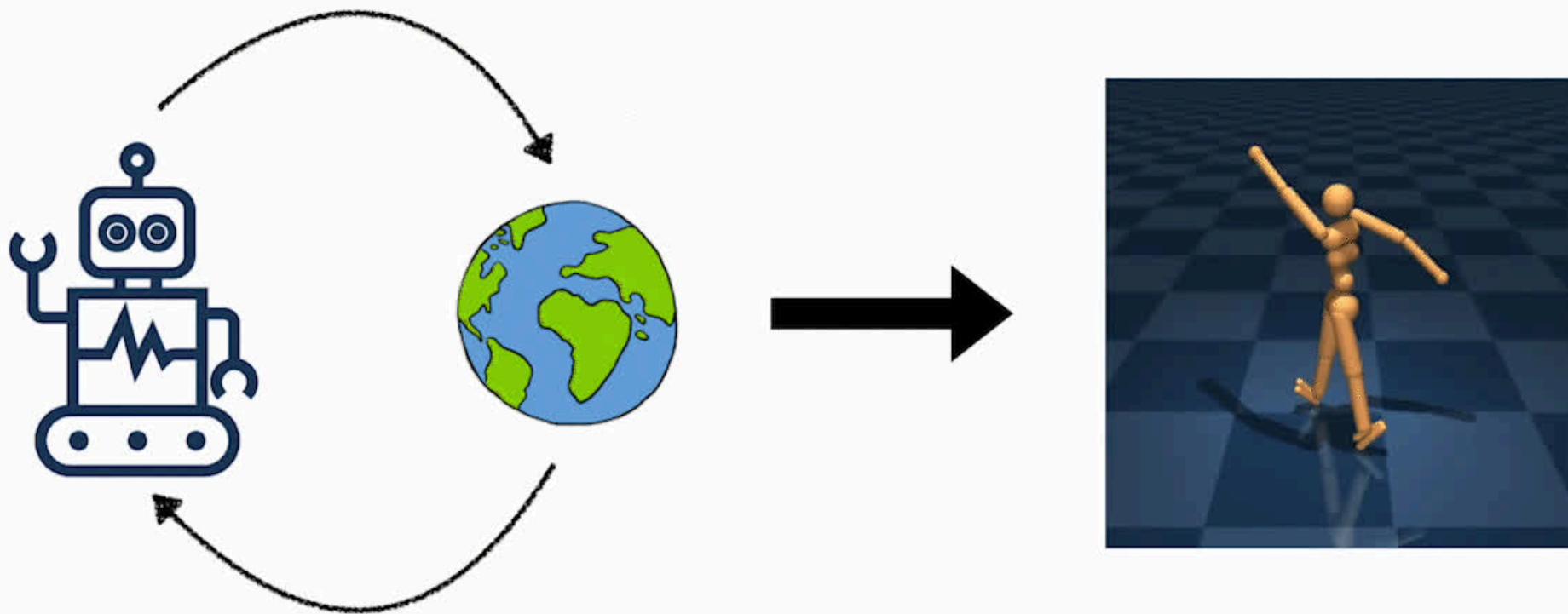


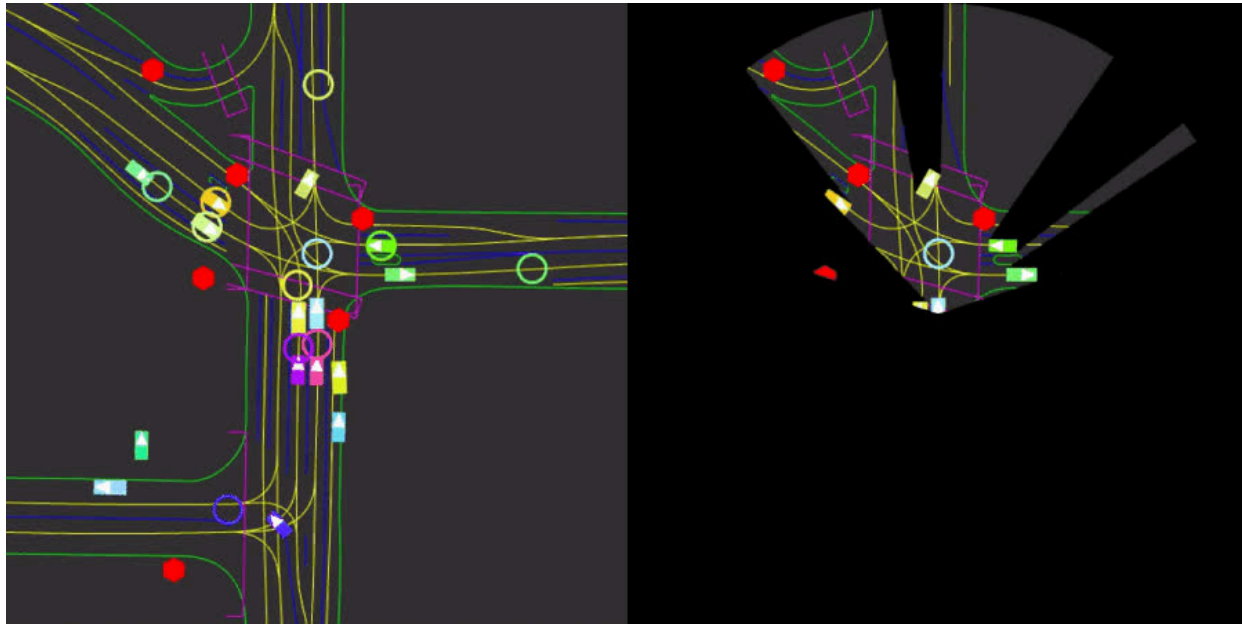
Reward Rush

- A Month-long hands-on competition to learn and apply Reinforcement Learning.
- **Goal:** Train agents across multiple Gymnasium environments.
- Participants compete to achieve the highest rewards & demonstrate understanding.
- **Open to all years &** teamwork encouraged (2 members at most).

