Link to feedback form:
http://shoutkey.com/peach

Tusic
Sprint 1 Review

Athmika, Emily, Hannah, Kristen, and Magnolia

We will design and fabricate a **page turner for musicians** that is actuated with a **hands-free** method.

MVP

Required aspects:

» Can turn at least one kind of sheet music reliably
» Is triggered by something without hands
» Constructed professionally (no wires, tape, cardboard showing)
» Has been tested by a musician for usefulness

Learning Goals

EMILY
System integration, program hands-free inputs

KRISTEN
System integration, Open-source programming, Prototyping

HANNAH
CAD, rapid prototyping, mechanisms, system integration

ATHMIKA
Writing more readable code

MAGNOLIA
Tidier circuits, Electrical troubleshooting

Stretch Goals

Mechanical

- » Handle loose leaf and music in binders
- » Flip forward and backwards
- » Should not interfere with the ability to read music

Hardware
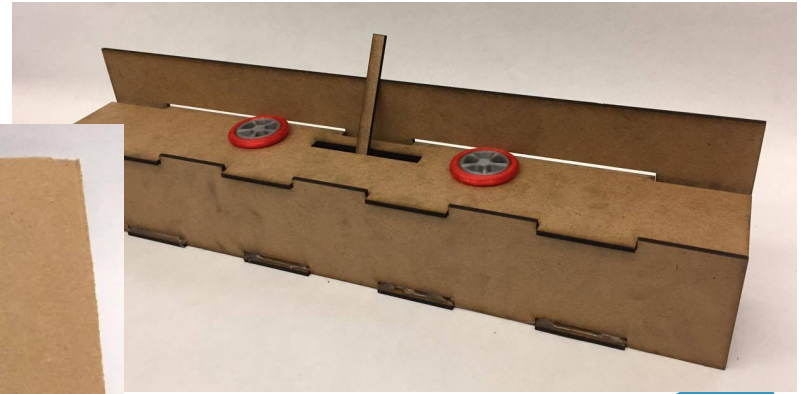
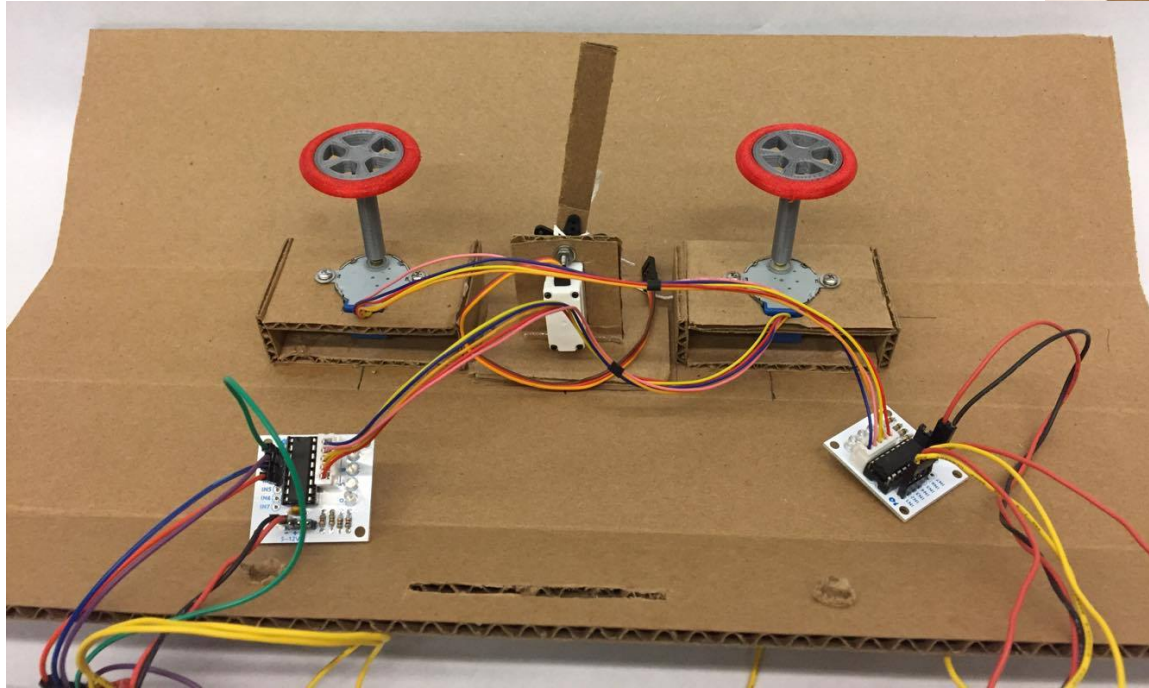- » Seamless integration with RasPi
- » Battery operated

