**Setting up the project**

* Install Python
* Upgrade pip
* Download the LF2 environment from this GitHub repo or from this link <https://github.com/elvisyjlin/lf2gym>
* Execute the setup.sh script
* pip3 install -r requirements.txt
* Run the python files inside the ‘example’ folder. With python test.py

If there are packages missing, manually install those packages with pip install

* Install the Tensorflow Framework with ‘pip install tensorflow’
* Install the KERAS Framework with ‘pip install keras’

**Setting up the KERAS Model**

Considerations:

* The input will be a **1 x state space vector (LF2’s Action Space is from 0 to 21)** and there will be an **output neuron for each possible action** that will predict the Q value of that action for each step.
* By taking the argmax of the outputs, we can choose the action with the highest *Q* value, but we don’t have to do that ourselves as Keras-RL will do it for us.

To do:

1. Define KERAS RL Memory
2. Define KERAS RL Policy
3. Create KERAS DQN Agent

<https://hub.packtpub.com/build-reinforcement-learning-agent-in-keras-tutorial/>