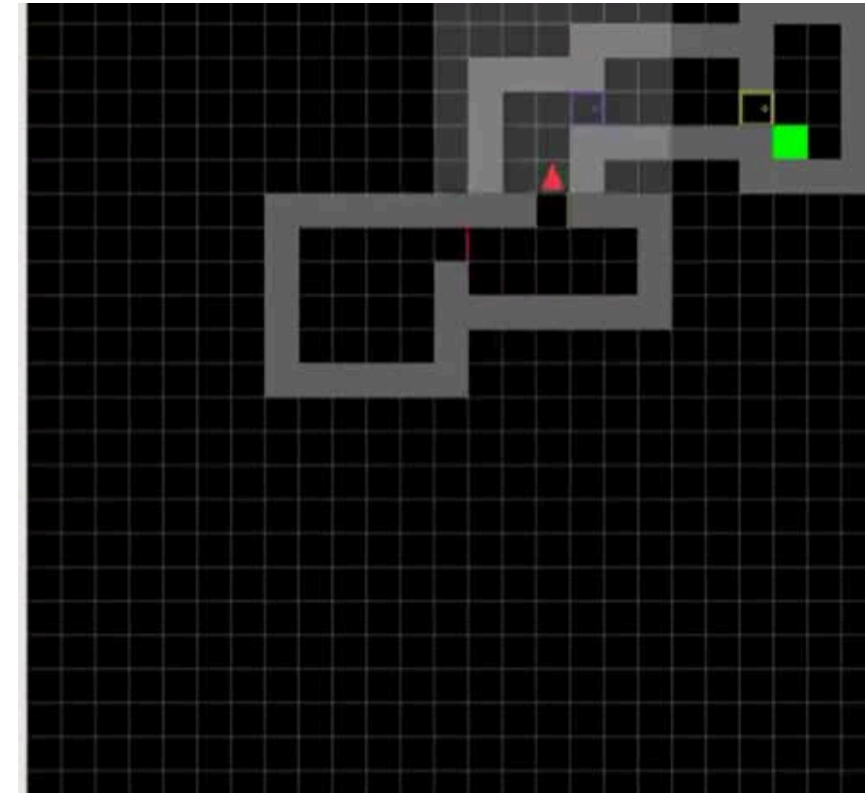
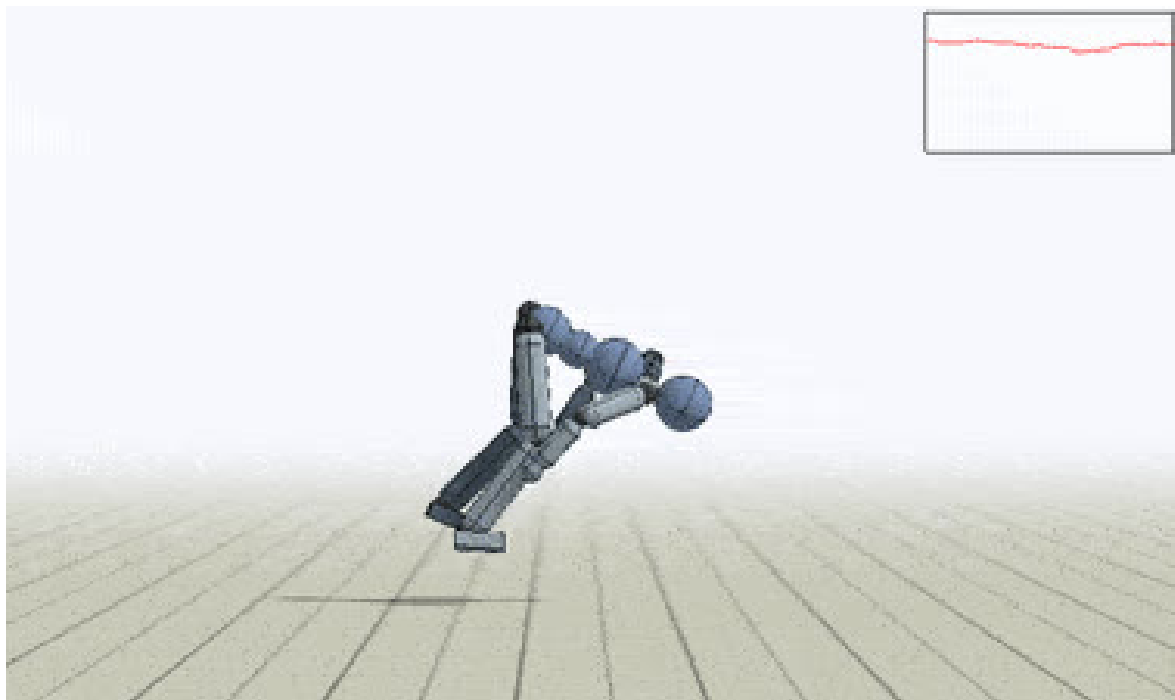


