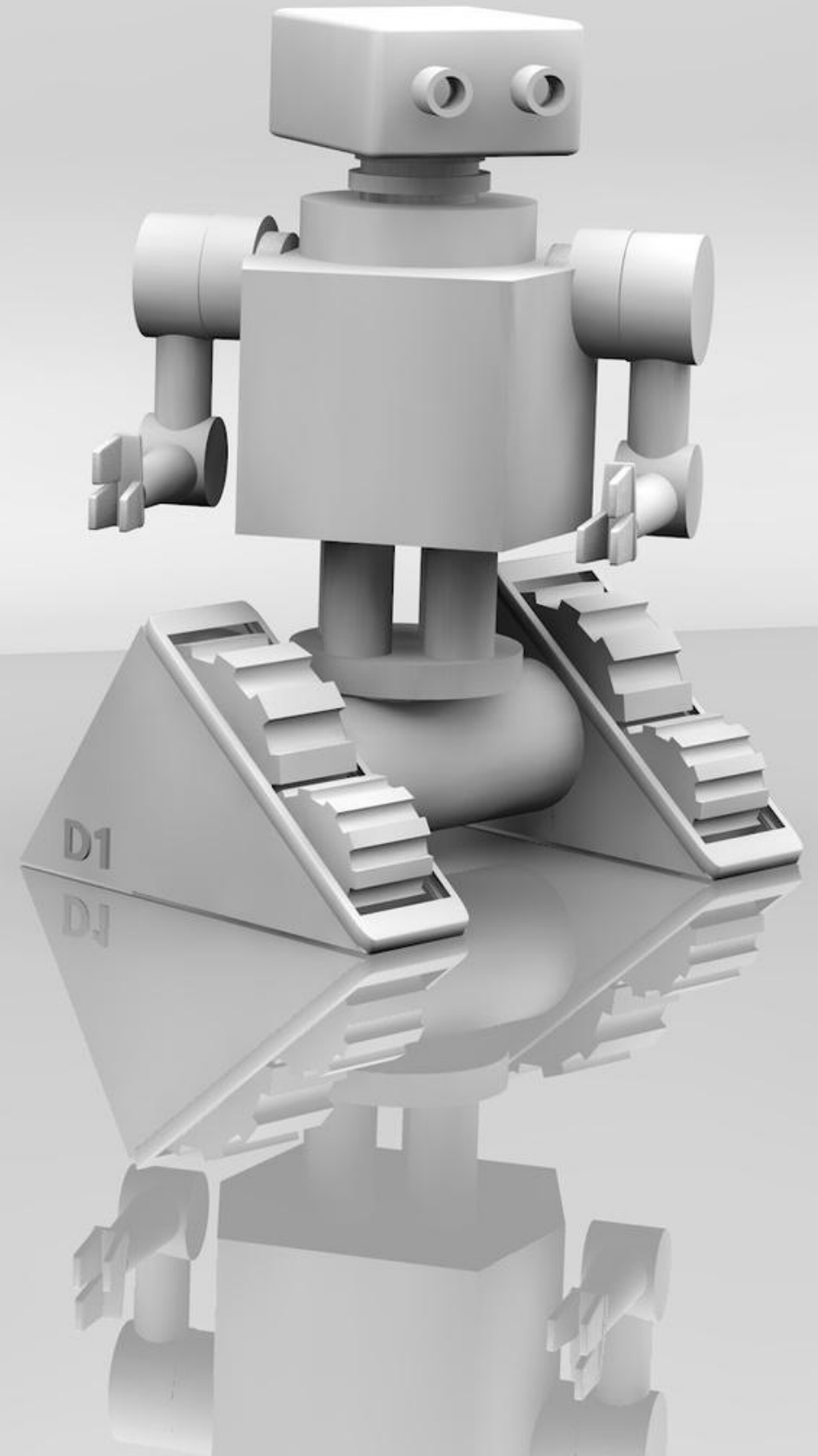
CREATION COMMANDS

- build-init
  - Prepares a directory for building
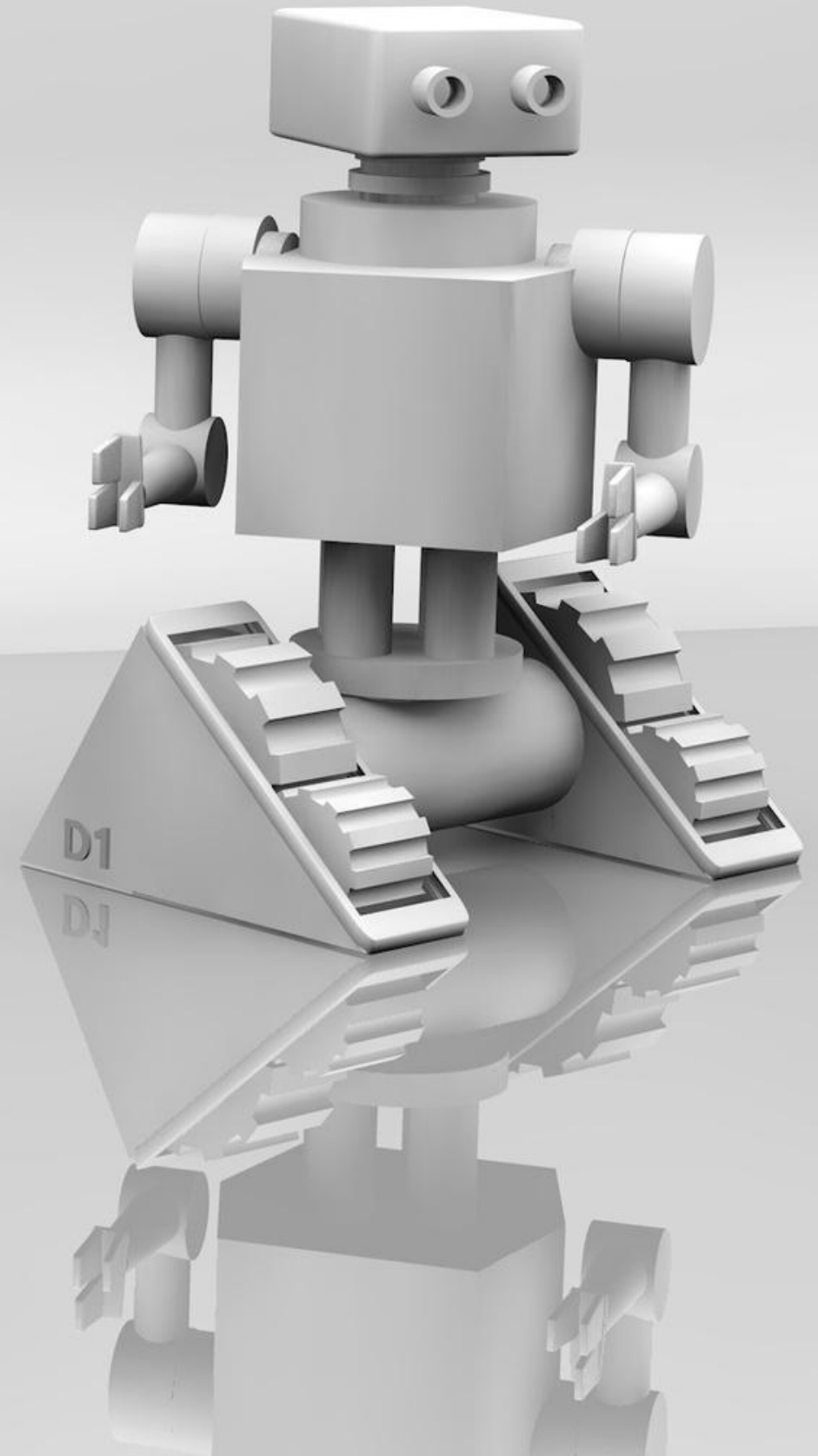- build
  - Creates a new container in an init'd directory

TOOLS USED

- QEMU
- [debootstrap](#)
- [guestfs-tools/libguestfs](#)

