

M_μtor

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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

Missing Features

- Most lessons
- All interactive practice (didn't even have time to start that)
- Saved progress

Bugs

- Music won't play perfectly in rhythm
- Music plays all notes at once after the first playing until refresh
- Staff notation might not show up until the link to it is clicked twice, or not show up at all due to a completely inexplicable and unhelpful VexFlow error message
- Rests are played as actual notes because VexFlow inexplicably doesn't store some of the parameters passed into its own note constructor
- All are bugs with the libraries used for music notation and MIDI playback with Javascript, not caused by us and not present in their own examples (which we used as reference)
- Countless other bugs that we've already fixed
- pythonanywhere version can't even playback

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?