Bots Hitting the Gym (Literally)

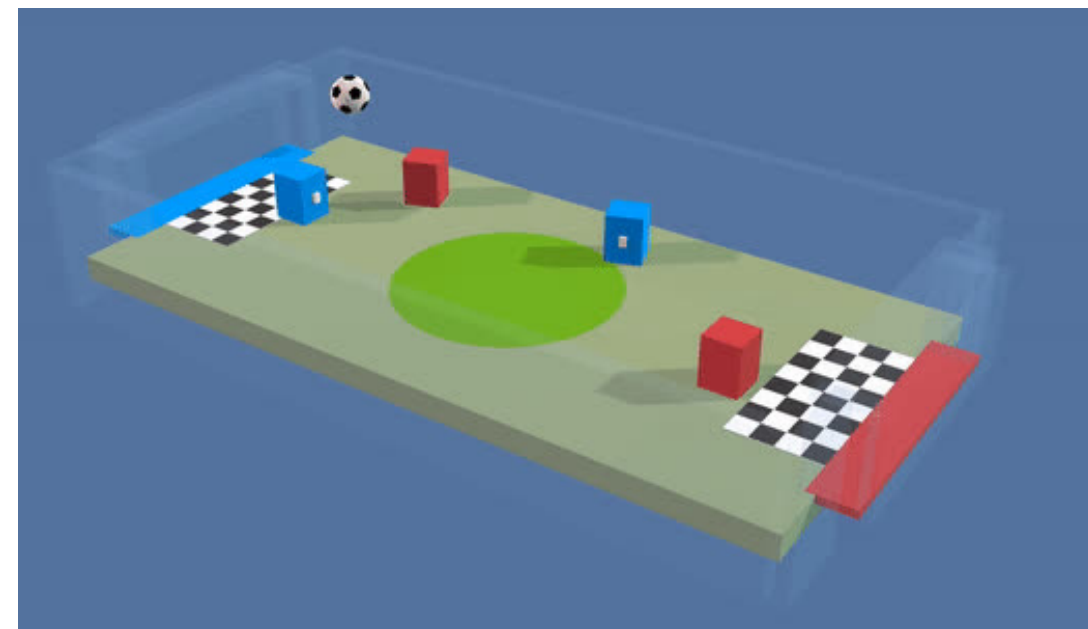
Sensor-Driven
Interaction &
Navigation Tasks



Complex Motion &
Locomotion Tasks



Minimalistic gridworld
environment for OpenAI
Gym



Physics-based
Continuous Control
Environments

Challenge Timeline





Competition Structure & Rules

Environments

- **Easy:** FrozenLake, Taxi
- **Medium:** Slippery FrozenLake, LunarLander, CartPole, MountainCar Continuous
- **Hard:** HalfCheetah, Walker
- **Very Hard :** Humanoid

Frozen Lake

Frozen Lake involves crossing the lake while avoiding **Holes** and reaching the **Goal Point** with a Possibility of **Slipping**.

You will have to train **2 agents**:

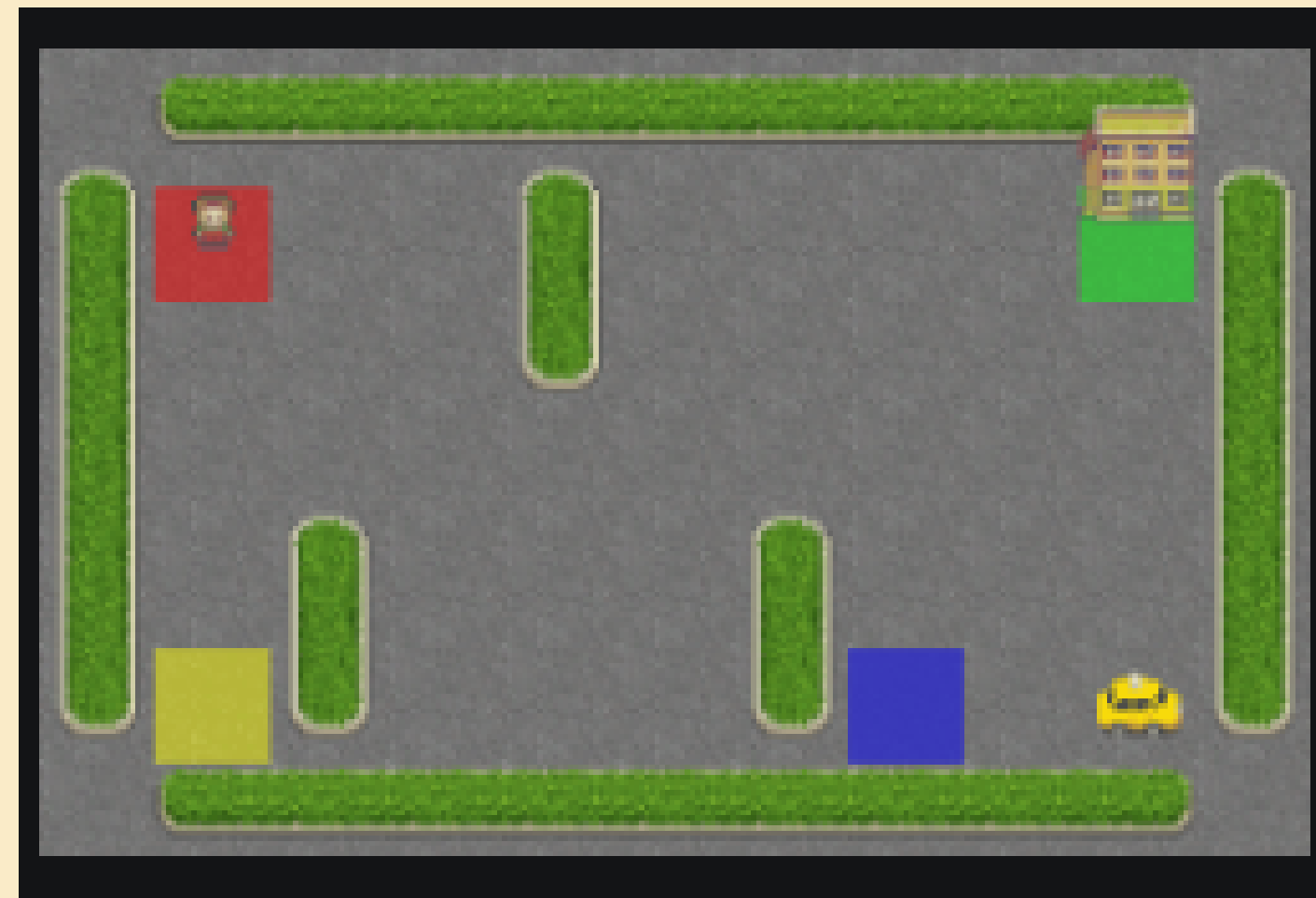
1. No slipping
2. Slipping Probability of **33%**



