ETS Educational Technology Services | Berkeley

Berkeley UNIVERSITY OF CALIFORNIA

Introduction

KALX 90.7 FM is the radio station of the University of California, Berkeley. It began broadcasting back in 1962 as Radio KAL using a cigar box as a transmitter. It was broadcast from Ehrman Hall to UC Berkeley's dormitories through wires stretched across campus. Since then, they have grown into an award winning station that is one of the most highly regarded names in college radio.
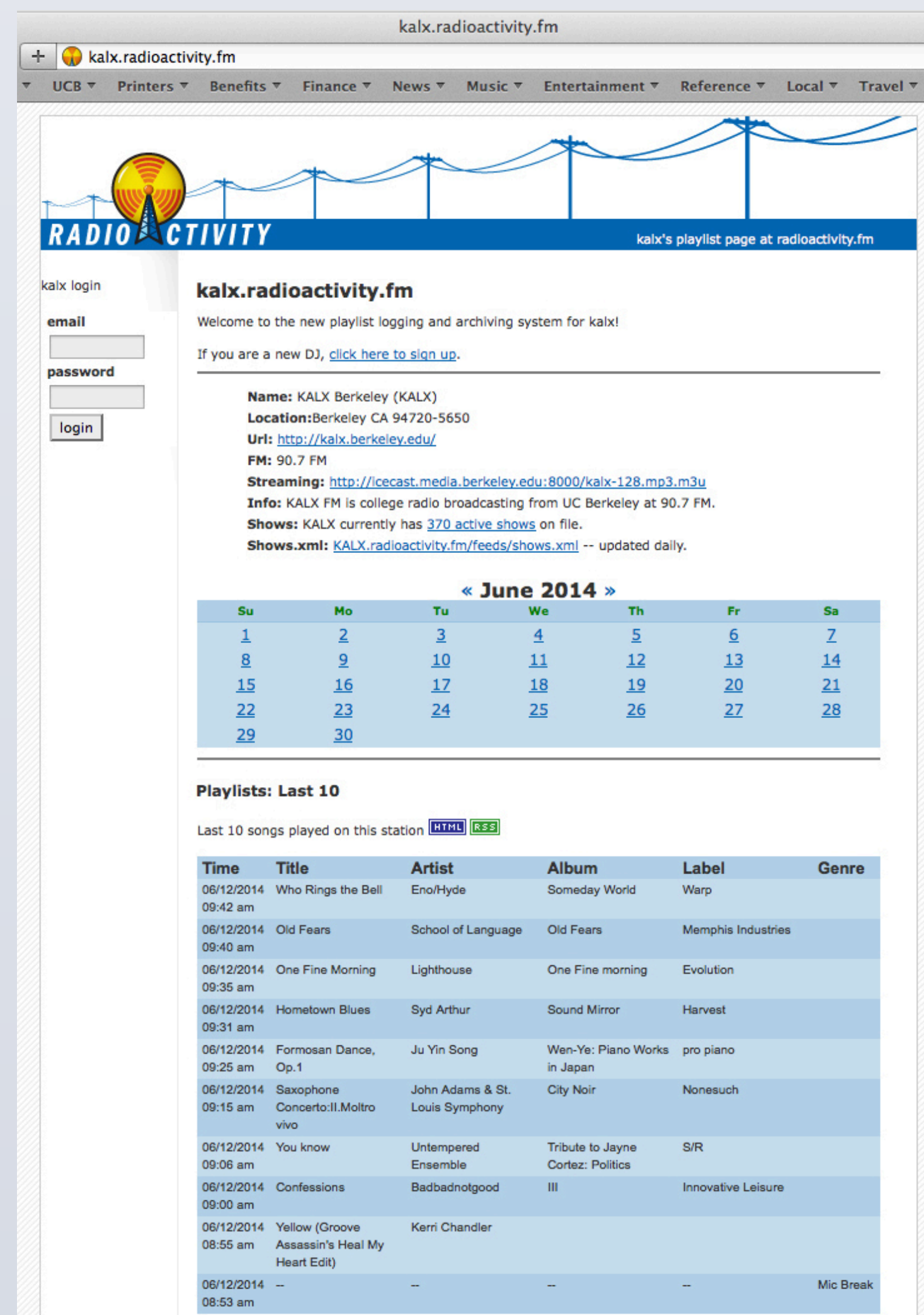
KALX broadcasts freeform radio 24 hours a day to a large portion of the San Francisco Bay Area. You can catch all stripes of underground music accented with news, sports and alternative informational programming.
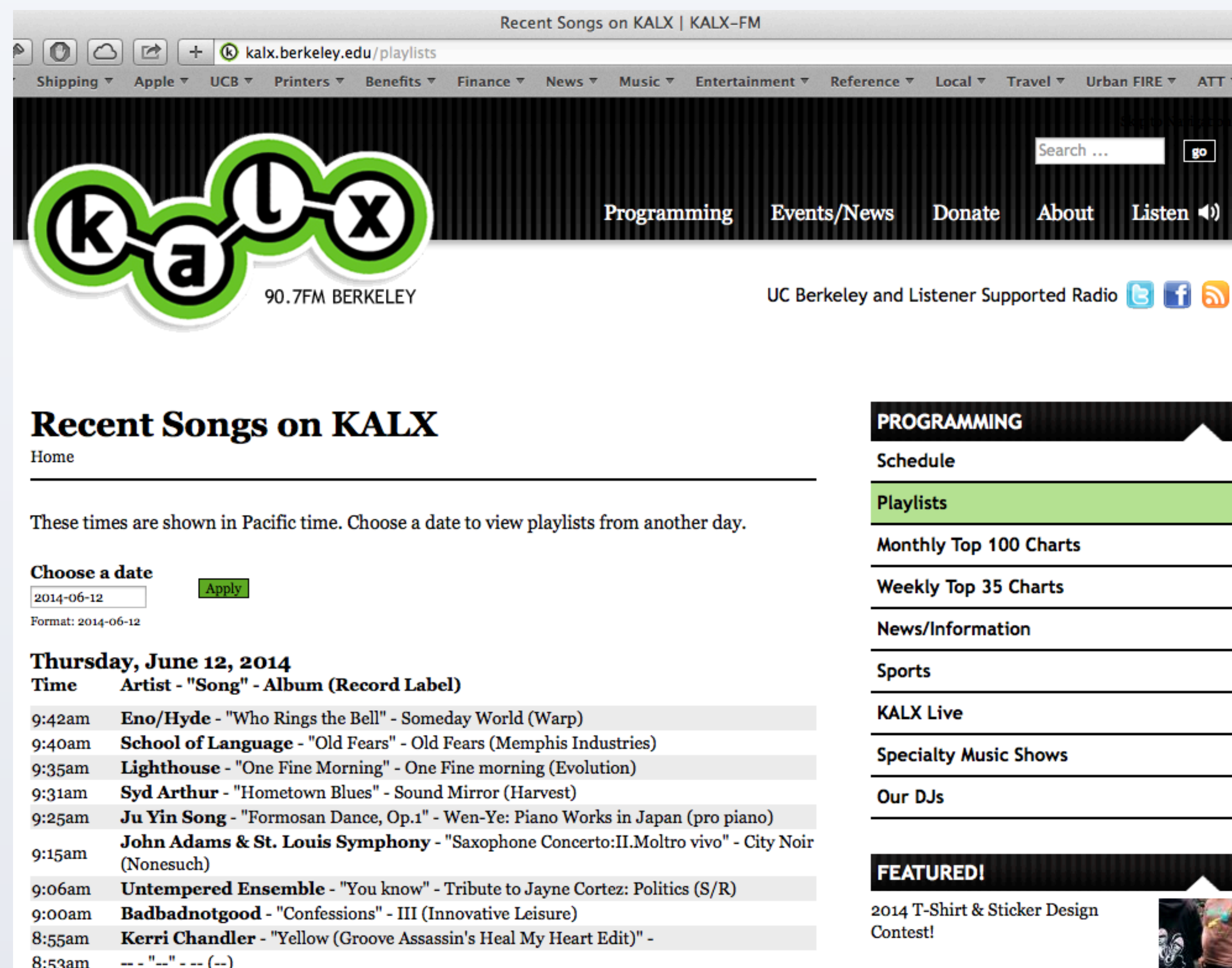
The Opportunity

