TASKS TO BE COMPLETED

1. Kinect (tracking in stage and strumming gesture) - Veronicca IN PROGRESS
    a. Motion Tracking
        i. STAGE 1: singular person (skeleton)
        ii. STAGE 2: character creation
            1. stick figures or blocks is fine at first
            2. then move on to a gogurt with string arms and fingers AND audience be different fruits jumping up and down
        iii. STAGE 3: two players
    b. Strumming
        i. record strumming pattern (BASIC)
        ii. make imaginary line between two hands to be the invisible chord
        iii. track two people strumming
2. Controllers (playing the guitar EXCEPT strumming) - Jesus IN PROGRESS
    a. Guitar
        i. Map guitar hero guitar buttons to actual buttons (DONE-Jessica)
    b. Guitar OR basic drums with MYO controller
        i. Preferably guitar motion from Raw Data
3. 3D Space - Bryan IN PROGRESS
    a. STAGE 1:
        i. stage with a marke red block for the area the kinect covers
        ii. fruits in audience and audience roar mp3 when song starts and song ends probably good in functions
    b. STAGE 2:
        i. Stage lights go out if you go outside of that block
        ii. audience jumps up and down to the beat in different random patterns
            1. EX
            2. 1001101
            3. 0010010
            4. 1101100
            5. ALL the 1 are currently jumping and the 0 are about to jump
    c. STAGE 3:
        i. Have a predefined border but have a warning when kinect loses track of where your hand is
        ii. audience jumps at random intervals and does the wave maybe
        iii. add sounds
        iv. weird stuff cuz austin is weird and stuff
4. Oculus - Kai - IN PROGRESS
    a. Track the head without everything going crazy, no movement just camera rotation in x y and z

ROBERT
Unity research

BRYAN
Currently working on 3D Environment

JESSICA
https://channel9.msdn.com/Blogs/k4wdev/Custom-Gestures-End-to-End-with-Kinect-and-Visual-Gesture-Builder

also watch part 2, you might want to follow along and actually record the gesture while you are at it.

//this doc basically explain VGB but in txt format (I'm a visual learner but we have time constraints so whatever is good for you works)

https://onedrive.live.com/view.aspx?resid=1A0C78068E0550B5!77743&app=WordPdf

JESUS
Research how to collect data from myo using visual studio.
Collecting raw myo data for finger gesture mapping.

Jesus resources:
Control:Mapper Kinect
http://www.controlmapper.com/apps/

Getting raw data from myo
http://developerblog.myo.com/raw-uncut-drops-today/

Plotting data in visual studio
https://codeabout.wordpress.com/2011/05/15/easy-way-to-plot-graphs-in-c-and-visual-studio-2010/
Raw data ->>>Myo sdk methods: DeviceListener.hpp
https://developer.thalmic.com/docs/api_reference/platform/classmyo_1_1_device_listener.html#details

https://developer.thalmic.com/start/
http://diagnostics.myo.com/

Myo Raw Data Collection
https://github.com/zkytony/MyoAVG-essentials/wiki/Documentation-of-setting-up-Myo-Project-on-Microsoft-Visual-Studio-2013-or-similar

Raw data from Myo to Unity

https://gist.github.com/chrisjz/efb6d3aa53fd65fb2364

UNITY ASSETS
Electric guitar: https://www.assetstore.unity3d.com/en/#!/content/12420
Other electric guitar: https://www.assetstore.unity3d.com/en/#!/content/24677

http://codeshare.io/KJXAC

Stat library: http://numerics.mathdotnet.com/DescriptiveStatistics.html