Taxi

The taxi starts off at a random location in the **5x5 grid** with passenger at one of the designated locations.

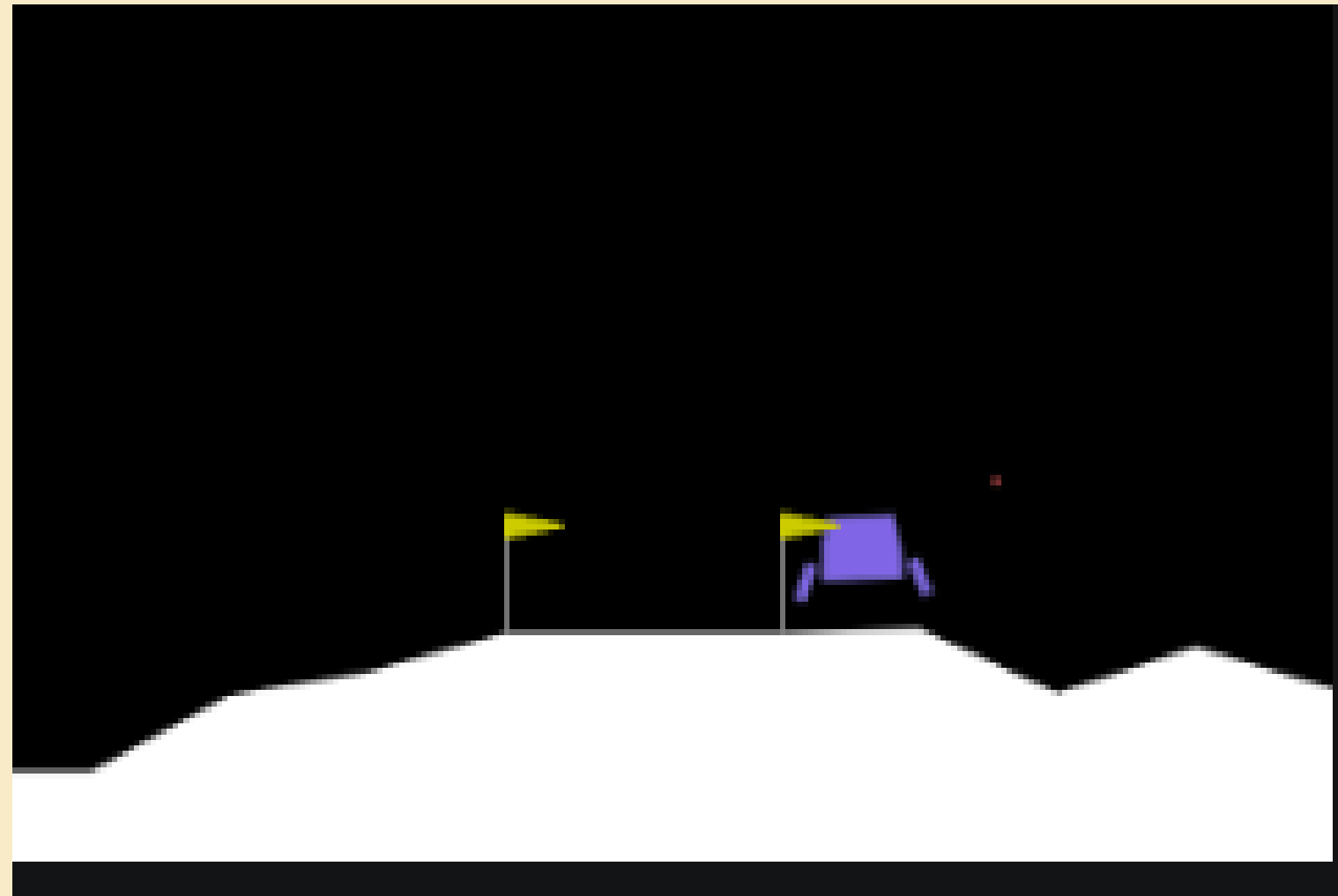
Your task is to Pick up the passenger and drop at **random** the goal location.





