TUSIC Emily, Kristen, Hannah, Maggie, Athmika

shoutkey.com/us



A PAGE TURNER for musicians that is actuated with a HANDS-FREE method.

OUR MVP

1	2	3	4	5
Can reliably turn sheet music	Hands-free trigger mechanism	Professional Construction	User testing with pianists	Integrated systems

LEARNING GOALS

Our individual goals. How have we met them thus far? EMILY System integration, program hands-free inputs

ATHMIKA

To learn system integration

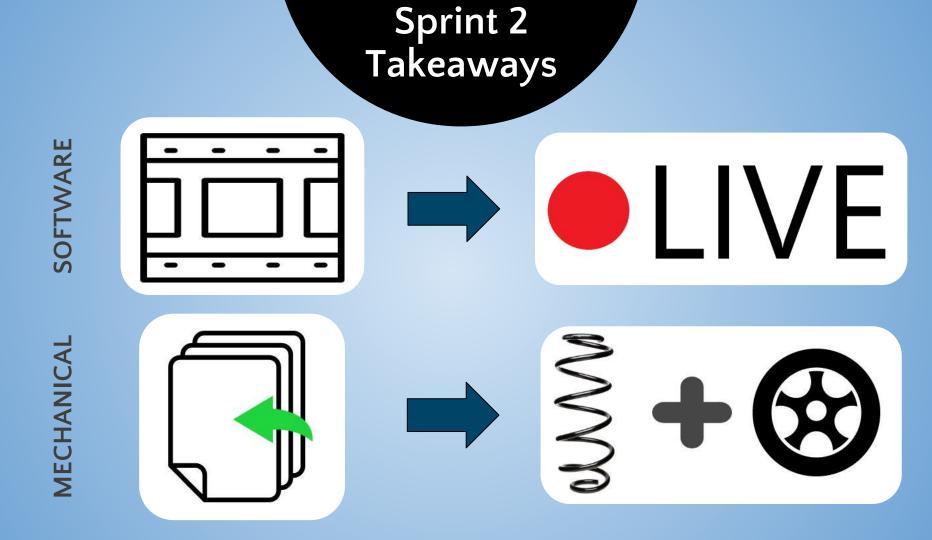
KRISTEN System integration,

Open-source programming, Prototyping HANNAH CAD, rapid prototyping, mechanisms, system integration

MAGNOLIA

Tidier circuits, Electrical troubleshooting

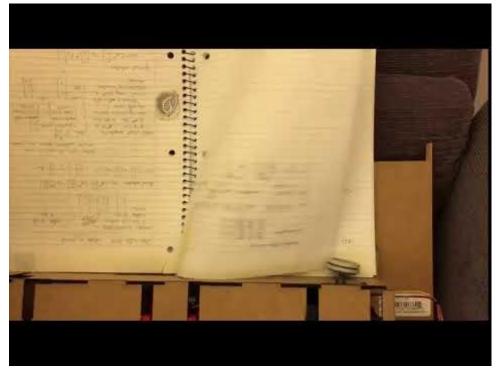
Sprint 2 Deliverab	2 oles				
twomotorsTimed Arduino 1.8.4	Destrypy × calbration.py × timecalibratio		2		The sea
twomotorsTimed	69 catturate the beats per minute tupm 69 path: path to the file 70 parami dictionary of parameters			- The tes	
digitalirite(Pini), (UD); digitalirite(Pini, (UD); digitalirite(Pini, (UD); digitalirite(Pini, LOD); j	71 """ 72 path = '/Users/emilylepert/Documents/01: 73 if params is None: 74 params = {} 75 # default:				
ر المعلم المع (20) المعلم معلم (20) المعلم معلم المعلم ا	<pre>76 samplerate, win_s, hop_s = 44100, 1024, 77 if 'acde' in paramas: 78 if params.mode in ['super-fast']: 79 samplerate, win_s, hop_s = 4000, 81 elif params.mode in ['fast']:</pre>			· Val	
// initializes stepper pins as output pinMode(Pin0, OUTPUT); pinMode(Pin2, OUTPUT); pinMode(Pin2, OUTPUT); pinMode(Pin3, OUTPUT);	82 # fast 83 samplerate, win_s, hop_s = 8000, 512, 128 84 elif params.mode in ['default']: 85 pass				
// sets stepper pins at low; OFF digitalimite(Pind, LOW); digitalimite(Pind, LOW); digitalimite(Pind, LOW); digitalimite(Pind, LOW); picMadedurato, INPUT); // initialize serial communications at 9600 bps Serial.Begin(65600);	86 else: 97 print("unknown mode (is)"-format(params.mode 88 # monult settings 89 if samplerate' in params: 89 if vinus' in params: 91 if vinus' in params: 92 winus - params.vinus 93 if 'bog.s' in params: 94 hog_s - params.hog_s	e))			
<pre>steps = 0; /***** BUTION/SWITCH SETUP ****/ // initialize the pushbutton pin os an input pinMode(duttom, IMPUT); pinMode(duttomkade, IMPUT);</pre>	95 96 s = source(path, samplerate, hop_s) 97 samplerate = s.samplerate 98 o = tempo("specifif", win_s, hop_s, samplerate) 99 # List of bests, in samples 100 bests = []				
pinMode(redLED, OUTPUT);	101 # Total number of frames read 102 total_frames = 0 103				
// initialize serial communications at 9600 bps	104 while True: 105 samples, read = s()				
Done uplauding. Sketch uses 3232 bytes (10%) of program storoge space. Maximum is 32256 bytes. Global variables use 244 bytes (11%) of dynamic memory, leaving 1804 bytes for local variables	<pre>106 is_beat = o(samples) 107 if is_beat: 108 this_beat = o.get_last_s() 109 beats.append(this_beat) 110 file o not confidered) > 2 and len(beats) ></pre>			J#	
159 Arduina/Cenuino Uno on /dev/cu.usbmodem142	.* Aa *** C≣ pop ▼ Fir	nd Find Prev Find All Tab Size: 4 Python			



