

# $M_\mu$ tor

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# Original Proposal

- Music tutor website
- Inspired by LenMus and Codecademy
- Music lessons & practice, all in Javascript
- "Practice" means interactive sections and minigames
- Saved progress by user account (database)

# Missing Features

- Most lessons
- All interactive practice
- Saved progress is missing from pythonanywhere, but not the Github or turned in versions

# Bugs

- Music won't play perfectly in rhythm
- Music plays all notes at once after the first playing until refresh
- Staff notation doesn't show up until the link to it is clicked twice
- All are bugs with the libraries used for music notation and MIDI playback with Javascript (or, in the last bug's case, a problem with mixing said libraries with vue.js), not caused by us and not present in their own examples (which we used as reference)
- Countless other bugs that we've already fixed

# The Story

- 2 very complex libraries that are the most popular (and possibly only) options for music notation and MIDI playback in Javascript: VexFlow & MIDI.js
- Both libraries seemed solid and had countless great, working examples
- Almost no documentation, and no decent documentation at all
- Had to read all of the VexFlow and MIDI.js code to learn how to do almost anything
- Spent the entire quarter trying to fix these bugs
- Technically a 3rd library, VexTab, which is an addon to VexFlow that makes it a little easier to deal with
- VexTab at least worked great and had great documentation

Now, for the demo!

# Questions?