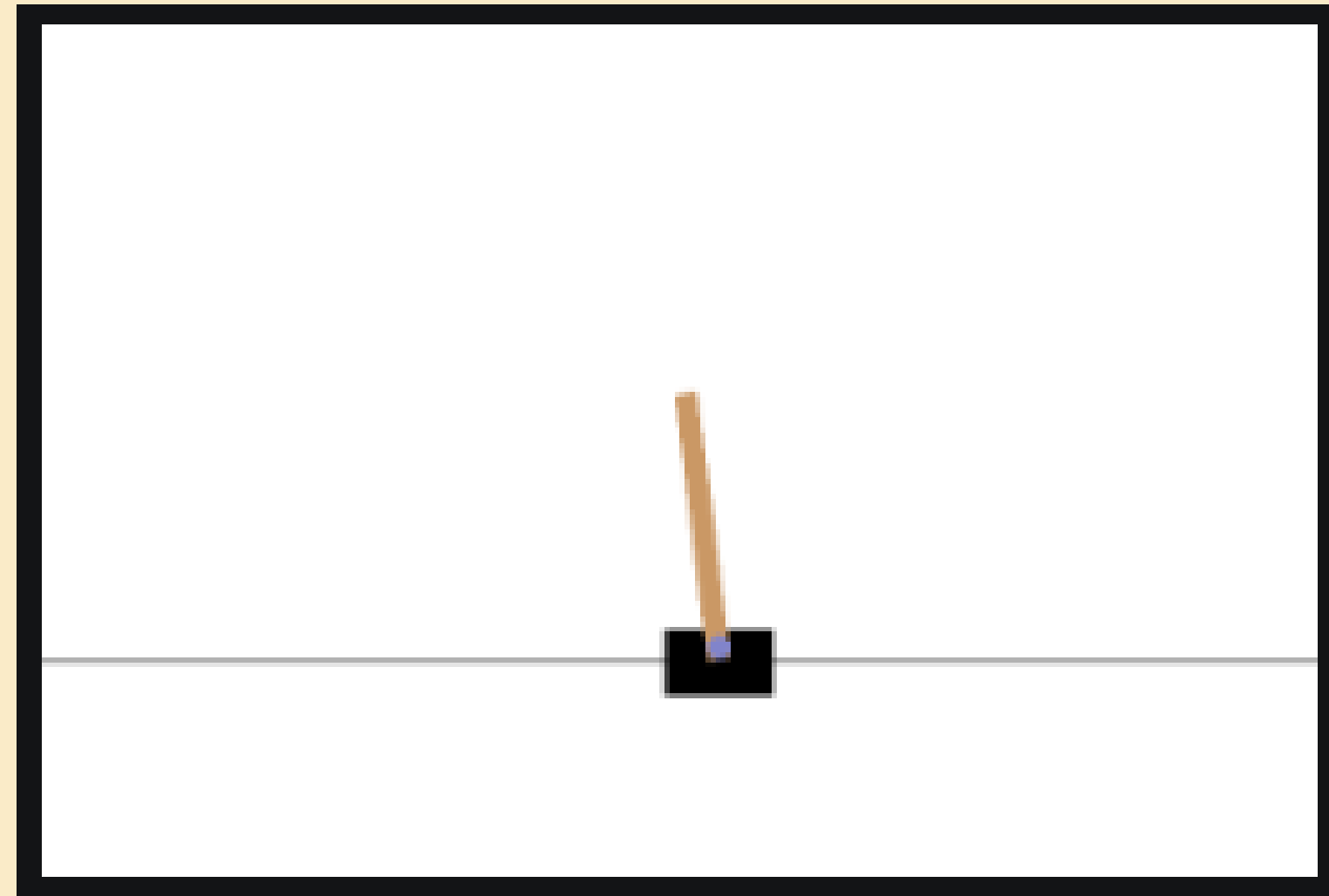
Lunar Lander

Your goal is to train an agent to land the rocket in the designated area using the **3 thrusters**