Software

- » Different modes for "learning" when to turn
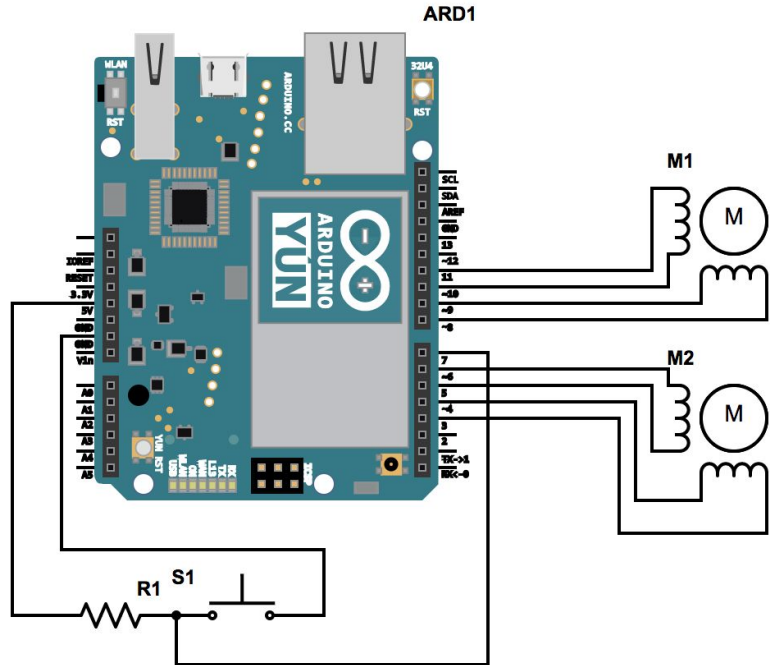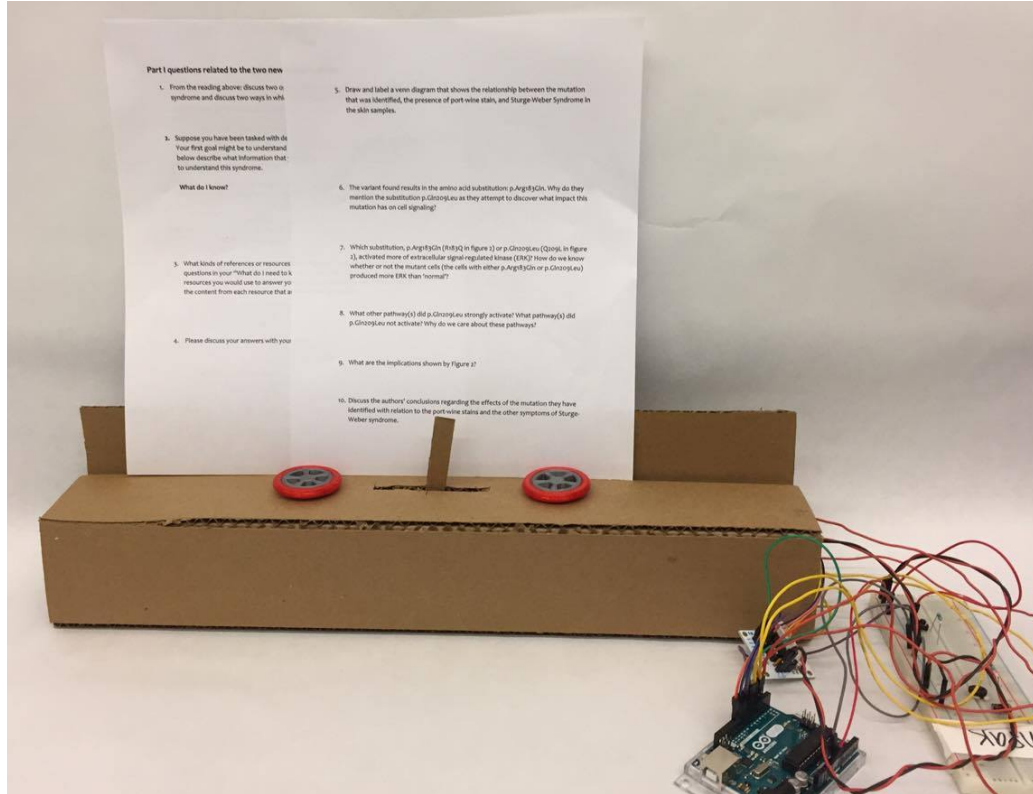- » Turning controlled by eye movement

