

MUSIC VISUALIZATION

nmd

PROJECT

200

JOIN US TONIGHT!

WHO: TONI KAPLAN, KATIE GALLEY, KAYLEIGH DEFRANCESCO

WHAT: NMD200 FINAL-PERFORMANCE

WHERE: IMRC MAIL ROOM(OUTSIDE VELMA'S OFFICE)

WHEN: THURSDAY DEC. 17 5:00 - 9:00 PM

**** LIVE DEMO 5:00 - 6:00 ****

SOME BACKGROUND INFORMATION:

PARSON'S CODE is a version of musical notation, through melodic motion, which tells the reader if the next pitch is up or down. The first note is represented by an asterisk, and is followed by either a "u" (Up), "r" (Repeat) or "d" (Down). Here's an example of it: White Christmas: *udduuu. It doesn't give exact note names, but gives the viewer direction in what the following pitch could be. Parson's Code can also be written out in this simple notation, to again show where the pitches are going.

CORNELIUS CARDEW was a British composer known for his experimental music notations. One of his most well known works was entitled "Treatise" and was a 193 page score which allowed for a great deal of interpretation. The beauty of it is the musician is in control and the piece will sound different each time. Unfortunately, there also isn't much guidance so it's not played very often.

COLORED MUSIC NOTATION is a form of music notation that's generally used with children, and adds color into basic music notation to help with learning and memory. It's said that color has the power to evoke different emotions and stimulates neurons. When learning new things in music, the color stimulates the neurons in many areas of the cortex, which thus reinforces the new material and improves the ability to retain more. Many experiments have been done to prove this, and it's been shown there does seem to be a correlation between colored musical notation and the student's retention. These examples will be demonstrated in our work.

WHO WE ARE

TONI KAPLAN¹ KAYLEIGH DEFRANCESCO² KATIE GALLEY³

MUSIC VISUALIZATION PROJECT

CONCEPT: Playing an instrument requires great devotion and attentiveness. Musicians have a reputation of special creativity- being able to play a tune is something so many musically inept people appreciate with awe and admiration. So, our group had the idea to explore the mind of a musician. Why not create a visualization to represent what the musician feels when they play? Better yet, what happens when you get a synesthete who plays music? What do they see, taste and hear? All of these questions lead us to the development of our final project idea: a visual projection synchronized to a live musician.

OBJECTIVE: We want our viewers to be able to watch this performance and feel as though they are looking into the synesthete's mind. This will be a sensory experiment into a rare experience in which the viewer can engage one's own senses as well. With each note, the viewer can compare their own emotive reactions to those being visualized.

INTERACTION: In order to make this happen, we will use processing to develop abstract and exploratory visuals for the length of the song. A song will be picked accordingly to go hand in hand with the visuals. Each note will be consistently represented in terms of what an actual synesthete might experience as they play. Our group member Katie will play the saxophone and act as our live performer. Should we decide we need Katie's assistance, we will find a reliable substitute musician ahead of time. Our performance will take place in one of the IMRC's most suitable rooms. Ideally, the room will be relatively small and will have decent sized windows for our audience to look in through. One consideration is the one-way mirror room. Outside the room will be poster visuals advertising our project and the brief idea behind it. Our performance will start with a projected introduction, briefly explaining synesthesia, the concept, and what they are about to see. The musician will be inside the room, where she will sit and play her instrument. As she plays, our visualization will come from a projector positioned over head. This will project onto the music stand in front of her where she pretends to read the visualization as musical notes. We have also considered adding another viewing component that would be projected onto the surrounding walls. If necessary, we will add speakers to enhance the audio. All of this will also be practiced and recorded ahead of time and used in place of a live performance if necessary. This can also be used as a video loop during off-live hours.

INSIDE:

TIMELINE

DESIGN

BUDGET

1. <http://nmdportfolios.org/tkaplan>

2. <http://nmdportfolios.org/kdefrancesco/>

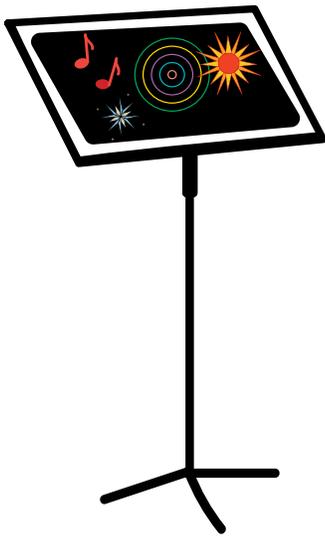
3. <http://nmdportfolios.org/kgalley>

DESIGN

Below you can see the layout of the visual setup that would be featured in the IMRC room.

Top: A close up showing the projection onto the music stand.

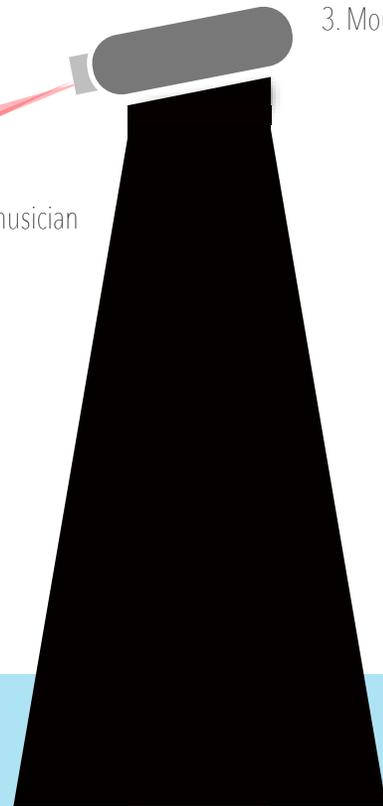
Bottom: Everything seen is shown as if it was through the window of the IMRC room.