CartPole



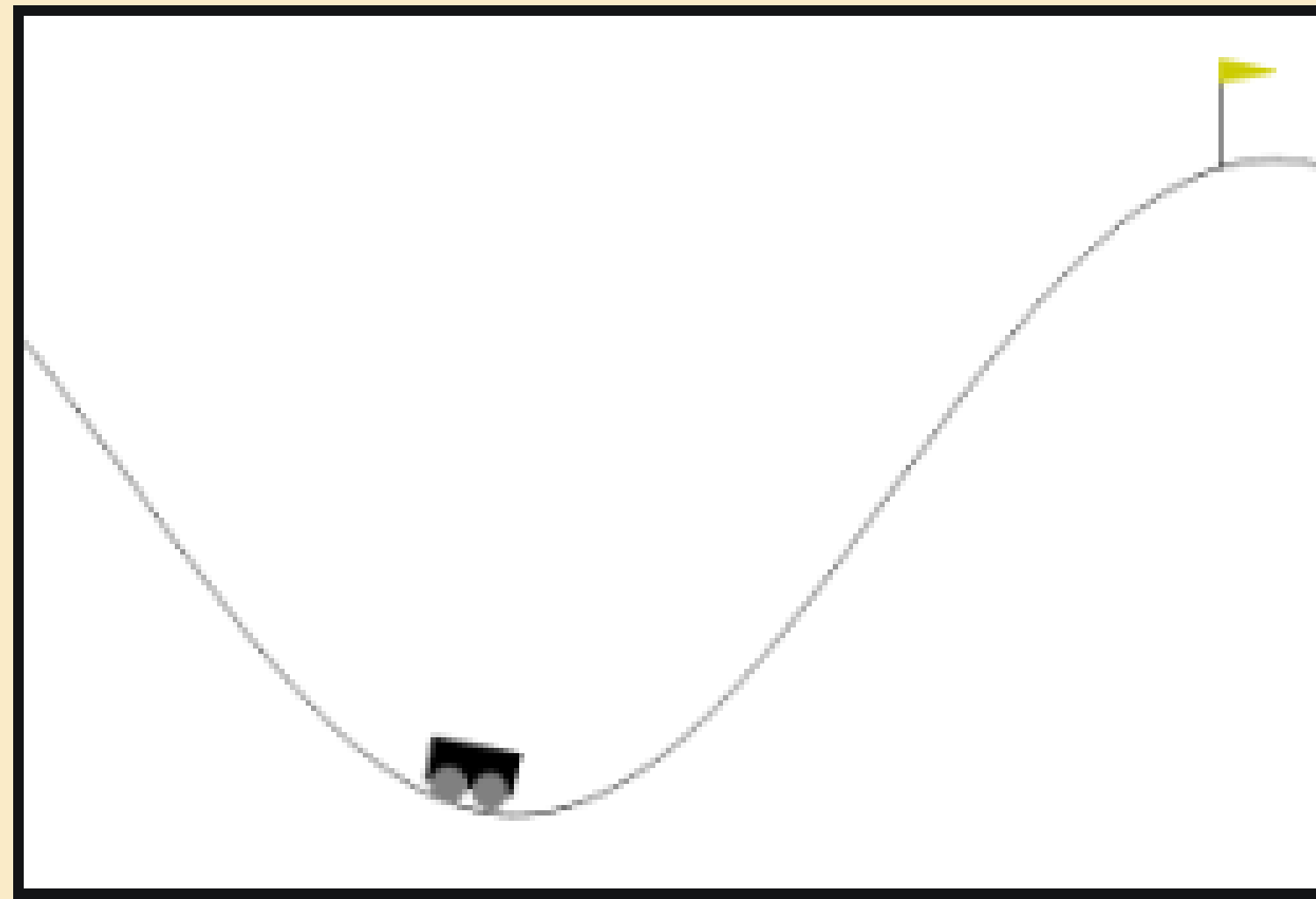
Balance a Pole on a Cart on a frictionless surface
by moving the cart either **left or right**



Continuous Mountain car

Reach the top of the Sinusoidal valley by accelerating either in left or right directions

