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## Recorder Hero

We aim to create an interactive music game featuring real instruments. The game will contain a number of songs that a user can play along with. The game mechanic will be styled after Guitar Hero: while a song is playing its notes will move across the screen and the player must play the notes on a controller at the correct time. Scoring is judged by the accuracy of the selected note and its timing.

However, one of Guitar Hero's greatest downfalls is that it restricts itself to just five "notes" and the player does not learn anything about playing music. We aspire to let users play real instruments instead. By taking a FFT (Fast Fourier Transform) of a live instrument the game will identify the pitch being played and score the note on its pitch and timing accuracy. Gamers will be able to engage with their music like Guitar Hero had let them do so before, all while learning new instruments.