Keyboard Dancer Quinn A. Hannah-White

Right off the bat, I understand that this could be very ambitious. Way too much, in fact. Still, it's the only idea that I've had in my head for a while, and I'd be really excited if I could get it to work. All that preface stuff out of the way, here's the actual idea: I would need to write a system that could essentially "read" music from a .mp3 file, determine where the "beats" are, and then take user input from the keyboard and judge how close it was to "matching" the timing of the beats. Think DDR, or Crypt of the NecroDancer (I'll provide a link to that one later on). I'm not sure if I'll be able to do this, but I'd sure as hell love to try.

After I get that done and out of the way (if I can with time to spare), I'd like to try and provide a graphical interface for playing a game based on this system. I'm not sure if you need the details of this part, but I'll throw them in anyway. It would be something akin to a turn-based game, where the turns would be based on a number of beats, and not personal wait time. It would have a really simple combat system to start out with, hitting the key on a beat would result in an "attack", missing it would be a miss, being close but not spot-on would do less damage, etc. You would have more than one "character" to control, all moving with the beats at a different rate. You'd have to plan how to line them up to perform combos, when would be a good time to attack compared to the enemy, and so on.

I think this would be enough to satisfy a project, but if even more could be done there's a friend of mine (Griffin Good, he's also in this class), who suggested to me the idea of procedurally generated music (writing a program to create melodies, etc.). Incorporating this into the project would make it much more difficult, but maybe we could pull it off.

Link for CoTND game website: http://necrodancer.com/

Griffin Good, possibly Hannah Apuan (the only two people I know in this class)