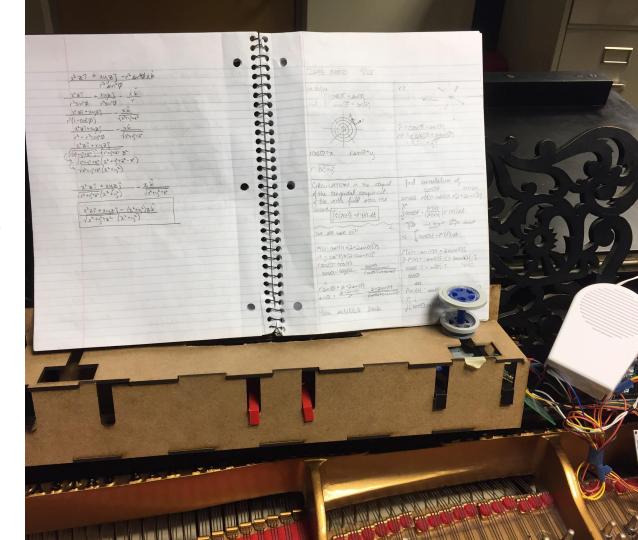
Final Pedal Integration



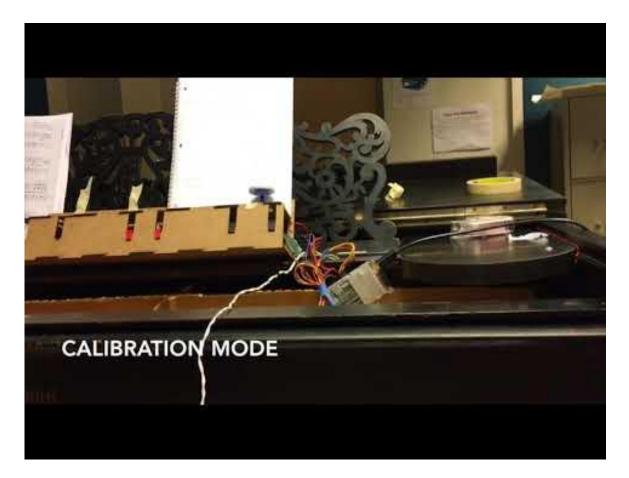
Moving one piece of paper consistently



Live music testing









RaspPi Integration



BIGGEST RISKS

- Consistent turning of page

- Calibration of live playing

FINAL GOALS

Overall Goal: Polish our MVP

Mechanical	Software	Electrical	Documentation
 Tweak sizing and fit of pieces Adding more wheels to the side 	- Continued testing of live music (possible different instruments)	- Neater wiring	 Professional recap of each of the sprints Final website running on Olin server