Several years ago, KALX began working with RadioActivity, a company that provides logging, playlisting and reporting software for radio stations. The original impetus was to replace the old process of DJs logging song plays on paper and generating top music charts by hand counting. This allowed KALX to much more easily submit their charts to the College Music Journal to be officially counted for the benefit of the artists and record labels involved. In addition, the software also allowed the station to submit information to several regulatory agencies as required for a licensed radio station. For example, stations are required to submit Reports of Use to SoundExchange, a performance rights organization that collects and distributes digital performance royalties. These include detailed information of what sound recordings were performed.

Soon after adopting RadioActivity, KALX underwent a redesign of their website. This presented an opportunity. Could we leverage the information that DJs were submitting to RadioActivity in the new site? Here we will discuss how KALX, in conjunction with ETS and RadioActivity, did exactly that. As an example, we'll take a look at the journey a playlist undergoes, from the DJ booth to the KALX website and other digital destinations.

The Process

KALX DJs log the songs they play into RadioActivity in near-real time, while they are in the studio. There is a computer in the booth that they use to connect to KALX's custom RadioActivity website (seen on the previous panel). These plays go into the RadioActivity.fm database. Every couple of minutes, these are turned into XML feeds.
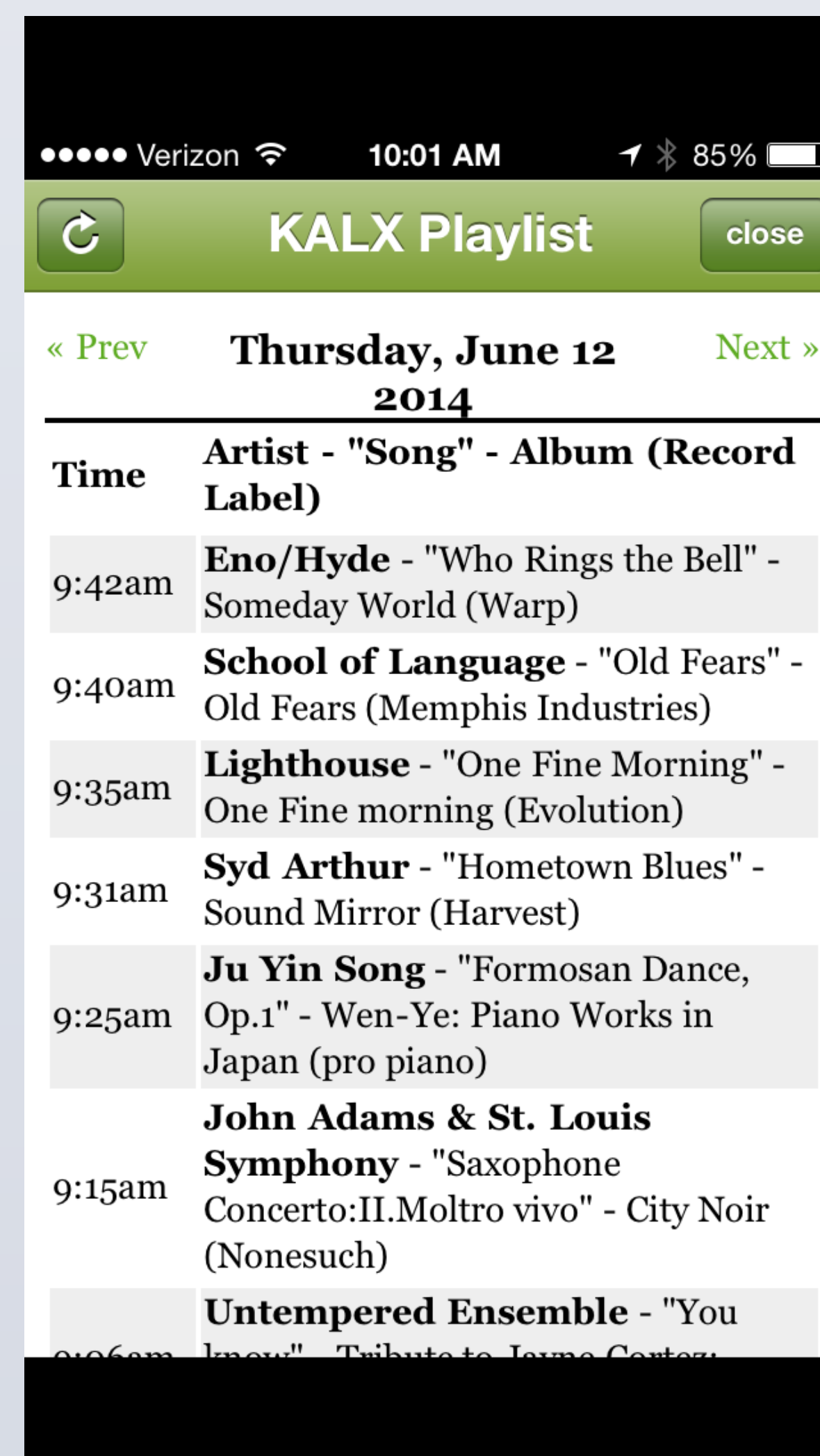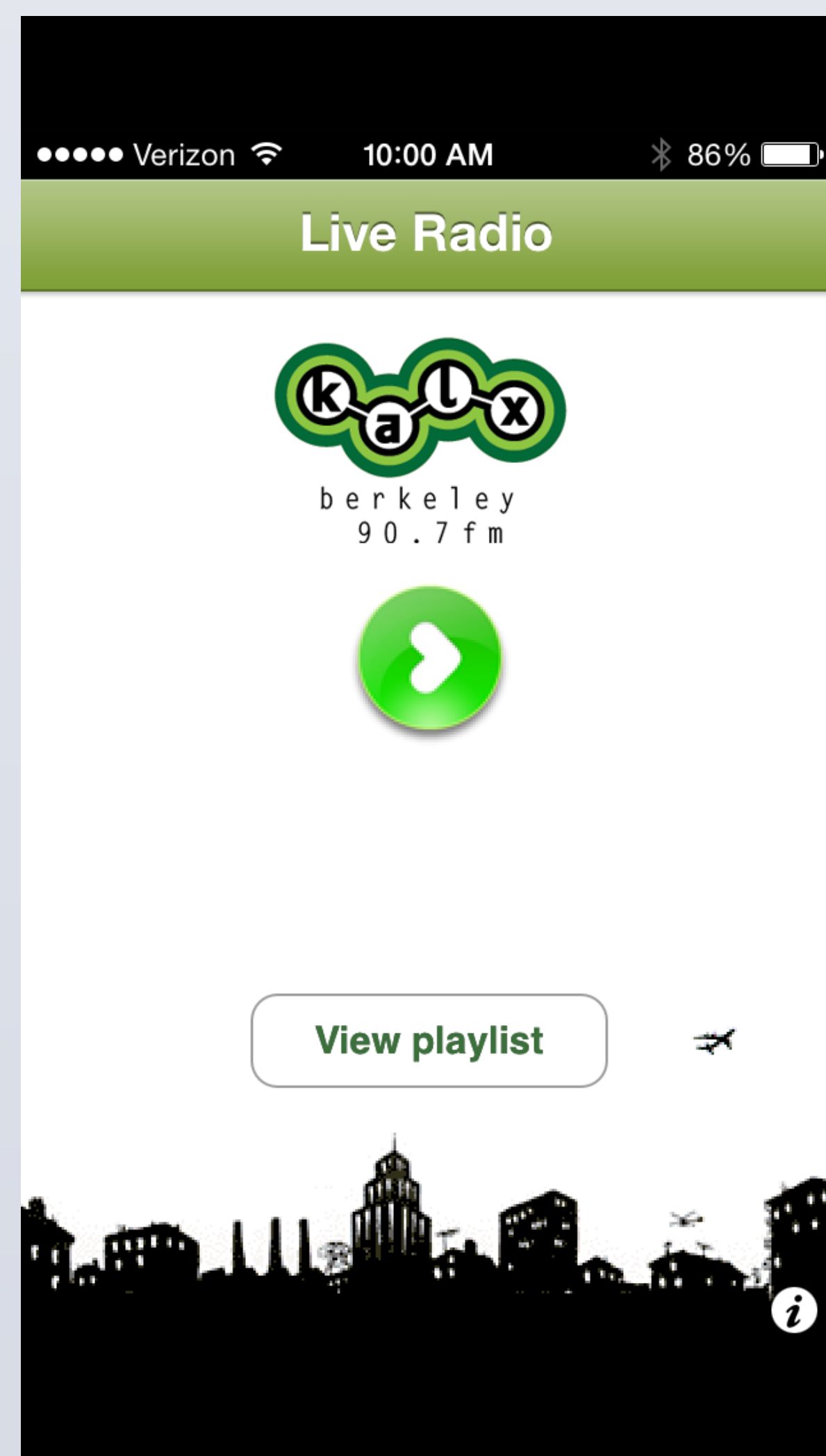
ETS designed the KALX website using Drupal. The Drupal site has scripts that pull the RSS feeds from RadioActivity and saves and displays them in a few different formats. The first shows the several most recent plays in a condensed format. The second, seen to the left, shows all of the songs played on-air for a particular calendar day. It is also possible to view playlists from previous days on this page. In addition, you can view current and historical playlists from particular station DJs.

