



Audio Player Plug in for an Online Music Portal

- A WordPress Solution

Executive Summary:

Our client is a vibrant start-up from USA who has a great passion for electronic music and is interested to improve music sharing and discovery services in order to create an online platform with social networking features which would go a long way in benefitting artists and their fans by providing great user experience.

The client approached Mindfire Solutions to develop a plug in that would have the following functionalities:

- Audio Player using Soundmanager 2 that displays the waveform and spectrogram of the track currently playing
- Audio Player will allow user to seek through track by clicking anywhere on the waveform or spectrogram
- Ajaxed the Autofocus+ 2.0 theme (modified design) template with the help of the plug-in that we developed to enable it to be crawled through by Google and other search engines, which allows music to be streamed continuously while browsing the site
- Adjust hash bang URLs using HTML5 history for "pretty" URLs
- Audio Player shortcode works with mp3 files hosted on different domains (particularly soundowl.com)



Mindfire Solutions with more than 6 years of WordPress development expertise proved to be the apt Software development partner and has been roped in for all the subsequent enhancements that our client would like to implement in their growing online music portal.

About the Client:

Client: Online music services provider

Location: USA

Industry: Entertainment

Technologies:

PHP, MySQL, JavaScript, HTML, CSS, custom WordPress plugin (to ajaxify whole site) and Autofocus theme



Business Situation:

When the customer first contacted Mindfire Solutions for software development help he wanted us to develop a single WordPress plugin which would broadly provide him the following functionalities:

- Include an Admin who can add tracks in 'shortcode' which can work with mp3 files hosted on different domains (particularly soundowl.com)
- When the user clicks on the play button, the track should play at the top of the site in Soundmanager2 player and it should be displayed as a waveform and spectrogram of the track currently playing.
- The audio player should allow the user to seek through track by clicking anywhere on the waveform or spectrogram
- Whenever the user opens the site, the track will get populated with a play/buy/download link
- While a track in progress if the user clicks on any other link track should continue playing.
- The music player should let the user add/delete multiple tracks at a time
- The Audio player plugin should have an ajaxed Autofocus+ 2.0 theme (modified design) template that can be crawled through by Google and other search engines, which allows music to be streamed continuously while browsing the site

The Mindfire Solution

Mindfire Solutions has a highly skilled talent pool of WordPress developers who quickly assessed the situation at hand and rose to the occasion of providing highly functional Audio Player plug-in which has all the features as desired by the customer as well as some more which were suggested by our WordPress experts to increase the efficiency of the plug-in.

Mindfire Solutions executed the task in the following ways:

- Implemented the music player using the Soundmanager 2 API.
- Made the whole site ajaxify so that the music stream was not disturbed when the user was browsing the site from one page to another
- Ajaxified the search option throughout the site, thus enabling the user to search for something while s/he listening the music stream
- Made the whole site ajaxify using HTML5 so as to avoid the "HASH BANG"(!) url and keep the browser history to work
- Created custom WordPress plugin which enabled the Admin to put the shortcode for tracks in WordPress posts or pages with proper parameters to ensure whether the track is available for download or not and whether the track is available for buying or not



The **specific characteristics** of the audio player were as follows:

- User can play track without adding to the player.
- User can add one or more tracks to the audio player and the tracks will play one by one
- User can swap two tracks
- When a track is playing, a seek bar will populate at the top of the page. This enables the user to seek the track to any point.
- In seek bar we are showing the current tracks in two different forms i.e. "WAVEFORM" and "SPECTROGRAM". The user can toggle between the two as per his discretion.
- Song Title present
- Play/Pause button present
- Prev/Next button present
- Download and buy link present