DEMO

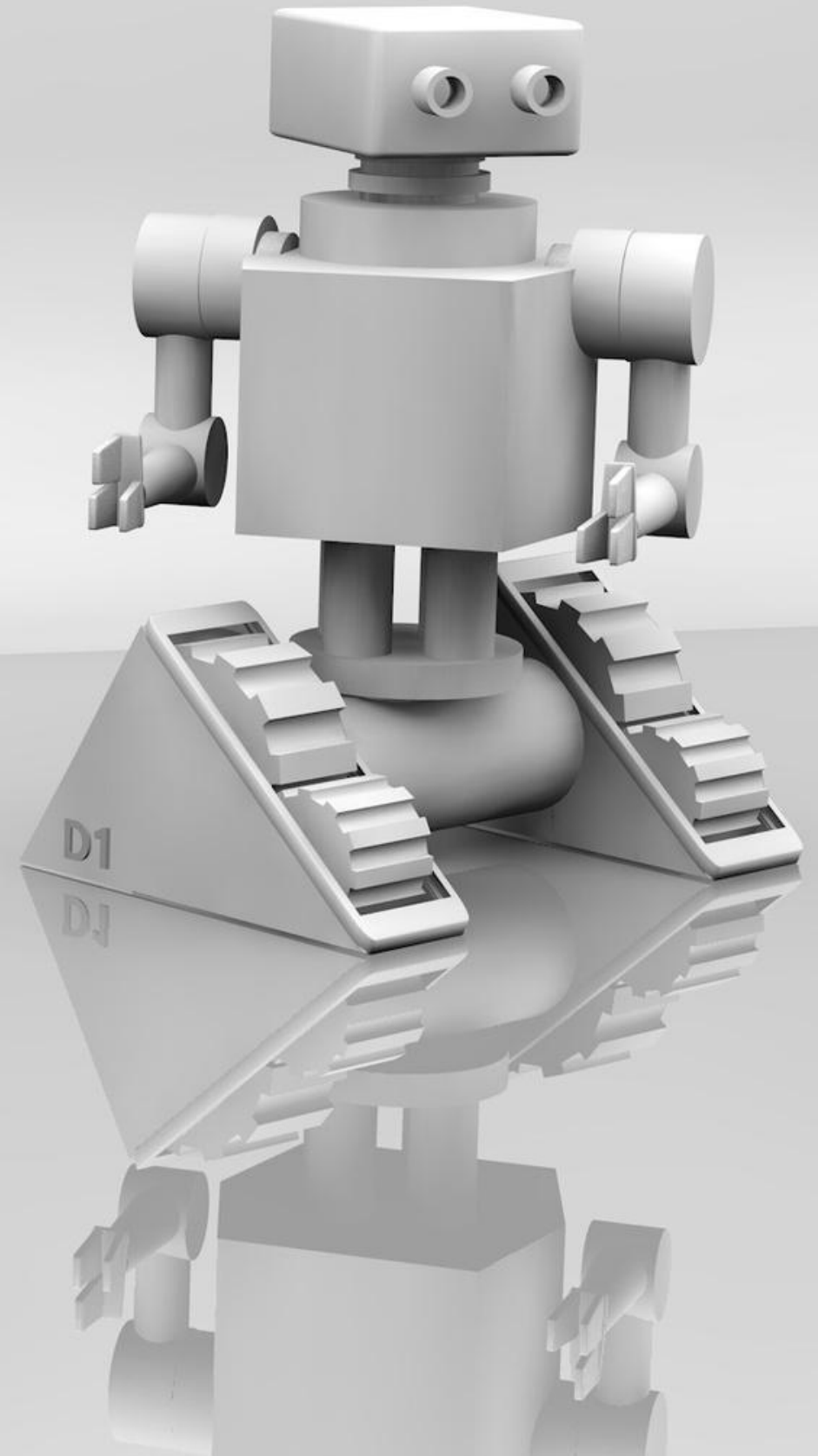https://youtu.be/4UQxMZL_CuM

DELETE/RENAME

NEW COMMANDS

- Delete
  - Deletes a container from the file system
- Rename
  - Changes the name of a container on the file system