The website also displays the Weekly Top 35 Charts and Monthly Top 100 Charts. The play count data is pulled from RadioActivity and imported into FileMaker Pro for tabulation. I created scripts to then format that data as CSV files to be uploaded to the Drupal site.

Extending to Mobile Devices

We soon determined that we wanted to extend the availability of this information further beyond the website. People often listen to the radio on the go, and should be able to get their information where it suits them. So with the playlists available in RSS format through their website, KALX was able leverage this data into a mobile app on the iPhone.
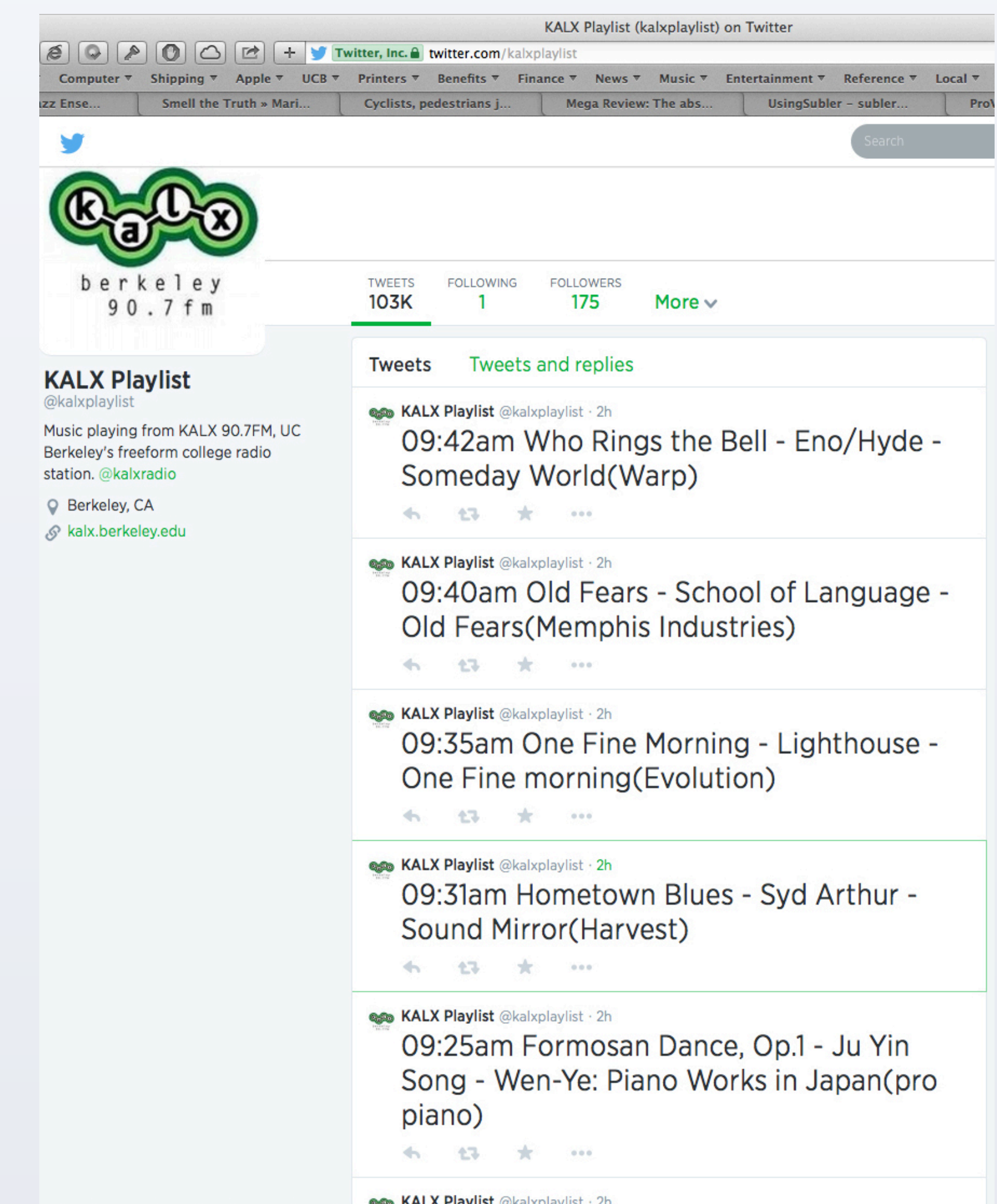
We came across an outside developer who happened to be married to an ex-KALX staffer who had moved from the Bay Area. As a gift to his wife, he wanted to design a KALX iPhone app so that she could listen to the station wherever she was. We worked with the developer to create the official KALX 90.7 FM app. In addition to playing music from the station live, the app also accesses the playlist information by way of the feed from the KALX website.