Demo

Deliverable 1: Prototype mechanical design
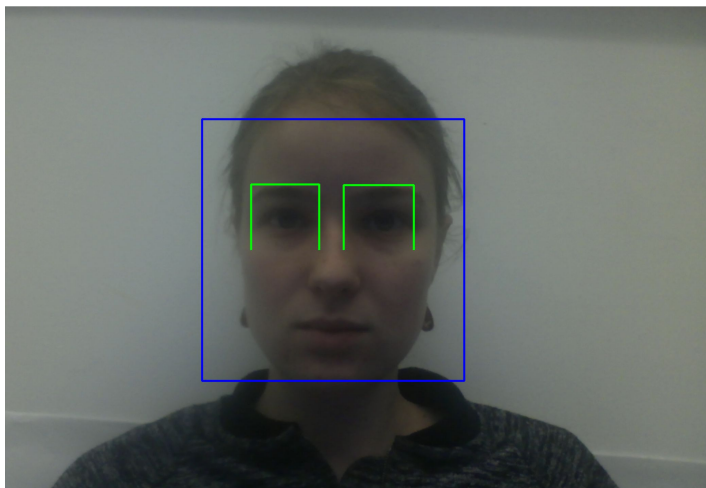
Deliverable 2: Button input to trigger system

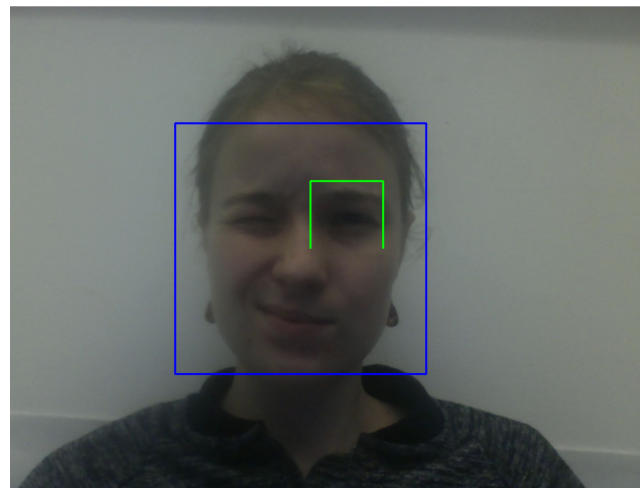# Deliverable 3: Integrated System

Deliverable 4: Eye-tracking software prototype

Both eyes

Wink

Deliverable 5: First draft of website

Blog

The Decision: A Page-Turner for Musicians

Posted on October 15, 2017

After our last group meeting, we had come to a bit of a deadlock. We couldn't agree on whether we wanted to work on a page-turner or a safety jacket for biking. Last night, however, we finally reached our decision. We will be creating a page-turner for musicians. Personally, I was originally leaning toward the safety jacket. The element that made me change my mind was identifying a clear user for our page-turner. When playing an instrument, both hands are usually occupied. This makes turning sheet music pages difficult and stressful. Additionally, sheet music is generally of a standard size and comes in specific forms (i.e. a stack of papers, a binder, or a paperback book). If this were a generic page turner, there would be many more variables, specifically, the size of books. We also believe that having a specific user in mind will help our design decisions as we move forward.