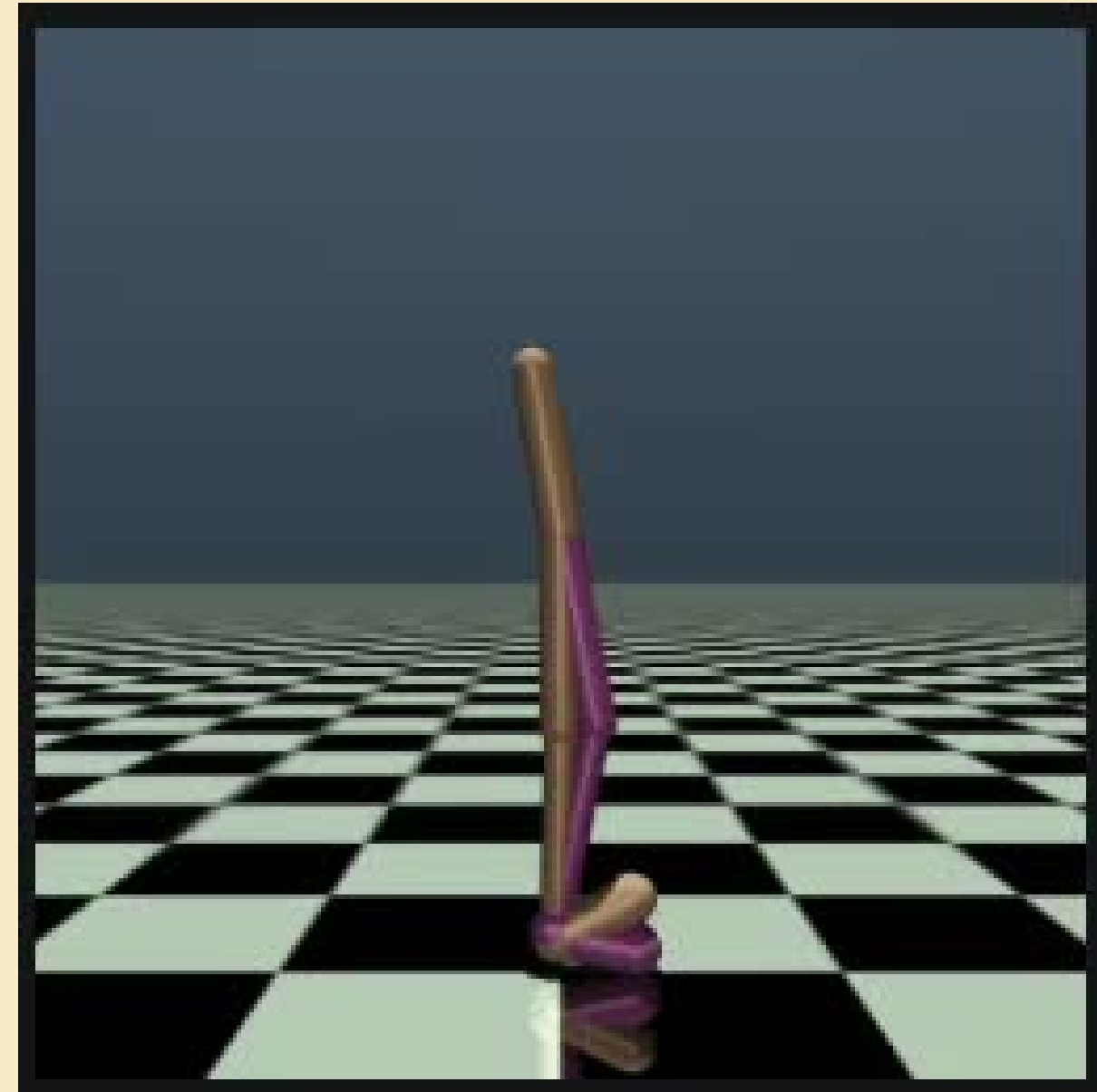
Note: The action space is not fixed



Walker

The walker is a 7 body parts - **6 Hinge** Bipedal robot

Your goal again is to train an agent to make it move **rightwards** by applying torque on the hinges

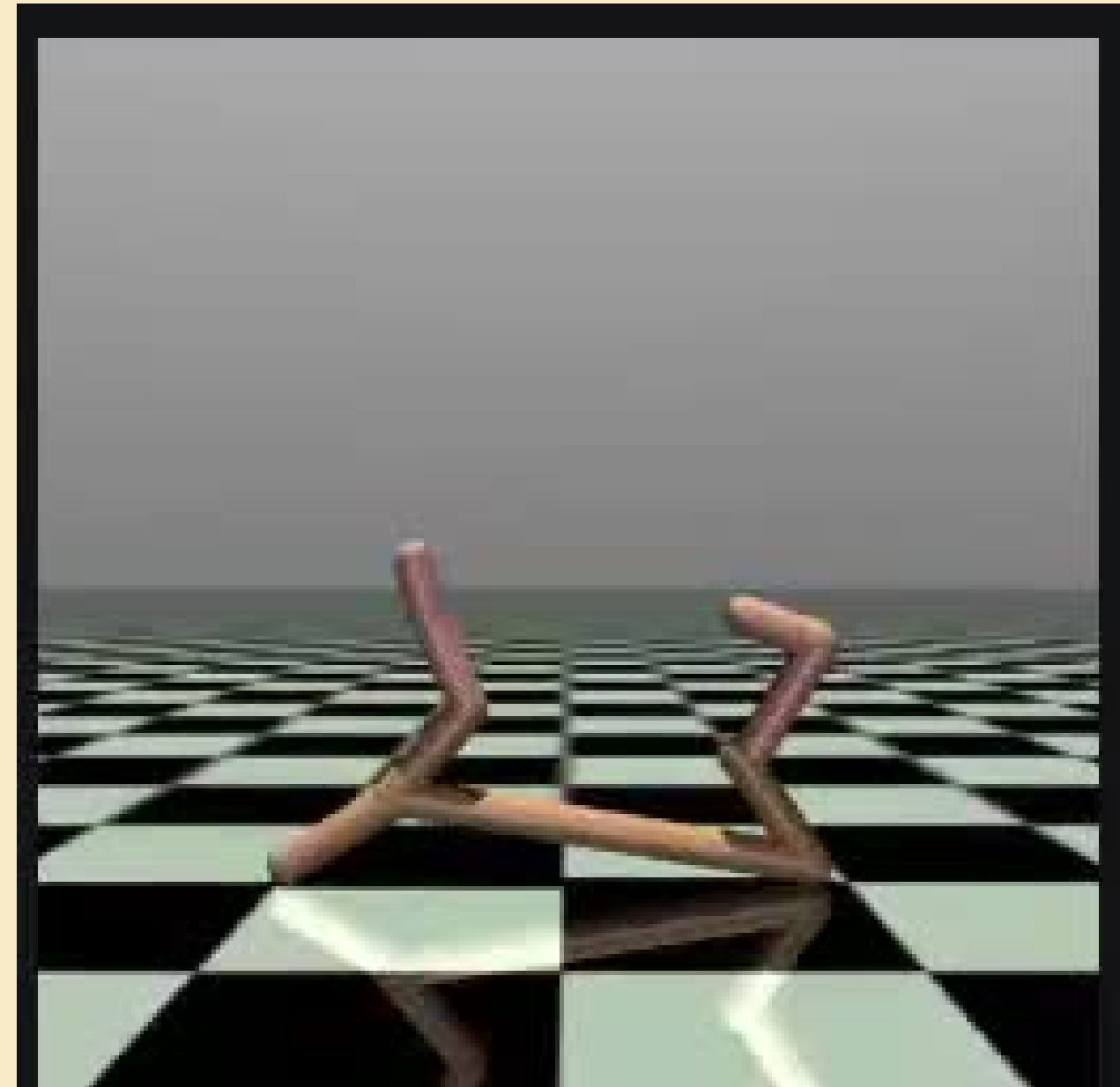




HalfCheetah

The half cheetah is a 2-D robot with 9 parts and **8 joints**.

