## Log of websites visited:

- This section contains a list of websites related to the creation of a simple website as well as information about Xively's API.

Creating a website:

http://www.w3schools.com/website/web\_design.asp

**Xively Tutorials:** 

https://personal.xively.com/dev/tutorials/

Xively API:

https://personal.xively.com/dev/docs/api/

Xively API Modification (GitHub):

https://personal.xively.com/dev/tutorials/channel-viz/

Forked Repository:

https://github.com/lalmeid2/channel-viz

Visualization of the forked GitHub repository in a website format:

http://lalmeid2.github.io/channel-viz

- This section contains a list of websites related to the Louisville website, where they did some work with the eggs' data. There is also a link to their GitHub repository, which can be forked and run locally.

Louisville website video tour:

http://instituteforhealthyairwaterandsoil.org/louisville-air-map/

Louisville website:

http://www.louisvilleairmap.com/#8/38.228/-85.761

Setting up Ruby:

https://gorails.com/setup/osx/10.11-el-capitan

Cloning Louisville website's repository from GitHub:

https://github.com/GeekNurse/Louisvilleairmap-opensource

- Follow the instructions on the README file;

Xively Sign Up:

https://personal.xively.com/signup

- This section is focused on how to get real-time updating data from Xively's website. As Xively is not being used by WickedDevice anymore it may not be useful.

Tutorial on how to get real-time updating data (Xively): http://xively.github.io/xively-js/tutorial/

- This section contains a list of website that focus on how to add the map element to the webpage.

How to add Google Maps to a webpage:

http://www.w3schools.com/googleapi/google maps basic.asp

Getting an API Key (Google Maps):

https://developers.google.com/maps/documentation/javascript/?hl=en-us

Creating a Master API Key:

https://personal.xively.com -> Settings -> Master Keys

Putting a marker on the map:

https://github.com/xively/xively-gmaps

Google Maps Simple Multiple Marker Example:

https://gist.github.com/parth1020/4481893

- This section contains a list of websites that focus on how to get information from Xively's feed. Once again, as Xively is not being used by WickedDevice anymore it may not be useful.

Getting all the information from the datastream (Xively):

http://stackoverflow.com/questions/18958581/xively-get-datastream-list-from-a-feed-using-javascript

Getting feed IDs inside a certain radius:

- http://stackoverflow.com/questions/18912293/search-xively-feed-id-in-javascript
- <a href="http://jsfiddle.net/rPuVw/">http://jsfiddle.net/rPuVw/</a>

Functions to access Xively's feed (Used to get the location values): http://xively.github.io/xively-js/docs/

- This section is focused on how to add "div" elements dynamically.

Dealing with 'div's (HTML):

http://stackoverflow.com/questions/14094697/javascript-how-to-create-new-div-dynamically-change-it-move-it-modify-it-in

- This section is focused on the new way WickedDevice is using to display data (which is currently being used on the markers on the map):

Dashboard used to display data:

P.S.: You can substitute the "egg00802a8333080122" in the end of the URL for the serial number of the egg you want to check. By doing this the dashboard will show the data from the egg correspondent to the serial number.

https://airqualityegg.wickeddevice.com/dashboard/#/egg/egg00802a833308012

(The emails sent and received from WickedDevice are attached to this file for a better comprehension of the new ways of retrieving data).

LA

De: Lucas Almeida lalmeid2@lion.lmu.edu
Assunto: Re: Air Quality Eggs Data Retrieve

Data: June 23, 2016 at 1:02 PM

Para: WickedDevice support@wickeddevice.com

Hi Vic,

Yes, that's it:)

What we thought is basically this: the user would be able to choose to see the real-time data or a block of previous data. In case the user chooses to see the block of previous data, he/she would be asked to provide the period (maybe initial and final dates and time (according to the possibilities of the data retriever function)) and any other parameter that may be necessary to do so. The date could be provided with the help of a calendar or simply a pre-formated text box. The time range could possibly be a drop down menu where the user would choose the initial time and final time. Does that make sense?

Thank you!

Lucas

Em Jun 23, 2016, à(s) 11:14 AM, WickedDevice < support@wickeddevice.com > escreveu:

Lucas,

Yes, that would certainly be possible. You're saying basically a way to take it out of "real-time" mode and specify a date range to visualize. Do you have some ideas on a user interface for specifying the date range?

Kind Regards,

Vic

On Thu, Jun 23, 2016 at 12:29 PM, Lucas Almeida <a href="mailto:slameid2@lion.lmu.edu">slameid2@lion.lmu.edu</a>> wrote:

Hi Vic.

