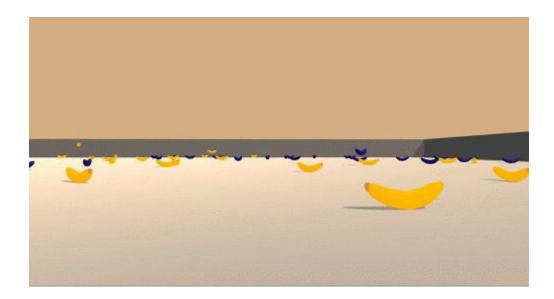
The Environment

For this project, we will train an agent to navigate (and collect bananas!) in a large, square world.



A reward of +1 is provided for collecting a yellow banana, and a reward of -1 is provided for collecting a blue banana. Thus, the goal of your agent is to collect as many yellow bananas as possible while avoiding blue bananas.

The state space has 37 dimensions and contains the agent's velocity, along with ray-based perception of objects around the agent's forward direction. Given this information, the agent has to learn how to best select actions. Four discrete actions are available, corresponding to:

- **0** move forward.
- **1** move backward.
- **2** turn left.
- **3** turn right.

The task is episodic, and in order to solve the environment, your agent must get an average score of +13 over 100 consecutive episodes.

Getting Started

- 1. Download the environment from one of the links below. You need only select the environment that matches your operating system:
 - o Linux: click here

o Mac OSX: click here

Windows (32-bit): <u>click here</u>Windows (64-bit): <u>click here</u>

(*For Windows users*) Check out <u>this link</u> if you need help with determining if your computer is running a 32-bit version or 64-bit version of the Windows operating system.

(*For AWS*) If you'd like to train the agent on AWS (and have not <u>enabled a virtual screen</u>), then please use <u>this link</u> to obtain the environment.

2. Place the file in the working directory, and unzip (or decompress) the file.

Instructions

Follow the instructions in *Navigation-Final.ipynb* to get started with training your own agent!