Your Goal is to make the cheetah move **rightwards** as **fast** as it can by applying torque at the joints

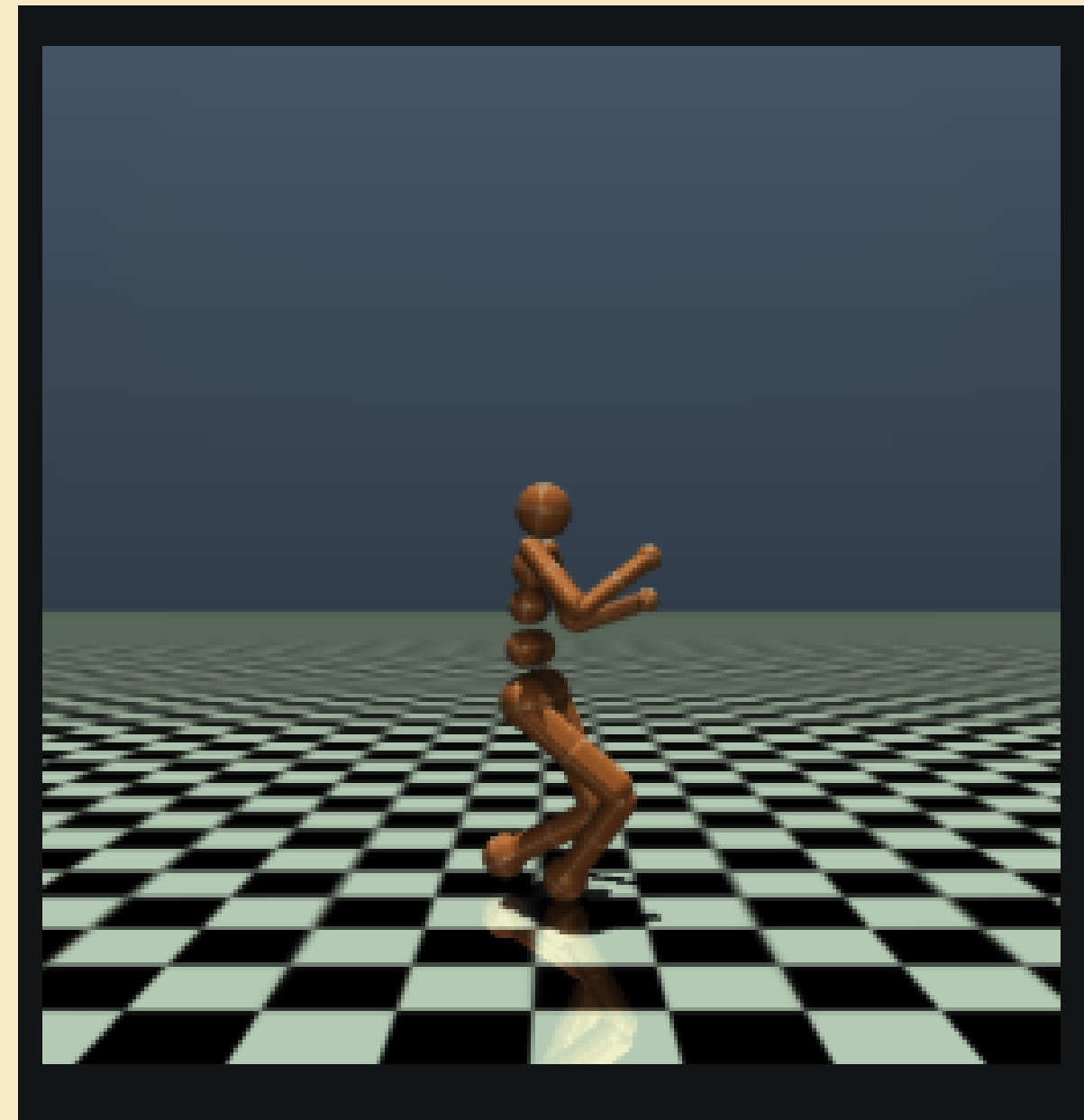




Humanoid

The Humanoid is a 3-D Bipedal robot with **17 hinges**.

Your Goal is to walk forward without falling as fast as possible by applying torques at the hinges





Competition Structure & Rules

For Participants

- **Freshers:** Solve Easy + Medium + report from each category
- **2nd/3rd years:** Solve Easy + Medium + Hard
- Optional bonus: Attempt Very Hard for special mention Submission
- Submit trained models via HuggingFace repo link
- Leaderboard evaluates your models
- Reports judged on understanding + insights + innovation