

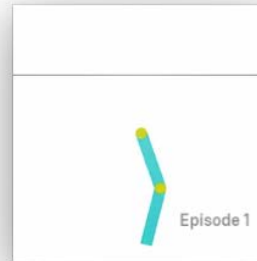
## Task W4 : Install OpenAI Gym environment <https://gym.openai.com/>

1. OpenAI Gym is a toolkit for developing and comparing reinforcement learning algorithms. It supports teaching agents everything from walking to playing games like Pong or Pinball.
2. We will use OpenAI Gym tool kit for exercise and term projects

[https://gym.openai.com/envs/#classic\\_control](https://gym.openai.com/envs/#classic_control)

- Algorithms
- Atari
- Box2D
- **Classic control**
- MuJoCo
- Robotics
- Toy text
- Third party environments

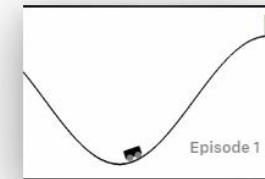
Classic control  
Control theory problems from the classic RL literature.



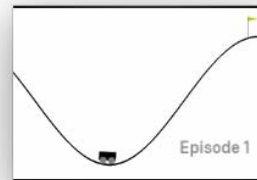
Acrobot-v1  
Swing up a two-link robot.



CartPole-v1  
Balance a pole on a cart.



MountainCar-v0  
Drive up a big hill.



MountainCarContinuous-v0  
Drive up a big hill with continuous control.



Pendulum-v0  
Swing up a pendulum.

<https://gym.openai.com/envs/#mujoco>

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MuJoCo

Continuous control tasks, running in a fast physics simulator.



Ant-v2  
Make a 3D four-legged robot walk.



HalfCheetah-v2  
Make a 2D cheetah robot run.



Hopper-v2  
Make a 2D robot hop.



Humanoid-v2  
Make a 3D two-legged robot walk.



HumanoidStandup-v2  
Make a 3D two-legged robot standup.



InvertedDoublePendulum-v2  
Balance a pole on a pole on a cart.



InvertedPendulum-v2  
Balance a pole on a cart.



Reacher-v2  
Make a 2D robot reach to a randomly located target.



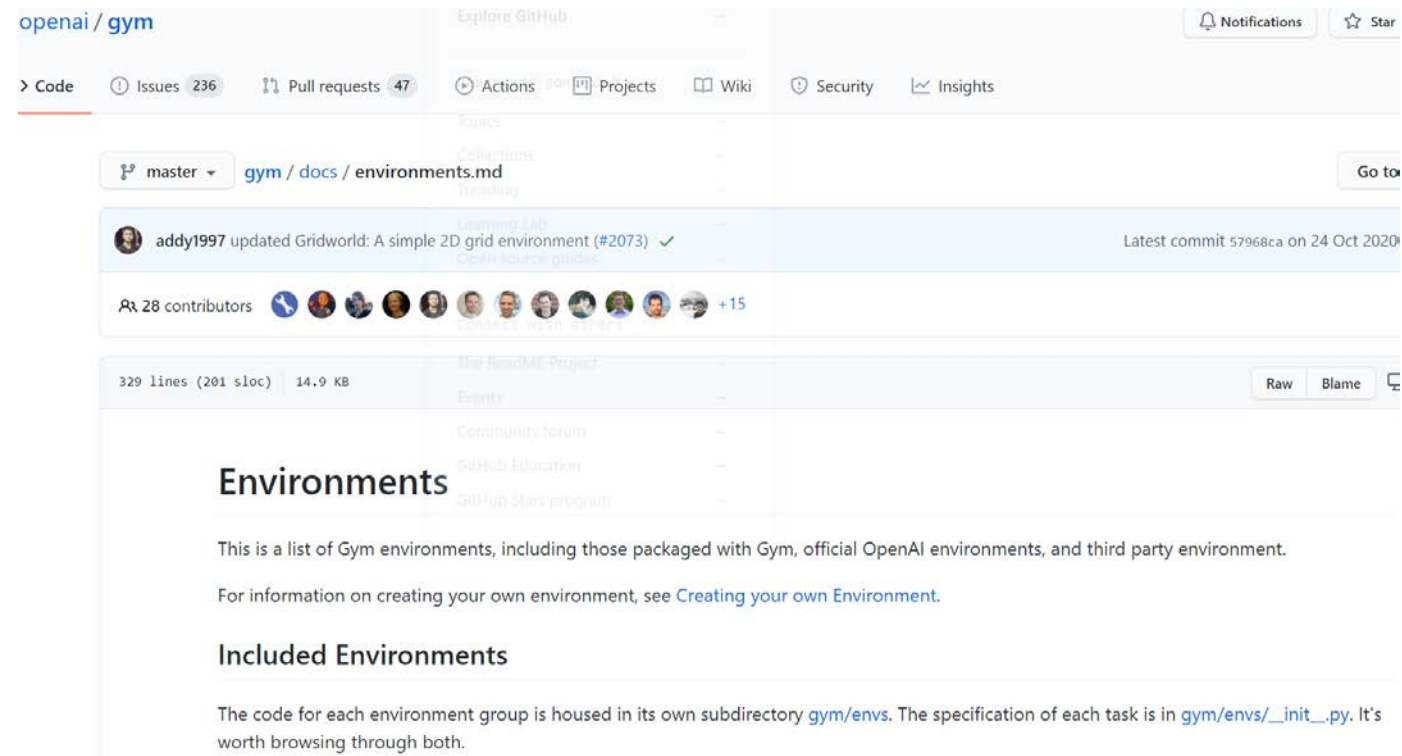
Swimmer-v2  
Make a 2D robot swim.



Walker2d-v2  
Make a 2D robot walk.

<https://github.com/openai/gym/blob/master/docs/environments.md#third-party-environments>

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### Gridworld: A simple 2D grid environment

The Gridworld package provides grid-based environments to help simulate the results for model-based reinforcement learning algorithms. Initial release supports single agent system only. Some features in this version of software have become obsolete. New features are being added in the software like windygrid environment.

Learn more here: <https://github.com/addy1997/Gridworld>