Alternative Musical Notation

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The problem

- Traditional musical notation is universally standardized/used, but often hard to understand and not well-thought-out
  - The traditional system of a 4-line-staff was invented by monks
  - Other attributes were added haphazardly along the way
    - Do re mi fa so... was another monk several hundred years later
    - Polyphony was likely a French composer
    - Etc.
  - The result is archaic and overcomplicated, but universally used
Related work

- There have been many attempts to come up with a better system
  - “Piano Roll” notation builds upon the rolls put into mechanical pianos to make them play
  - “Chromatic Staff” notation sticks with basics of traditional music notation but changes the spacing of the notes on the lines
Solution thoughts

- Do not want to do something like the chromatic staff, which is easy for current music-readers to understand but hard for others
- Things to remember:
  - Position ("higher" or "lower" is a good way of encoding pitch)
  - Size is a good way of encoding loudness
  - Many ways to encode rhythm
  - Speed is more complicated
Proposed initial solution

● 13 bars per hand (to represent 1 octave with both white and black keys)
  ○ Black keys colored black, white keys colored white
  ○ Like a piano roll, note lengths determined by bar lengths
  ○ Vertical lines determine rhythm
  ○ Size of bars determines volume of note

● Next steps will be talking to music-readers to get their opinions on this model/ideas for improvements