



February 1, 2013

Weekly Newsletter #3

## Team Members:

**Albert Gea**  
Producer

**Meng Xie**  
Associate  
Producer / Art  
Lead

**Nathan Levin**  
Lead Designer

**Michael Lee**  
Lead  
Programmer

**Cheng Yang**  
Programmer

**Pei-Lin Lu**  
Programmer

**Romain Deciron**  
Programmer

## Advisors:

**Jiyoung Lee**

**Carl Rosendahl**

## Branding and Programming Frameworks

This week, the team finalized branding and began laying down the foundations for the project. The programmers are in a comfortable place in terms of knowing what can be achieved this semester, and we are preparing to finalize our design around the tech's capabilities.

In terms of branding, our color scheme, poster, half-sheet, and general branding elements have all been finalized. We've made adjustments such as making sure the treble clef in our logo was on the G line of the staff, and organizing background patterns to clash less with text.

The big progress this week was in setting up our tech foundations:

The team has settled on using the Sparrow Framework for our app because it's an easier to learn game engine in Objective-C, our preferred programming language for this application. Other ones we looked at included Cocos2D and openFrameworks. Cocos2D, while the most successful open-source game engine for iOS, had more features than we needed and a higher learning curve than Sparrow. openFrameworks, while powerful and well suited for certain sound libraries, was a lower-level framework that also had a steep learning curve. We have decided that Sparrow's access to UIKit, and similarity to ActionScript, should give us the functionality we need while also being something that our programmers can quickly adapt to.



Cheng also explored pitch detection through the opensource C++ library "dywapitchtrack." The capabilities looked promising and she was able to quickly write a script to draw a pitch line over time based on audio input, which is exactly what we'll need for the app. We're now looking ahead to the larger problems of determining sung note length and filtering out background noise from the microphone.

Finally, we had two very helpful meetings with Roger Powell this week. On Wednesday, Pei-lin and Nate met with him to ask broad questions about how to create the sequencer for our app. He highly recommended using FMod as our audio engine, and offered to meet with us again to explain how he created the sequencer for EA's Music Construction Set 11. On Friday, Roger shared how he accessed specific pitches of instrument samples in the program. Everyone in the meeting was very excited to hear Roger's expertise on the subject, and he, too, was interested with meeting with us every week. The programming and design teams now feel very optimistic as we move forward.

This week has been a productive week. Perhaps not very tangibly so, but the research and preparations that the team has made this week mean that our spirits are high and we will be able to start next week con brio.