TEST SUITE

WHAT IT IS

- Ran in Docker
- Calls pytest in the container
- Captures output and gives input using custom streams
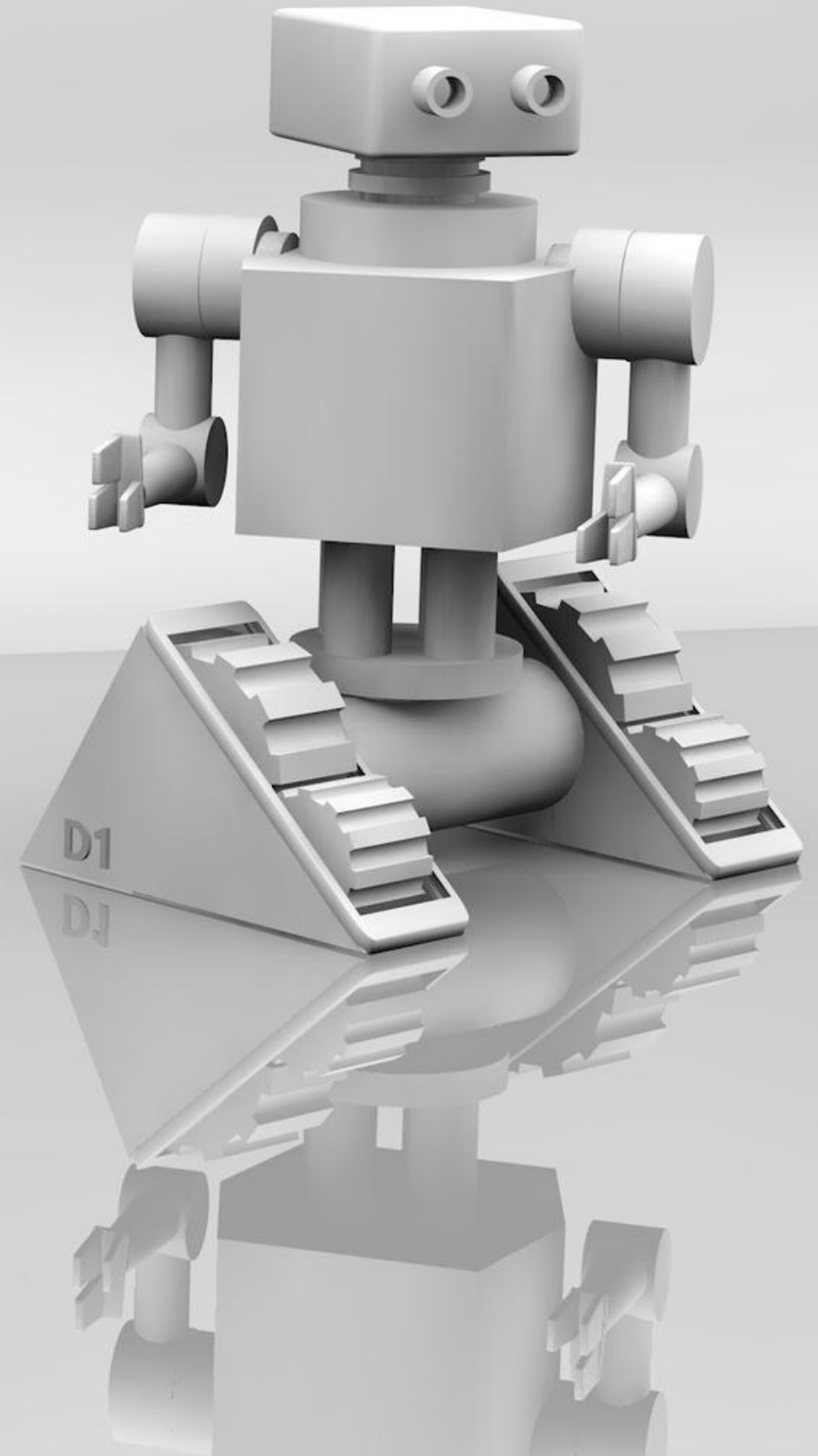- Tests check the basic requirements of the project

DEVELOPMENT ISSUES

- Ran into many issues while developing
  - Issues with inexperience with docker
  - Issues with custom streams
  - Issues with the run command
  - Crashing computer

FUTURE WORK

- Need tests for container creation and other course containers
- Need tests to deal with edge cases of some commands

