Mon 11/21/2016

Wed 11/16/2016

Goals

\* try to use the numpy only audio processing filters ..

Lets get the code that record from the microphone and plots the result

And then apply a filter (low pass or high pass) and plot the result...

Wed 11/10/2016

Goals --

\* try to understand what audioprocessing we need to do

Links:

\* butterfield filter ..

https://www.mathworks.com/help/signal/ref/butter.html

\*

Wed 11/2/2016

Goals for today ...

\* verify that the game works on Zimu's computer... YES

\*

Next steps

Blender game ISSUES

\* it is not clear when the user is supposed to talk and when the system is recording or not ..

Wed 10/26/2016

Goals for today --

\* review low-pass filter code (looks good!)

\* start writing python controller which reads from both microphones

And attach it to a blender sensor for when the robot descends..

We got record4.py to read from one microphone and do some analysis and

Send data back to Blender...

Remaining goals:

1) get algorithm working, not in Blender, just in Python

2) make the game better ..

\* need better cues for the user

\* need interesting animations to make it more fun ...

Mon 10/10/2016

Last time we got pyaudio to work recording from a microphone,

But one of the microphones isn't working and we don't know how to

Process the data that it generates...

We seem to have something that looks like it is working!!

But it would be good to test with graphs..

We used pyplot to plot the data

Next steps --

* Tim gets a new microphone
* We test it in python with two microphones and graph the data and make sure its accurate...
* Look at the 2D game and findout exactly what the algorithm is
  + I remember something about a low filter ...
* We load this into a Blender python module and get blender to respond
* Then we make the game more fun!!
* And we're done with the first version!!!

Next meeting is Wed 10/17

Goal is to have a working version of the game with the microphone and correct algorithms by 11/1

Wed 9/21/2016

We spent an hour and came up with this line

export PYTHONHOME="/Library/Frameworks/Python.framework/Versions/3.5/"

We needed to upgrade the system version of Python to the same one that blender uses, 3.5.2

Then we went to the folder where the blender app blender.app/Contents/MacOS/blender

And we linked in the new version, python3 with the symbolic link python

ln -s python3 python

Then set the path to look first in the current folder before looking elsewhere

export PATH=".":$PATH

Then we moved the installed version of python to /tmp (just to get it out of the way)

By going to the Contents/Resources/lib folder and

mv python /tmp

Then we visited pyaudio's site and cloned its git repository and installed the version with

python3 setup.py install

Finally we could then startup blender with

./blend

And in the Python console we could import the pyaudio module....

And google showed us how .... sort of...

Mon 9/26/2016

Wed 10/5/2016

Monday 10/10/2016 -- Complete the minimal viable product

Minimal Viable Product

It should be

* Easy for the player to understand what to do (when to speak, how well they are doing, ..)
* Somewhat exciting and fun
* Give correct feedback on pronunciation