

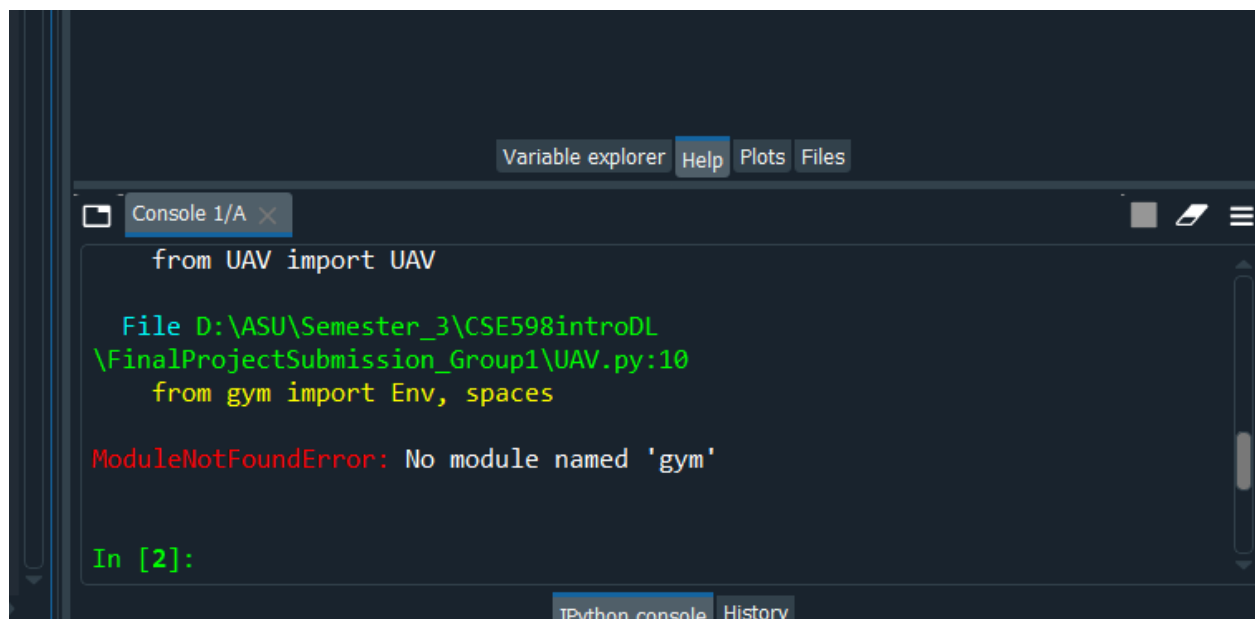
ReadMe: (Instructions to run the code for DQN Fully Observable)
by
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Step1: Unzip the files from Whitchurch_sandbox onto your system

| Name | Date modified | Type | Size |
|------------------|------------------|-------------|--------|
| __pycache__ | 02-12-2022 17:59 | File folder | |
| drone_basic | 09-10-2022 12:04 | PNG File | 104 KB |
| moving_obstacle | 19-11-2022 17:06 | PNG File | 3 KB |
| obstacle | 09-10-2022 12:04 | PNG File | 1 KB |
| sandbox_1 | 09-10-2022 12:04 | Python File | 2 KB |
| target_basic | 09-10-2022 12:04 | PNG File | 21 KB |
| UAV | 01-12-2022 09:56 | Python File | 21 KB |
| variant1 | 02-12-2022 18:03 | Python File | 16 KB |
| variant1_failure | 02-12-2022 18:02 | Python File | 16 KB |
| variant2 | 02-12-2022 18:04 | Python File | 15 KB |
| variant2_failure | 02-12-2022 18:02 | Python File | 15 KB |

Step 2: Open an IDE of your choice: [I used Spyder 4.2.5] for my dev work in Anaconda

Step 3: Open one of the Test run files: variant1.py and try running it. You will get an message saying 'gym' is not installed [gym is open AI gym]



```
from UAV import UAV

File D:\ASU\Semester_3\CSE598introDL
\FinalProjectSubmission_Group1\UAV.py:10
  from gym import Env, spaces

ModuleNotFoundError: No module named 'gym'

In [2]:
```

Step 4:

```
>pip install gym==0.21.0
```

Step 5:

pip install opencv-python

Step 6:

```
pip install torch==1.12.1 torchvision==0.13.1 torchaudio==0.12.1
```

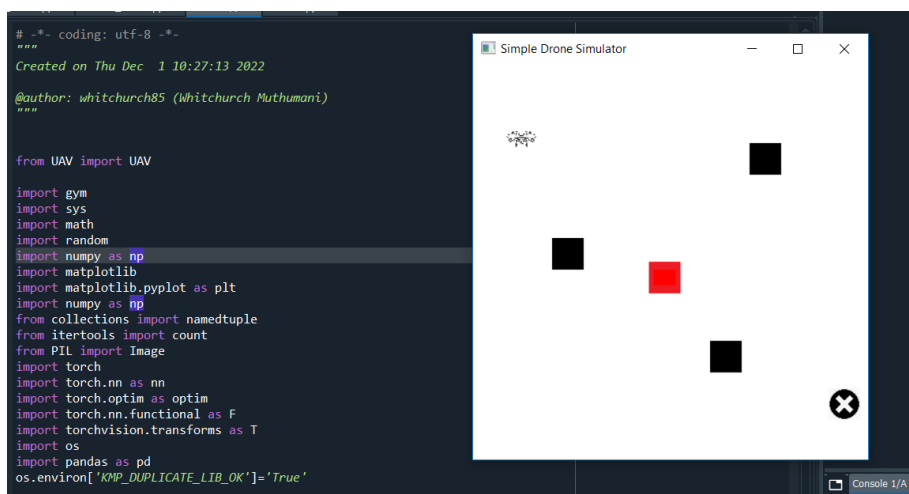
Step 7:

```
python -m pip install -U matplotlib
```

Step 8:

```
pip install pandas
```

Step 9: If successful, training will begin and the Drone World Open AI Gym environment will start



Step 10: Run all the scripts to view the plots from the report:

- Variant1.py
- variant1_failure.py
- Variant2.py
- varint2_failire.py