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SHOUTCAST & ICECAST RADIO PLAYER

Thank you for purchasing this product. This is a plugin based on HTML5 and jQuery using the audio object to play and pull data from SHOUTcast and Icecast servers.

In the following sections the installation and setup of the player will be explained.

SYSTEM CHECK

This is a HTML5 plugin which means you can install it in any sort of website. From a basic static web page to a dynamic website. You can install it on WordPress, Joomla and similar CMS's. However, for the simplicity of the setup, in this manual the general method is explained for installing it in a normal webpage. For other CMS's such as WordPress the method would be similar but with some advance actions that is out of the boundary of this plugin and relays on the user's experience.

RADIO STATIONS:

To retrieve data from SHOUTcast and Icecast stations, the server information for each should be as following (Minimum):

SHOUTcast Version: 2

Icecast Version: 2.4.0

Simply you can find out by checking if your radio station contains a public homepage that has information about streams.

PLUGIN SETUP:

Basically, the installation can be done in 3 sections as follows:

- 1. Insert the supporting links in the header of the webpage.
- 2. Insert the supporting JS code at the end of the body tag.
- 3. Insert the player's HTML code in anywhere you desire in the website.

SUPPORTING LINKS

The following links are required to be in the header of the webpage that will contain the player:

<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="http://code.jquery.com/jquery-2.1.4.min.js"></script>
link href="css/shiPlayer.css" rel="stylesheet"/>

The first Metatype, helps to keep the plugin responsive. The second script is the jQuery source that is required to run the player. And the third link is the CSS file which is responsible for how the player looks like.

NOTE: please make sure the path of each file is accessible, wrong path at this stage can lead to not showing the player or not functioning at all.

SUPPORTING JS CODE

The core part of the plugin needs to be inserted in the bottom of the webpage, just before the '</body>' tag.

Also, the API of the player needs to be located there where you can configure the player through that.

The first script is the JS file that is responsible for the functions of the player.

And the second script is how the player in the webpage connects to the plugin. The id "#radio1" is a unique identifier that denotes the plugin to the HTML code that will be inserted in the next section.

The element "type" is the type of the radio, which is either shoutcast or icecast.

The element "URL" is the URL of the radio station, following with its port.

NOTE 1: the URL needs to be valid, as if you open it in the browser, the home page of the radio should show up.

NOTE 2: make sure the URL does not end with a slash "/" letter.

NOTE 3: make sure the URL is not the streaming URL. It should be the homepage URL. For the streaming URL, you can specify it separately through API.

NOTE 4: There are many more features that you can configure through API that will be explained in the following sections.

INSERTING THE PLAYER'S HTML CODE

The final step is to insert the HTML code anywhere in the webpage. This is where you want your player to appear at. So, it could go inside a div or any other element that you wish.

<div class="shiPlayer" id="radio1" data-tag=""></div>

Make sure the id element of the above code is the same as the id you set in the previous section for the API. That's how you identify the specified API and settings must be implemented on this HTML code.

If all the above sections are done correctly, the player must work at this stage.

NOTE: You may have different players within the same page. For this reason, you need to make sure the right ids are set and ids are unique for each player. Otherwise the players would not be functional.

The player comes with a powerful API that through it you can configure the player in terms of style and functionality.

The following is the complete list of it API elements:

#	Elements	Description	Examples / Default Values
1	type	The type of the radio station, it should be either <i>shoutcast</i> or <i>icecast</i>	type: ""
2	URL	The URL of the radio station homepage.	URL: ""
3	lastFMkey	The API key for Last.FM. The opposite value is the default value.	lastFMkey: "665b8ff2830d494379dbce3fb3b218a9"
4	mount_point	Icecast's mount point, it should be the streaming mount point.	mount_point: "chiptune.mp3"
5	cors_proxy	Icecast only. As pulling data from Shoutcast and Icecast requires cors, it is either possible through proxy websites such as the provided example or leaving it blank if the cors is set in the server's config.	cors_proxy: "https://cors- anywhere.herokuapp.com/"
6	stream_id	Shoutcast only. By default, its 1 but for station with multi stream ids it could be any other number depending which stream needs to be accessed. The opposite value is the default value.	stream_id: 1
7	Streampath	Shoutcast only. This is the following section of the URL that shows the audio stream of the radio. The values for URL + streampath in the browser is the URL for audio streaming. Leaving it blank will still make it work with the default value. The opposite value is the default value.	streampath: "/stream?icy=http"
8	radio_logo	The custom logo that will be placed in the <i>info</i> section of the radio.	radio_logo: "img/logo.png"
9	default_image	Sometimes when the image of the artist is not recognizable by the Last.FM, a default image will be replaced instead. You can change it to any image you desire.	default_image: "./img/default_artwork.jpg"

		The opposite value is the default value.	
10	blurriness	The blurriness of the background image. Default value is 7.	blurriness: "7px"
11	autoplay	Automatic audio streaming with page loading. The opposite value is the default value.	autoplay: false

FURTHER INFORMATION ABOUT THE API

In this section, further information about some of the API elements are explained.

URL

The URL value should contain only the URL of the radio and its port. Such as

http://78.46.66.99:8000 = URL:PORT

The above URL is the main URL of the homepage of your radio station and not the streaming URL/path. The streaming path is the one that plays the radio.

For SHOUTcast by default the streampath is "/stream?icy=http", which you don't need to specify it when configuring your player. But if you know the streampath is anything else, you can change it through the API.

Example:

streampath: "examplePath"

For Icecast, you require specifying the mount_point of the radio. It could be anything such as "music.mp3" or anything else. Make sure you specify this in the API of the player.

To make sure the above settings are done correctly you can test the following combination in your browser and see if the radio starts playing.

