Killing two birds with one stone - hands free and blind people (voice activated)  
We’re targeting blind musicians who want to learn music theory and ear training/aural music theory based on apps/games like Singstar (same principal for pitch recognition and whatnot) and the principals of a chromatic guitar tuner app

Both PC Java and Android Java and potentially if possible run it through different types of phones

Two different phone brands - different hardware

Android tablets too

The options for the visually impaired to learn music theory and music theory ear training are limited and expensive usually requiring cumbersome CD's or 1 on 1 tuition. This app will allow blind people to learn many of the aural components of music theory on their own assuming they can use a device (android phone) running java. This also has the side effect of being useable by people who lack hands since it will be voice controlled and will feature an instructive GUI. Mostly about pitch matching. Can be used as a tool to learn singing and whistling.

There will be many traditional theory exercises such as pitch matching, intervals, melody dictation which will allow the person to learn tonal part of aural training (potentially rhythm).

This app is different to many of the previous apps because instead of just on-screen confirmation; another pitch will sound that represents their pitch(different waveform sound from the target) which removes the need for a graphical GUI

It will use the systems voice recognition for navigation through the exercises, pitch recognition libraries will be used for pitch, premade sounds will be recorded for examples or synthesized. GUI easy to draw (GUI last maybe). Music exercises will need to be written. The skills to continue completing the exercises will need to become more difficult to stimulate the learning process.

We should research how long it'll take

What are we building, who's doing it, who's doing what, how we’re doing it, what platforms we’re doing it on, how long it’ll take to build, what disabilities we’re working with, how that disability effects the use of our chosen device, how we’ll support people with that disability

To begin with – find the libraries and how to use them, figure out what already exists that we can just pull from Sourceforge or whatever, make a Gantt chart  
 -voice activation libraries  
 -general Java app libraries for Android

Near the start – voice activation  
 -some way of navigating the menus  
 -voice activation libraries

After that - pitch matching to the recording, some example theory exercises

After that – develop a progression of exercises, GUI  
 -first component would be pitch matching (purely to learn how to sing the correct pitch)  
 -second component would be phrase matching (being able to do phrases of notes)  
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After that – reward system of some kind (points or whatever if we can be bothered)

After that – more theory exercises

Three assignments for three people

Rory’s assignment:  
 -make a final judgement about whether it’s actually viable to do this  
 -see if we can find all the necessary libraries/resources/information and compile as much as   
 we can, maybe put it in a Word document and put it on Github  
 -make a case for iOS vs Android

Johnny’s assignment  
 -make a final judgement about whether it’s actually viable to do this  
 -see if we can find all the necessary libraries/resources/information and compile as much as   
 we can, maybe put it in a Word document and put it on Github  
 -make a case for iOS vs Android

Anthony’s assignment  
 -voice control  
 -menu navigation  
 -getting it to go through different menus  
 -just kind of look into it at this stage and figure out if it’s viable with Java and the hardware   
 of a phone I guess  
 -make a case for iOS vs Android

Public class wastingtime{

Public static void main(String[] args){

While(true){

System.out.println(“Wasting time”);

}

}

}