GSoC 2019 Proposal Sugar labs: Let's Vue-tify

Basic Details:

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My Mother tongue is Hindi and I am proficient in English.

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Share links, if any, of your previous work on open source projects?

I am a second year student at Amity University, Noida. I got introduced to the open source by user meetup groups, I am still exploring my area of expertise so just digging into this whole new world. Currently I haven't contributed to Sugar labs as I just discovered this organization and it's quite interesting.

All of my work in the field of open source is listed on my github profile sjha2048, Few of my personal projects are listed below,

Track-green

Eazypay

Mig

Nishkarsh

I also maintain a personal blog <u>straystream</u> which is pretty much stagnant right now.

Project Details

What am I Making?

Right now sugarizer relies on the Enyo JS framework and as my proposal title suggests, my project is to replace it with Vue JS.

These two frameworks can't be compared on the basis of pros and cons as both of them have their ups and downs.

How will it Impact Sugar Labs?

As sugarizer is capable of running on any device and web browser, It is very useful tool. Currently Sugarizer is written in Enyo Js but it doesn't uses any thing from Enyo Js which really makes it mandatory to use, replacing it with Vue Js will modernize the entire codebase. As Vue Js is really getting the traction in open source world and it will also attract the developers.

Speaking of developers Enyo Js doesn't uses templating so it is hard for developers who are from traditional HTML background to understand the codebase and also Enyo Js has a stiff learning curve whereas Vue Js code is easy to understand.

The entire Vue ecosystem is small and fast so choosing it means you are getting one of the best speed parameters available.

Vue Js is easy to pick up as its structure is very intuitive and Vue components are pretty much a combination of HTML and Js.

With Its extensive documentation it will attract new developers to contribute in sugarizer.

The applications built with Vue Js offer fantastic performance with warp speed

We can speed up the rendering times for sugarizer with the implementation of virtual DOM, hence all the dependencies will be tracked during the render,

Vue Js, overall removes the need for a whole class of performance optimizations.

According to my observations Vue has better performance as compared to Enyo because of its dependency-tracking observation system

And lastly how can we forget the documentation as compared to Enyo, Vue has excellent documentation.

Tech Stack

<u>Vue JS</u>, <u>Facebook jest</u>, and as of now I am not aware what else will be used apart from (HTML/CSS/Js).

Work Environment

Operating system - GNU/Linux (currently using antergos) , windows for outreach

Editor - Visual Studio code, Vim

Project management - kanboard

VCS - git

Timeline:

Dates	Objective
Before may 6	A slight look at the Sugarizer's codebase and documentation.
7th May - 27th May	 Community Bonding period Understanding how activities in sugarizer are created and how do they work
28th May- 31st May	Gaining prior knowledge of Enyo Js to understand the codebase
1st June - 8th June	 Studying the entire structure of sugarizer
9th June - 15th June	Finding the alternative components which will be necessary for the replacement.
16th June - 23rd June	 Implementation of enyo kinds in Vue js
24th June - 28th June (first evaluation)	Deliverables: The code inside <u>Js</u> folder should be replaced.
29th June - 6th July	Work on enyo.js
7th July - 14th July	 Learning <u>facebook jest</u> for writing tests.
15th July - 22nd July	Modification in test folder for Vue js
23rd July - 26th July (second evaluation)	Deliverables: At least half of the code inside lib should be replaced with Vue Js
27th July - 11th August	Finalizing the main coding part
12th August - 18th August	Work upon writing tests
19th August - 26th August (Final Evaluation)	Deliverables: Completely replaced codebase with all required tests.

After GSOC:

I will be maintaining the code base, like any new feature announced in Vue JS will be implemented by me and also I will be contributing in sugarizer by adding new set of activities and fixing the issues.

How am I suitable for this project

Recently me and my team were selected in Smart India Hackathon which is worlds biggest hackathon, in SIH we made Nishkarsh Portal which is entirely written in Vue JS you can have the look at the source code here.

I think that my past experience with Vue Js will help me to complete this project efficiently.

Time Commitments

My university exams will be over by 27th april so, I am completely free in my summer vacations and I can devote upto 40-50 hours in a week and my summer break ends on 2nd of August, after that I will be able to manage around 30-35 hours in a week, I have no special plans for my summer vacations so I can devote myself entirely to the project.