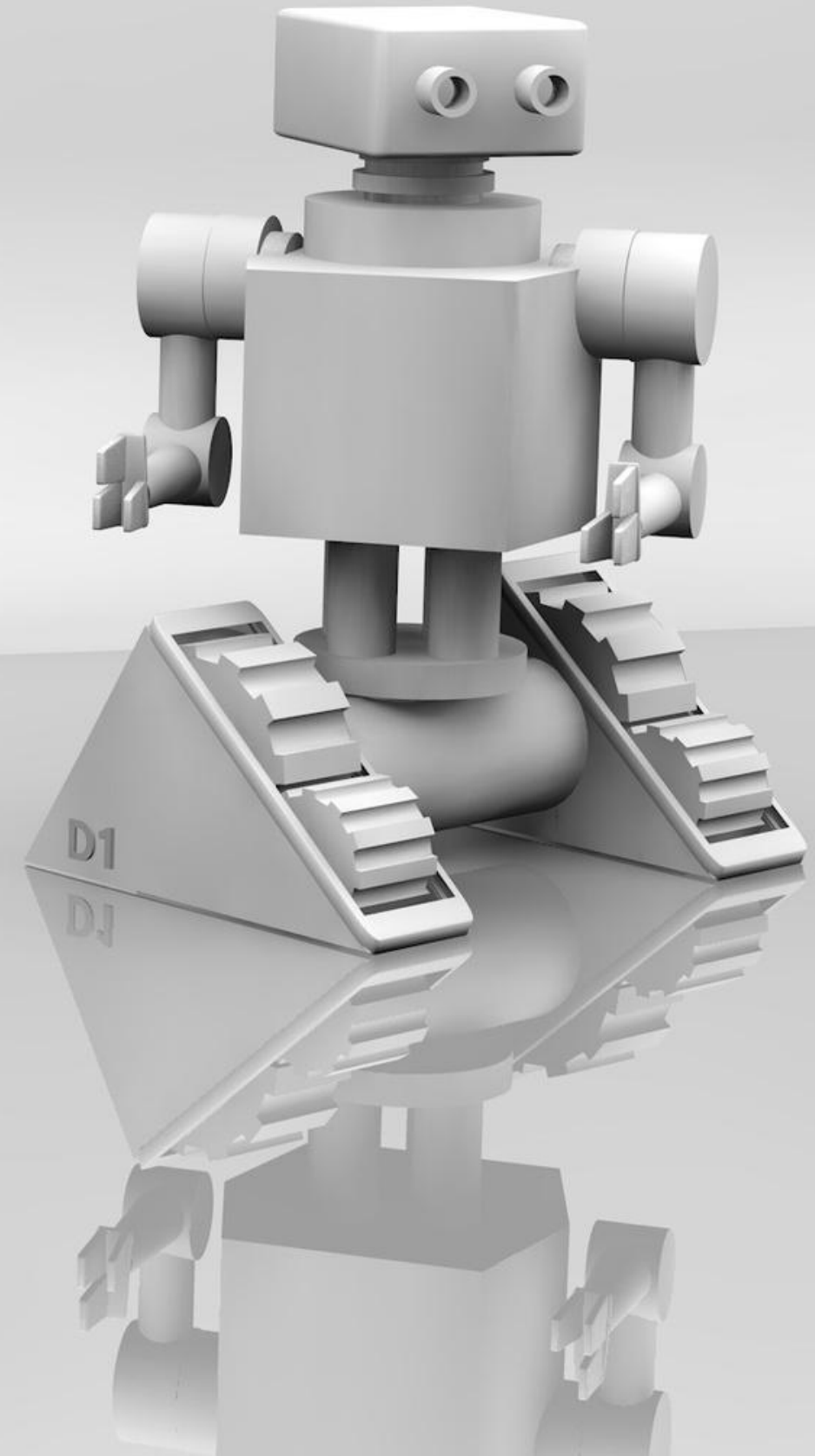# EVALUATION

PYTEST RESULTS

- Failure to run sparc-linux-gcc in Compiler Theory container
- Failure to upload container to server

```
test/test_help.py .                          [ 10%]
test/test_run.py .                           [ 20%]
test/test_put_get.py .                       [ 30%]
test/test_ct.py F..                          [ 60%]
test/test_many.py .                          [ 70%]
test/test_upload_download.py .F              [ 90%]
test/test_help.py .
```
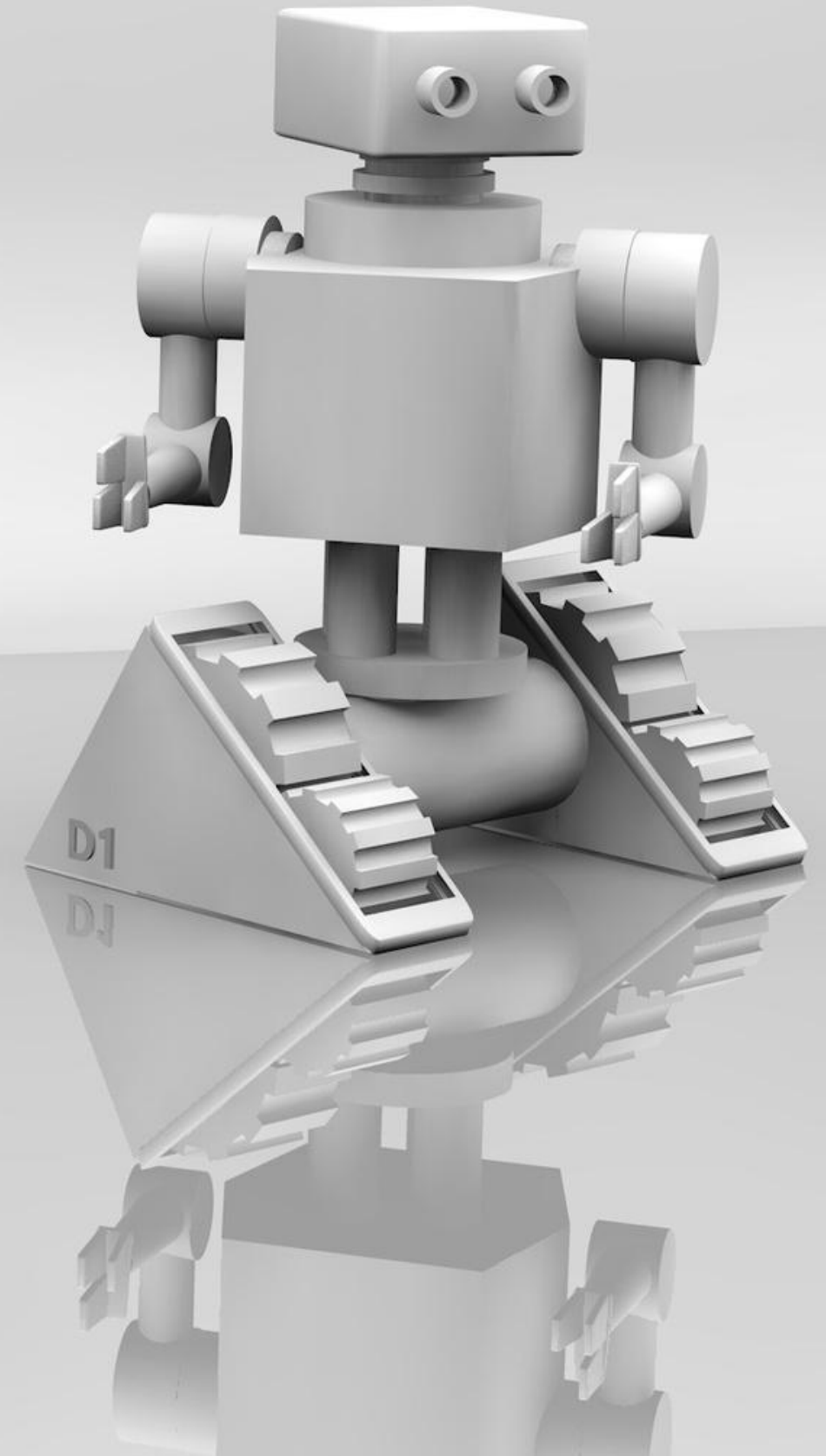
POSTER/EBOOK

POSTER

Open from web page

MILESTONE 6

NEW CONTAINERS

- Programming Language Concepts
- Operating Systems Concepts

TEST/DEMO

- Our tools should pass every test
- Need to fix bugs identified by test suite (or fix test suite)

EVALUATION

- Wait for Compiler Theory students to respond to our surveys.
- Complete Evaluation.

USER MANUAL

- Should detail all features of our tool
- Should be made to be read by both students and faculty

DEMO VIDEO

- Should feature all components of our system
- Could be used by students or faculty to learn how to use our tool

THANK YOU!