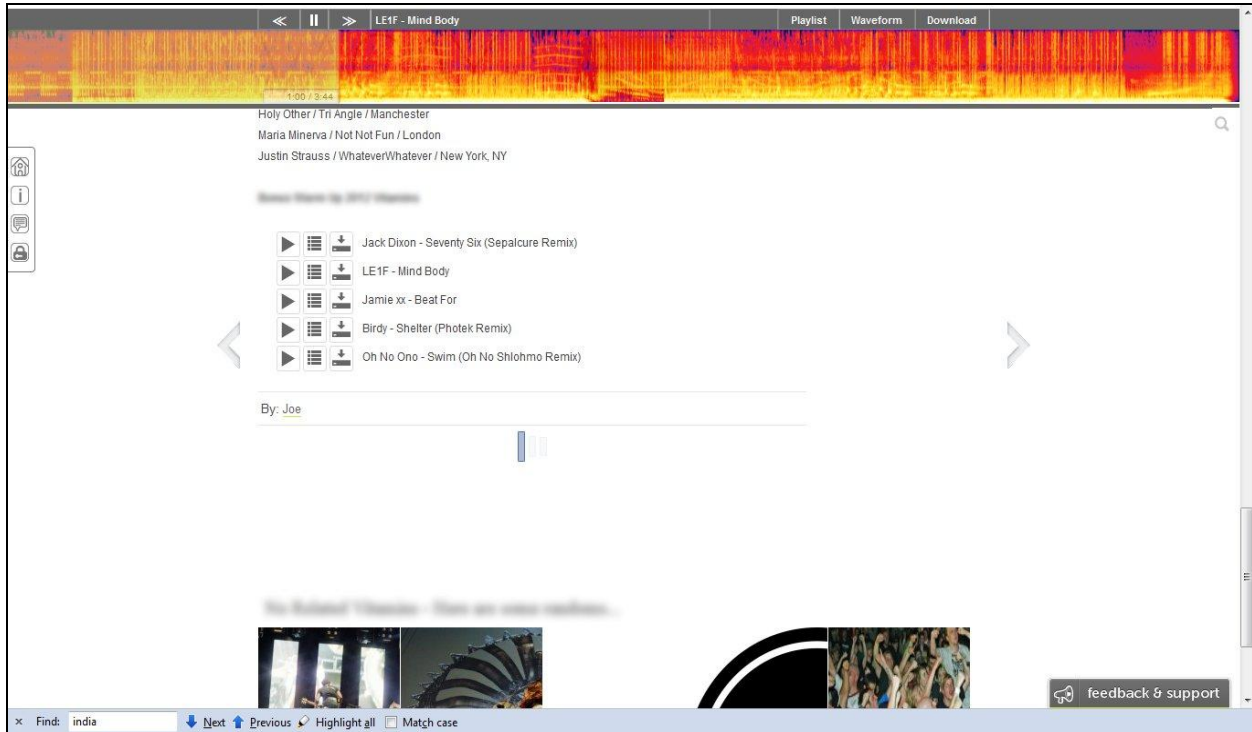
However, there was a limitation to the plug-in and that was the inability to work on Internet Explorer (IE) environment.

Screenshots/Illustrations:

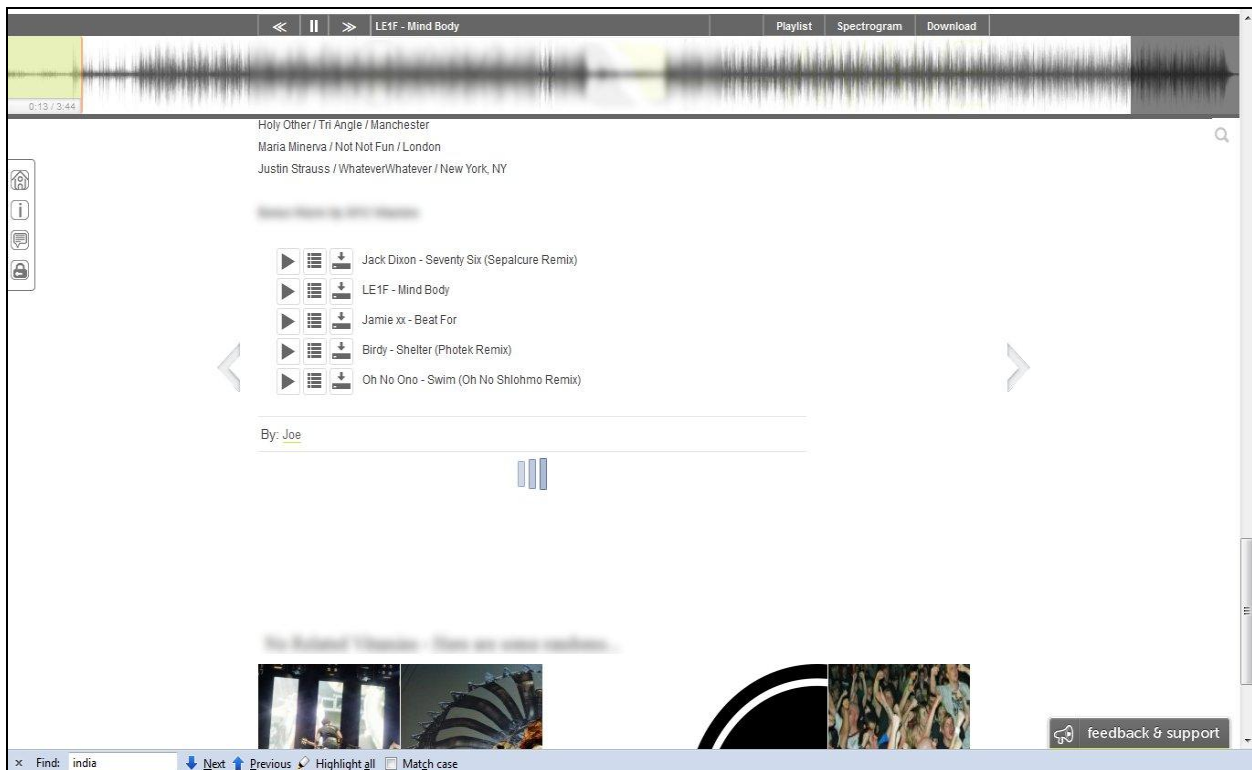
The following are some screenshots which give a clearer picture of the project.