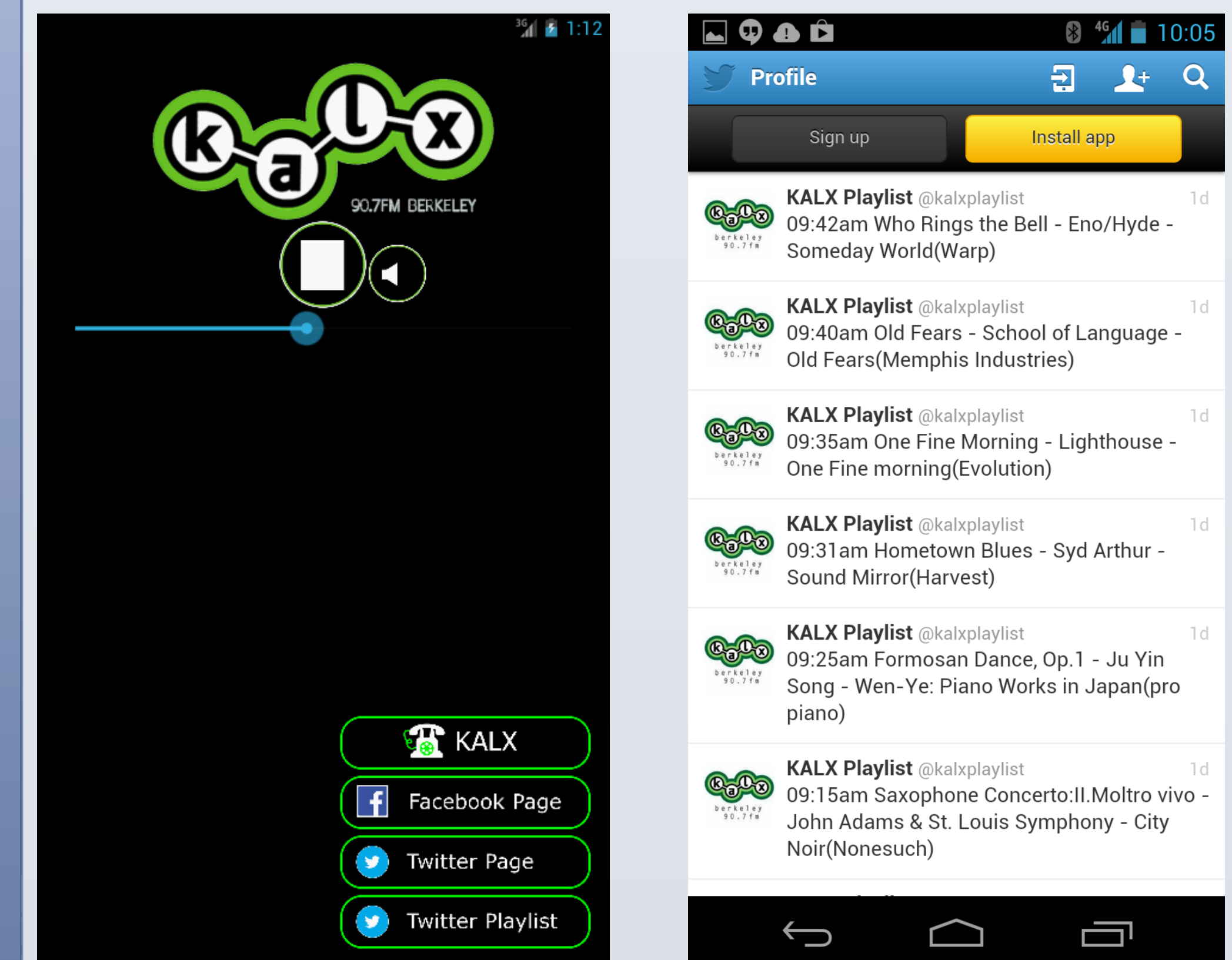
There is also a a KALX 90.7 FM app for Android devices. It gets it's playlist information using a different method…

…To the Twittersphere

KALX was able to work with RadioActivity to create customized playlists that go to Twitter. Essentially, it's a cron job that looks at the most recent plays and then reformats them and tweets them out using oauth credentials set up under the KALX Twitter account.

Another developer with KALX connections worked with KALX to create the Android KALX 90.7 FM app. It gets it's playlist information by linking to the above Twitter feed.

This concludes our story of the journey of a KALX playlist. Now, wherever you are, you'll always be able to answer the question:

What's Playing on KALX?

Questions? Comments? Contact Greg German via email at greggerman@berkeley.edu or by phone at 510-847-2148.