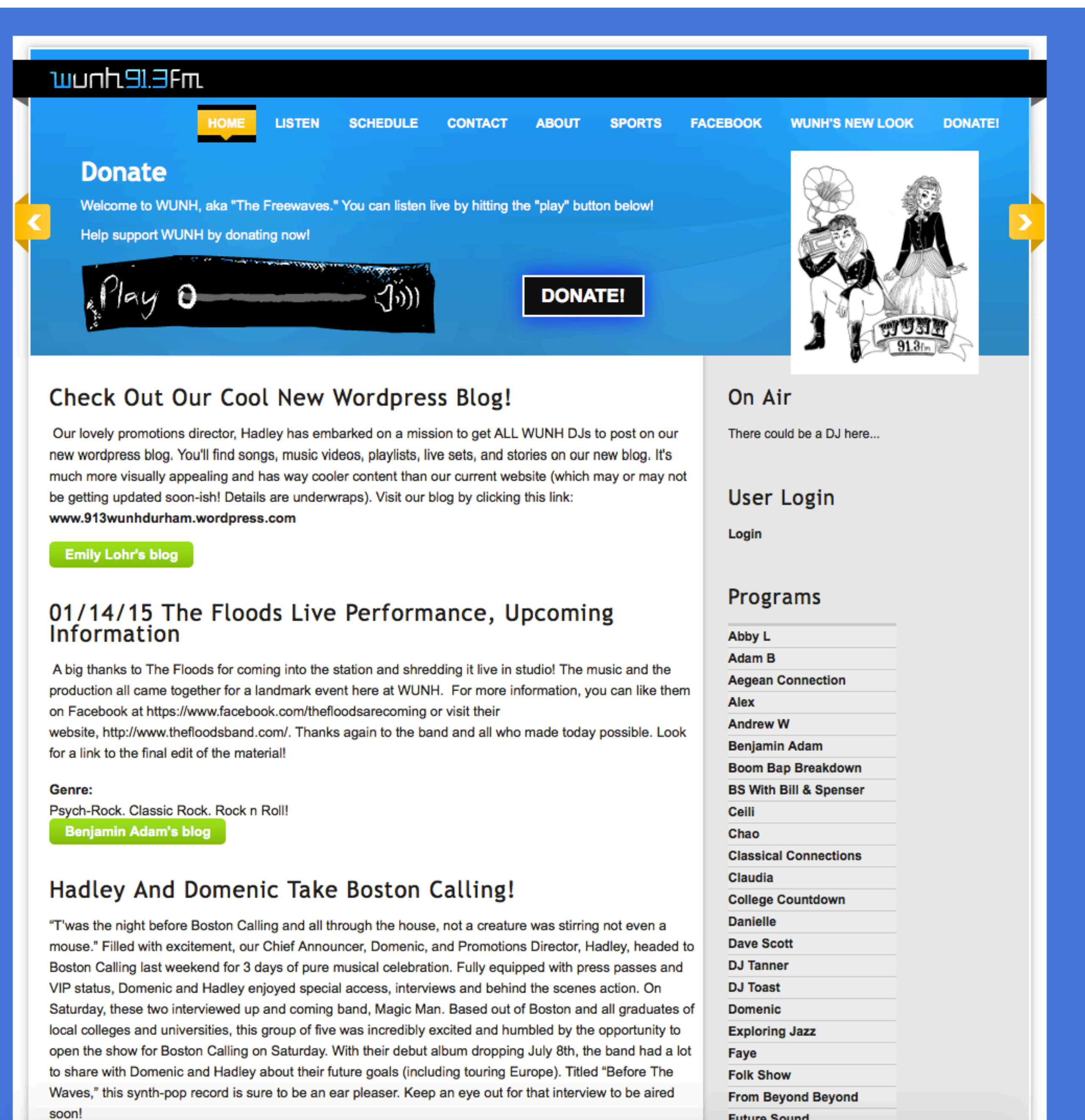


## The Old Site



## Goals

- Create a new design that is modern and gives a consistent experience from device to device.
- Modify the live stream player to be easily identifiable, and keep the music constant and uninterrupted throughout page clicks.
- Integrate song identification with the live stream and display track information with the music player.
- Update the archive system to allow searching for archives by DJ, show, or a song played during the show.
- Add a show management system that gives executive members of the organization access to set information about shows, such as its scheduled times, and who will be live at that time. This will be shown to the user in a calendar setting.

## Research

- Laravel is a PHP framework focused on rapid development of high quality applications. We chose Laravel because for it's out of the box features including authentication, routing, session handling, queueing and caching. The online documentation was a great way to learn about the capabilities of the framework, but Laracasts (video tutorials) proved to be invaluable.
- In order to implement the song identification, we must feed the current part of the stream through a program to generate a fingerprint, then we send the fingerprint to an API that will check for that song in their database and send us back the track's data, including artist and song title.
- When the song identification is complete, we will add the track to a database to remember when songs were played for the archives. This will allow us to implement a search for users to find archives by song title, artist, or show.

## Problems

- The original website is a Drupal setup, and it was decided that the new site would be done with Laravel. This means that just about everything with the old site would be scrapped, and we would not have any code to reuse on the new site.
- We found 4 separate programs to handle the song identification, but have had no luck with any. Our original plan was to use a program called 'Echoprint' but while developing, the company decided to no longer support that program anymore. We have tried a few other programs, such as 'AcoustID' and 'MooMash' but after cutting the stream down to an MP3, the program couldn't identify the song. Without this feature, we are unable to display which song is currently being played at the station.

## What's Next?

- We are currently trying a program called 'Gracenote' to perform our song identification, however there is not much documentation for the program. Once we figure out this step, we will easily be able to finish the site by completing our plans for the archives.
- Deployment of the site will be done with Heroku, a cloud platform as a service (PaaS), to migrate the site off of its current server. This will result in better hosting and less need for server administration.

## The New Site