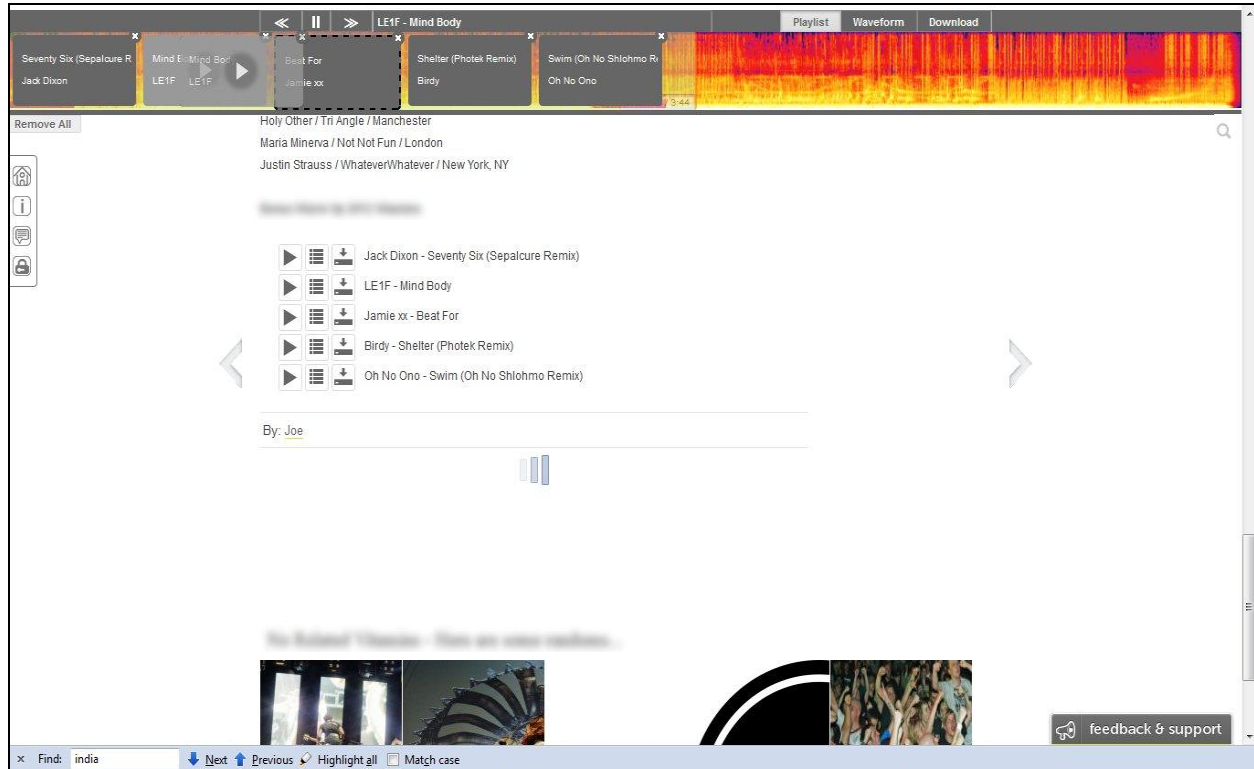
Screenshot 1: The above screenshot shows the playlist on the homepage of our customer's website.



Screenshot 2: The above image shows the music track in spectrogram form along with the playlist.



Screenshot 3: The above screenshot shows the music track in the form of a waveform form along with the playlist.



Screenshot 4: The above image shows the feature wherein music tracks can be swapped.

Customer Benefits:

The skilled WordPress development experts at Mindfire Solutions provided the client with an extremely user friendly WordPress plug-in that was complete with all the desired functionalities as expressed by the client. The client who had reached out to execute a single test project has converted into a regular customer after the completion of the initial project. They have chosen Mindfire Solutions as their trusted software development partner for all their subsequent software development needs.