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Day 0: Ideas, ideas, ideas!

Posted on October 13, 2017

Today marks the first day of our final Principles of Engineering project. Last night, I found that my team co(Kristen), Athmika, Emily, Hannah, and Maggie. We have three Software Engineers, one Mechanical EngiPhysicist. This seems like quite a solid spread of skill-sets, and considering that I almost chose Electrical Emajor, I feel confident that we will be able to accomplish electrical aspects of our project as well.

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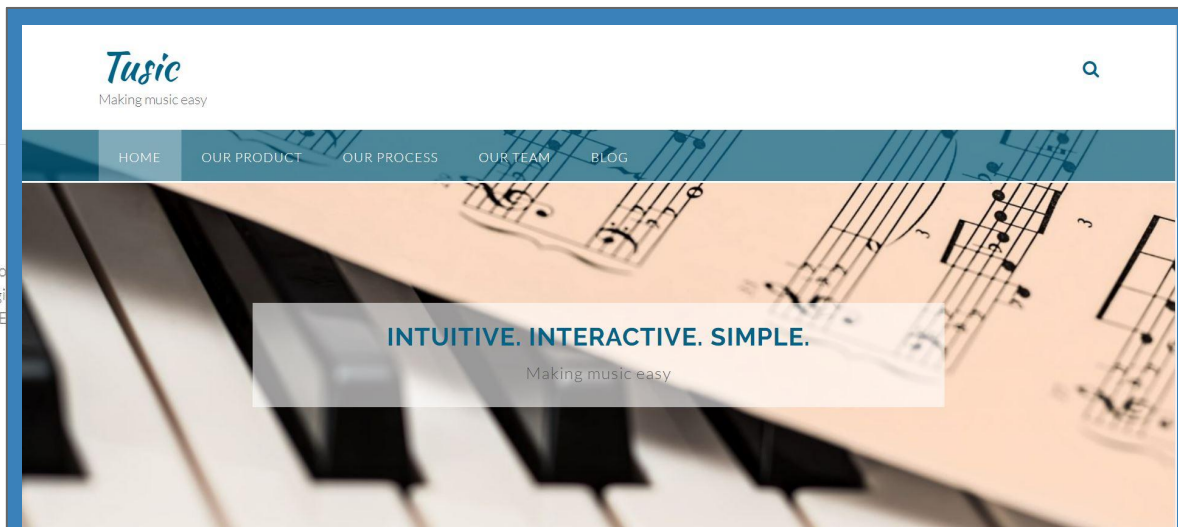
The Decision: A Page-Turner for Musicians
Day 0: Ideas, ideas, ideas!

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October 2017

Tusic
Making music easy

HOME   OUR PRODUCT   OUR PROCESS   OUR TEAM   BLOG

INTUITIVE. INTERACTIVE. SIMPLE.

Making music easy

Current Challenges

Software

- » Communication between camera and system
- » Distance calibration

Mechanical

- » Getting motors to move simultaneously
- » Methods/materials for moving paper
- » Actuation to handle stacks

Deliverables for next sprint

» Integrate eye and motor control with Raspberry Pi
» Better mechanical prototype (no cardboard)
» Capability to turn several pages of music