1. music stand acting as projection screen

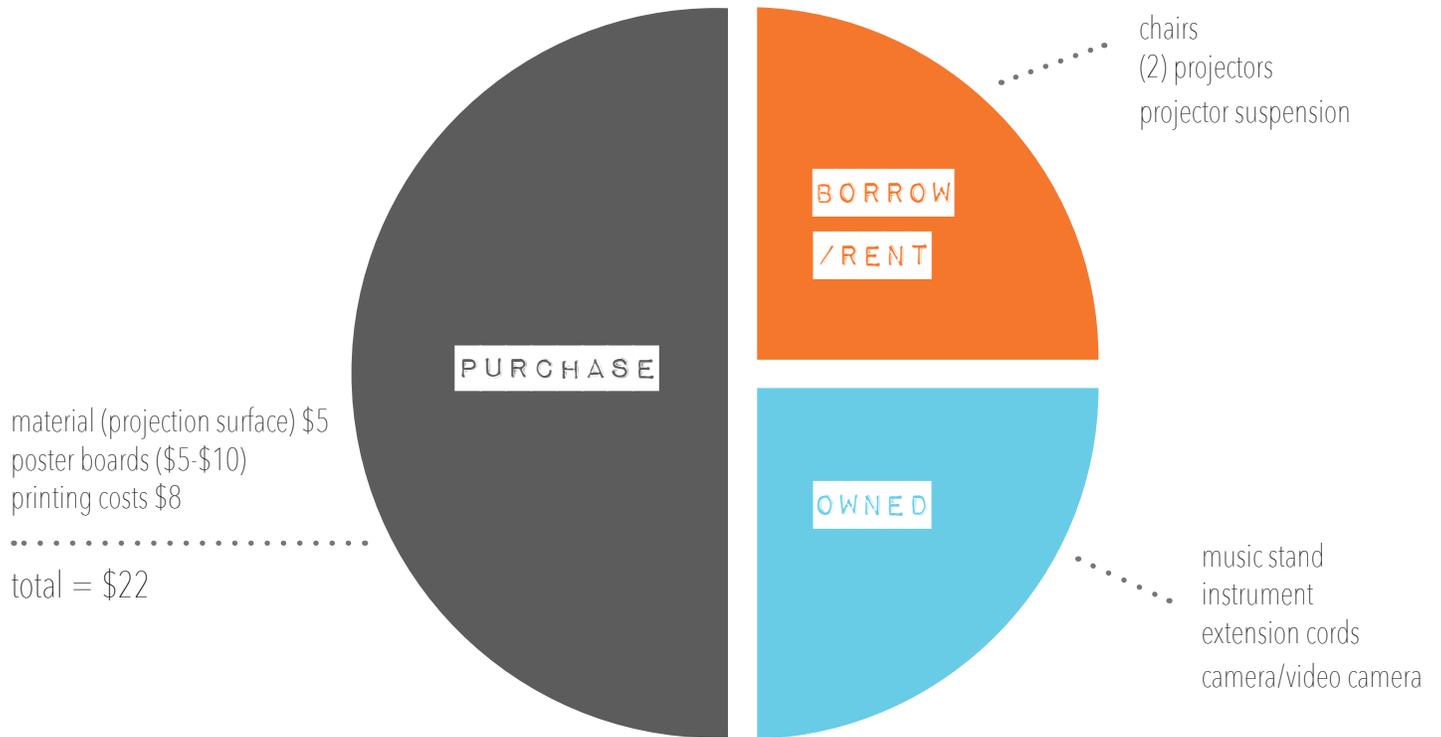


2. Seated musician



3. Mounted projector

BUDGET



TIMELINE



** Link to IMRC Room Request (if necessary) - must be reserved 7 days in advance. **UPDATE: chosen presentation space=mail room

Team member topics:

Katie- music visualization: Ginger Hwalek

Toni- music history & evolution: Sean White

Kayleigh- psychology, synesthesia, & communication studies

Hard copy book information:

Music Between Us : Is Music a Universal Language? by Kathleen Marie Higgins

Musicophilia: tales of music and the brain Cover Image by Oliver W. Sacks

Online sources used:

Music History from Primary Sources An Introductory Essay - Alfred Mann

<http://lcweb2.loc.gov/ammem/collections/moldenhauer/2428106.pdf>

5 1/2 Examples of Experimental Music Notation - Jimmy Stamp

<http://www.smithsonianmag.com/arts-culture/5-12-examples-of-experimental-music-notation-92223646/#12L4MAJQVsfQLH-gl.99>

Intuitive Music and Graphic Notation at Aalborg University on Two Musical Training Disciplines Within Music Therapy by Carl Bergstrøm-Nielsen

<http://dvm.nu/files/collegno/1999/intuitivmusikeng.pdf>

Contour, Interval, and Pitch Recognition in Memory for Melodies - W.J. Dowling and Diane S. Fujitani

http://www.brainmusic.org/MBB91%20Webpage/Melody_DowlingFujitani.pdf

MarcoTone The Science of Tone-Color - Edward Maryon

<http://www.lvx.org/files/quicksiteimages/marcotone.pdf>
