Keyboard Hero Product Backlog

* Starting the game and choosing songs and difficulties (Effort: medium)
  + Starting the game opens a welcome screen with the options play game, about game, leaderboard, or quit. (Effort: Small)
  + About game simply explains how to play the game (Effort: Small)
  + Quit game exits the program (Effort: Small)
  + Leaderboard will allow the user to choose songs and difficulties and see the top scores that they should aim to beat. (Effort: Medium)
  + Play game will open another menu called song selection, where you can go through the list of available songs in a scrolling selection choice. (Effort: Hard)
  + Player can select the song that they want to play, or choose to select their own personal song. (Effort: Small)
    - If they choose to select a current song, it will offer the different difficulties and show the top score for each difficulty. (Effort: Small)
    - If they select to choose their own song, they are brought to a selection where they will select the song file in a form of a wav that they wish to play. This song is then ran through the beatmap generator to create the game, and added to the list of songs. (Effort: Medium)
  + Will then pass the song and difficulty to run\_game, which will start the game. (Effort: Small)
* Beatmap generator (Effort: Hard)
  + Will take a song in the form of a wav file and generate a beatmap from it. (Effort: Hard)
  + Enables users to play the game to whatever song they want, allowing more customization. (Effort: Small)
  + Will automatically scan the song, and then output a series of commands in the form of a text file that will generate the notes used when playing the game. (Effort: Medium)
* Playing the game (Effort: Hard)
  + The player can check their score as they are playing it. (Effort: Small)
  + If their score drops below a certain amount, they will be stopped. (Effort: Small)
  + Getting multiple notes right will chain for a combo, increasing the amount of points scored. (Effort: Small)
  + In this game, there will be three difficulty levels of easy, medium, and hard. Each level will increase the amount of notes. (Effort: Medium)
  + There are two modes for this game: a classic note dropping mode, and a visual note mode similar to the game osu. (Effort: Hard)
  + For the classic mode: (Effort: Medium)
    - There will be two types of notes, click notes and hold notes. (Effort: Small)
    - The notes will drop down as the music plays, and then the player will score based on their timing for their button clicks. (Effort: Medium)
    - The closer to being perfectly overlapping the note and key button are, the higher the points will be given for that note. (Effort: Hard)
  + For the osu mode: (Effort: Hard)
    - The notes will be circles generated that require the player to click them at specific timing. (Effort: Hard)
    - The circles will be placed in random patterns within a certain radius of each other. (Effort: medium)
    - The clicking time will impact the score. (Effort: Small)
  + After the game, if you win you will see the high scores, and if your score is high enough you will be able to enter your name in the high scores. (Effort: Small)
* Overall Graphics (Effort: Medium)
  + The notes will fall synchronized with music. (Effort: Medium)
  + The background of the game will have changing colors and look visually appealing, possibly with images for some songs. (Effort: Medium)
  + The pressing of the notes will light up the note along with displaying the timing score they got. (Effort: Medium)
  + Menus will be colorful and interactive, possibly moving/interesting background or special cursors. (Effort: Medium)
* Leaderboard (Effort: Medium)
  + Will have an online stored leaderboard for all of the songs and difficulties. (Effort: Medium)
  + Lets players compete with their friends or strangers across the world. (Effort: Small)
  + When a player’s score is high enough to be included in the leaderboard, they will enter their name, after which the song, difficulty, and score will be stored to a database in MySQL. (Effort: Medium)
  + The leaderboard will be shown after the player plays a game, or if they select leaderboard in the main menu. (Effort: Medium)
  + The highest score for each song and difficulty will be shown in song selection. (Effort: Small)