# SUGAR NETWORK Urgent Maintenance

# Project Proposal (Technical Service Funding Request)

### Summary

Due to recurrent *spam* attacks we have had during previous months, and due to the fact that we are serving a large group of active users during the local school year, funding is required to develop a solution for removing *spam* and prevent it in the future.

# Goals

To perform the following technical services:

- The addition of a "Captcha" identifier for the 3 main forms.
- Clean the Spam comments

### **Contract details**

Contractors: Luis Sebastian Silva, Laura Victoria Vargas Funds requested: USD \$500 Sugar users affected: Potentially 40.000+ (29.030 unique users in 2016)

## Questions

#### What is Sugar Network?

Sugar Network is an additional view added to the Sugar frame, in versions of Sugar deployed in Peru's customized OLPC-OS fork. It was developed to allow users to interact with each other as well as developers; sharing files, comments and feedback. It is also an Activity distribution network, giving users access to a subset of ASLO compatible with the Sugar version installed (0.94) on field. This is achieved by means of a server component hosted in Sugar Labs infrastructure. *Anyone* can communicate with the SN user pool by using the public web front end as the "Demo" user.

#### Why is it of value to the community?

Sugar Network offers insight [1][2] and a link into one massive deployment (Peru bought 800k XO laptops in 2007-2008) of Sugar. Through it, it is possible to reach active users with new content and Activities (but not operating system updates), and have a general idea of use patterns (anonymously). Since the Ministry started deploying it in the field in 2014, we've reached just over 40k unique users.



#### Some rough statistics about SN (data is hosted in Sugar Labs infrastructure):

Sugar Network traffic for 2016. Notice school year is March-December.



Sugar Network usage pattern is consistent with XO use at school only.

[1] Source: http://jita.sugarlabs.org/node.sugarlabs.org/



Active users for same time period. Active users are users contributing any content to the SN.

[2] Source: <u>http://network.sugarlabs.org/stats-viewer/</u>

#### What will the funds be used for?

500\$ has been requested to pay directly developers for their time in order to create a solution that will clean *spam* from the network as well as prevent from occurring it in the future. The work is expected to take 3 days.

#### Why should Sugar Labs be doing this?

Because Sugar Labs cares about Sugar users getting spam within the Sugar interface. Original funding covered part of the initial development, but not any maintenance, which has been happening on a volunteer basis. Since 2015, the Ministry of Education of Peru has not prioritized nor funded any development projects related to Sugar.

### **Technical Details**

#### 1. Captcha

Only applies to the Web frontend, as no spam has come from XO laptops. Web component is a Flask app (Python+HTML+JS).

There are few forms in Sugar Network that allow to post contents. A third party captcha service can be implemented as it was done in the *pe.sugarlabs.org* wiki as well as *wiki.sugarlabs.org*.

#### 2. Cleanup

Sugar Network offers an API that will serve as a basis for a solution that will pull every single resource for network-wide analysis. We expect to code a few heuristics to get rid of the majority of Spam (e.g. links), and to check manually all of the content to be removed (all the content compressed is about 550MB but most is activity bundles and file attachments).

### **Conflict of Interest Statement**

Laura Vargas has openly declared the existence of conflict of interest associated with any funding request presented by herself or Sebastian Silva (husband) because of her status serving as a Sugar Labs Oversight Board member.

Still, Conservancy acknowledges that many PLC (Project Leadership Committee) Persons are technical service contractors and therefore it would be doable for the Sugar Labs Oversight Board to approve the required funds.

While Aleksey Lim (the original backend developer) is no longer an active contributor of Sugar Labs or the project, it would take the SomosAzucar team (Laura and Sebastian) significantly less time and effort to grasp the implementation details of Sugar Network because we were designers and developers of the respective Front End and knowledgeable of technical details involved.