URL:PORT/STREAMPATH

Replace the **URL** with the URL of the radio station, replace the **PORT**, with the port of the station, and the **STREAMPATH**, with the streampath (or mount point) of the player.

EXAMPLE: http://relay-chi.gameowls.com:8000/chiptune.mp3

Running the above URL in a browser will play the radio.

LAST.FM

This player use Last.FM servers to get images of the playing music and artists. For that reason, an API Key is required, which a default one is inserted and works perfectly. But due to limitations from Last.FM, it might not be functional for busy websites.

You are suggested to get a private API Key from Last.fm and insert in in the API configuration of the player. Remember the API Key we provided will be used by other users who bought the player and access rate will be shared with everyone. The best solution is to request your private API key using the Last.FM official website.

CORS PROXY

Due to the <u>same origin policy</u> it is impossible to retrieve data from one website to another unless the service provider is allowed it. For Icecast servers' versions lower than 2.4.1, you need to either allow CORS from you Icecast server or user third party proxies.

In the Icecast server in root folder there is a COR or crossdomain.xml file, you need to specify the CORS setting in that file for the website the player is installed on.

Alternatively, you can use following third party websites:

cors_proxy: "https://cors-anywhere.herokuapp.com/

or

cors_proxy: "http://crossorigin.me/"

CUSTOM LOGO

The radio information of the player contains a deducted place for your radio Logo. Simply using the API you can set the logo. The size of the logo is $100 \times 100 \text{ px}$, but you can put any size and it will automatically cover the whole space.

API EXAMPLES

In this section couple of API example are provided to help you understand how to work with the API:

SIMPLE SHOUTCAST RADIO

```
$("#radioX").shiPlayer({
  type: "SHOUTCAST",
  URL: "http://80sbeats.cyberbeats.net:8000",
});
```

This is the simplest set of API for SHOUTcast that only specifies the type of the player and the URL of the home page of the player.

SHOUTCATS RADIO WITH LOGO

```
$("#radioX").shiPlayer({
type: "SHOUTCAST",
URL: "http://80sbeats.cyberbeats.net:8000",
radio_logo: "https://goo.gl/Z9ouz1",
});
```

This is the same as the previous example only contains a customized logo and its URL as the source of the logo.

SHOUTCAST PLAYER WITH DIFFERENT STREAM ID

```
$("#radioX").shiPlayer({
    type: "Shoutcast",
    URL: "http://144.76.92.208:9158",
    stream_id: 3,
});
```

in this example, the stream id is equal to `sid=3`. This is used in situations where a single radio station hosts multiple streaming.

SIMPLE ICECAST PLAYER

```
$("#radioX").shiPlayer({
    type: "icecast",
    URL: "http://78.46.66.99:8000",
    mount_point: "90beat.ogg",
    cors_proxy: "https://cors-anywhere.herokuapp.com/"
});
```

This is the simplest way of implementing an Icecast station in the player. All four elements are important to be correct to make the player working. The mount point is just the format and the name of the streaming channel which is already set up in you Icecast server. You can ignore the last element (CORS_proxy) if you set the crossdomian.xml correctly in the Icecast server.

STYLING FEATURES

```
$("#radioX").shiPlayer({
    type: "icecast",
    URL: "http://78.46.66.99:8000",
    mount_point: "90beat.ogg",
    autoplay: true,
    default_image: "./img/mypic.jpg",
    blurriness: "2px",
});
```

In here you can see example of changing blurriness and default background image, and autoplay.

QUESTIONS & TROUBLESHOOTING

SETTING IT UP ON WORDPRESS?!

Even though this plugin is based on HTML5 and we do not support WordPress setup, but to make it easier, we can provide some tips to help you set it up on WordPress as many users have installed our products on WordPress successfully.

- Use a WordPress plugin to insert the supporting links inside the header (instead of doing it manually)
- The folder of the plugin must be registered in config.php

THE PLAYER DOES NOT APPEAR?

Possible reasons would be wrong linking. Make sure the correct URL path is linked in the header and body tag of the player so all the jQuery and CSS files are accessible.

IT IS PLAYING BUT NO DATA IS AVAILABLE?!

Most likely the radio station URL you provided is not valid, or the server does not provide data using that URL.

Other problems could be related to how the URL is provided in the API, the following is an example of the correct URL vs a wrong one:

URL: "http://144.76.92.208:9158" (Correct)

URL: "http://144.76.92.208:9158/" (Wrong)

Please note the second URL contains a slash "/" that makes the player broken.

ICECAST NEXT SONG AND HISTORY?!

Icecast servers do not provide information about the previous played tracks and the next song. Therefore, the history is completed as songs are being played in the webpage. The player will add songs automatically one after the other.

NO NEXT SONG FOR SHOUTCAST?!

If no next song in appearing for the SHOUTcast player, then most likely the server does not provide such feature. If you are the radio owner, you can activate it in your SHOUTcast server settings and it will be updated on the player automatically.

COPYRIGHT

This player is entirely programmed and designed by Danial Sabagh @ www.danialsabagh.com

However, the following plugins and API are used to make this product working.

LAST.FM API

SHOUTCAST API

Icecast API

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FINAL WORD

If you enjoy using this product, I would really appreciate if you leave a feedback on the products page on <u>CodeCanyon - Review</u>. And if you are struggling with anything before you leave a comment, please email me through my profile on CodeCanyon and let me know about the issue, 99.9% I will be able to solve it for you.

And lastly, if you have any great ideas about anything related to music, radio, music players and anything fancy just let me know about it and I will work on it. It will go on CodeCanyon for sale but you will receive it for free! So feel free to email me about your ideas and your ideal music plugins. ©