banyanunity

Overview

This package allows two-way communication with your Unity project and the outside world. Using sockets, you can flawlessly receive and send messages with any machine running on a Banyan network. This will allow your game to not only be affected by real-world actions but also trigger them via Arduinos or Raspberry Pis.

For more information see this extended guide.

Prerequisites

Python 3 install

Go to the Python 3 Install Page and scroll down to the bottom of the page. Choose your install type, and install. Make sure to add Python to the PATH!

Banyan install

To install Banyan on your machine, just open a command shell in Windows by pressing the Windows button and typing **cmd**. Since Python 3 comes with Pip, use pip to install Banyan. Just type in the command shell: `pip install python-banyan`

Unity install

Go to the Unity Store Page and choose the type of Unity you will use. Follow Unity's instructions on how to install the version of Unity you selected.

Script documentation

Unitygateway.py

This script uses Banyan to constantly listen to messages with the topic of send_to_unity, and forward those messages to Unity. It sends the message to Unity by opening a socket encoding the message, then after sending the message it will close the socket.

Unitylistener.py

This script receives messages sent by Unity, by listening to the port 5001 on a socket. Once Unitylistener.py decodes the message, it sends the message to the backplane witht he topic of receive_unity_message.

test_unity_sender_cube.py

This script uses Banyan to send two messages with the topic of send_to_unity. Each topic is in a

dictionary format, which is eventually comverted to JSON once sent.