Dr. Landry and I were discussing about the dashboard and he liked it. He asked me to ask you if it would be possible for you to add a function to it; the possibility to retrieve a block of historical data based on days and times given by the user. It is an idea that, according to Dr. Landry, would be beneficial to the high school students that will, in the future, be in contact with the eggs.

Thank you!

Lucas

Em Jun 21, 2016, à(s) 11:01 AM, WickedDevice < support@wickeddevice.com > escreveu:

Hi Jim, Lucas,

Good to have some face time earlier :-).

I've hosted an instance of the experimental dashboard at: https://airqualityegg.wickeddevice.com/dashboard

If you visit that page though, you'll just be presented with an empty map today. If you change the URL to the following you'll get a dashboard for egg serial number egg00802a8333080122:

https://airqualityegg.wickeddevice.com/dashboard/#/egg/egg00802a8333080122

Eventually I want that map to have Eggs displayed on it as the navigational link to those dashboard pages, as well as a user login allowing you to 'favorite' Eggs to allow you to get back to their dashboards more directly.

The most unintuitive thing, at the moment, I think, is that when you change the Duration drop-down it takes some time to take effect and there is no feedback to the user while that changeover is happening. Just be advised that if you are patient it should update.

The code for the experimental dashboard site lives here: https://github.com/WickedDevice/EggDashboard

Please let me know if you have any questions or comments, especially if you identify anything that might be low-hanging fruit.

Kind Regards,

Vic

On Thu, Jun 16, 2016 at 3:00 PM, WickedDevice <<u>support@wickeddevice.com</u>> wrote: Lucas.

Yes, OpenSensors has an API which is described <u>here</u>, but I don't know if they have client libraries for different language bindings at this point.

I've personally written a Node.js module that the Download tool (among other tools) uses, and you can find that source code here: <a href="https://github.com/WickedDevice/AQEV2DataDownload">https://github.com/WickedDevice/AQEV2DataDownload</a> in the opensensors.js file (I haven't published it to npm or anything). And you can pretty easily roll your own, it's just HTTP calls. I like the Messages by Device API: <a href="https://api.opensensors.io/index.html#!/messages/get\_v1\_messages\_device\_client\_id">https://api.opensensors.io/index.html#!/messages/get\_v1\_messages\_device\_client\_id</a>.

They have some growing up to do, and they count on developers to be polite at the moment I think, so whatever you do, please don't generate more than once data request per second programmatically, or you may inadvertently rain on *everyone's* parade who uses OpenSensors.io. You'll find evidence of such self-policing sprinkled throughout my code.

By the way the code for the experimental dashboard is here in case that interests you: https://github.com/WickedDevice/EggDashboard

Kind Regards,

Vic

On Thu, Jun 16, 2016 at 12:50 PM, Lucas Almeida < lalmeid2@lion.lmu.edu > wrote:

Hi Vic,

Thank you for the answer! Do you know any way I can retrieve the data from <u>OpenSensors.io</u>? Because, with Xively, there was a library of functions that would allow me to get the data so it could be used by other websites, for example.

Thank you!

Lucas

Em Jun 16, 2016, à(s) 9:09 AM, WickedDevice < support@wickeddevice.com > escreveu:

Lucas

Sorry for the delay in getting back to you. Xively is a defunct path for Air Quality Egg data, everything goes to <a href="OpenSensors.io">OpenSensors.io</a> these days. That being said, we have a dashboard we've been working on that is in the early stages of development that you can check out here: <a href="https://airqualityeqq.wickeddevice.com/dashboard/#/egg/egg0080292710990151">https://airqualityeqq.wickeddevice.com/dashboard/#/egg/egg0080292710990151</a>

Just replace egg0080292710990151 with the serial number you're interested in.

Kind Regards,

Vic

On Tue, Jun 14, 2016 at 12:42 PM, Lucas Almeida <a href="mailto:lalmeid2@lion.lmu.edu">lalmeid2@lion.lmu.edu</a> wrote: Hello,

My name is Lucas Almeida. I am student at Loyola Marymount University in CA and I am currently doing research with Dr. James Landry. Our research project is working with your Data Eggs to monitor air quality throughout Los Angeles.

My question to you, or whoever it may concern, is: how to retrieve the data collected by the eggs in real time? We are trying to build a website to show the data in a customized way. The problem is that I have been trying to take the data from Xively's website, but it seems that it has not been updated in a while.

Thank you in advance!

Lucas Almeida