

# Sugar Labs Social Proposal

## About You

**1. What is your name?**

Avinash Bharti

**2. What is your email address?**

[avinashbharti97@gmail.com](mailto:avinashbharti97@gmail.com)

**3. What is your Sugar Labs wiki username?**

Avinashbharti97

**4. What is your IRC nickname on irc.freenode.net?**

Avinash\_bharti

**5. What is your first language? (We have mentors who speak multiple languages and can match you with one of them if you'd prefer.)**

My first language is HINDI and my language of communication is ENGLISH

**6. Where are you located, and what hours (UTC) do you tend to work? (We also try to match mentors by general time zone if possible.)**

I live in Kurukshetra, Haryana (India), During GSoC Period i will be at Nashik, Maharashtra(India).

I would prefer to work between 10:00 UTC-18:00 UTC but I can adjust my timing if required.

I have no any other commitment this summer so I will be able to spend 45+ hours per week.

**7. Have you participated in an open-source project before? If so, please send us URLs to your profile pages for those projects, or some other demonstration of the work that you have done in open-source. If not, why do you want to work on an open-source project this summer?**

No, this is my first open-source project.

However, I was introduced to open-source by my college seniors. I got to know that by contributing to open source projects, I will not only be raising my existing skills but will also be giving back to the community. The thought of contributing to a market-ready product and a professionally maintained large code base makes me feel great, and then I decided to dive into Open-source and hence choose GSoC to start my journey.

### Why SugarLabs?

Sugar Labs is an organization dedicated for Social cause, building the foundation for future of many children. It would be an honor to work with an organization which will be enlightening the future of many children who are new to computer field. I'm sure working with this organization will help me to utilize my skills in the best way .

### Contribution to SugarLabs

- Did 110+ hindi language translation submission on <https://translate.sugarlabs.org>  
Username : avinashbharti97  
Profile : <https://translate.sugarlabs.org/accounts/avinashbharti97/>
- Opened an Issue on www-sugarlabs regarding UI/UX of search bar.  
<https://github.com/sugarlabs/www-sugarlabs/issues/205>

- Created a Pull Request on an issue of www-sugarlabs

Status: **Merged**

<https://github.com/sugarlabs/www-sugarlabs/pull/209>

I did contribution to NITKOSG which is an open source promotion group of my College.

Contribution can be tracked here: <https://github.com/NITKOSG/InfoGami/pull/2>

## About your project

We are looking for projects that will enhance the Sugar Learning Platform. Please consider how your project will have impact on children learning.

### 8. What is the name of your project?

Sugar Labs Social

### 9. Describe your project in 10-20 sentences. What are you making? Who are you making it for, and why do they need it? What technologies (programming languages, etc.) will you be using?

Currently, Sugar Labs don't have any suitable platform other than [social\\_help](#) where developers, teachers, and parents can discuss the projects, software etc. developed or released by the organization.

Due to which there is a blurred line between what is actually demanded by teachers, parents and what developers are developing. This project aims to solve this problem.

### So, why Sugar Labs Social when already social\_help project exist([issue](#))?

Well, As of my research social\_help is a [project](#) which Integrated Discourse forum into sugar and it was made for only sugar users. That means if a user needs an help or want to explore or discuss about Sugar labs, a user is bounded to use sugar. Sugar Labs Social will be available in the form of website which would be more accessible.

The main idea of Sugar Labs Social is somehow same as [Sugar\\_help](#) but Sugar Labs social will be having a lot of different features(mentioned below) other than Sugar help .

Also, Sugar\_help is currently not live and not under maintenance.



Sugar Labs Social is a Website Project which could be accessed using any modern Javascript enabled Web Browser.

## Primary features proposed

### **A. Signup / Login feature**

- a. Email registration
- b. Social authentication
  - i. Google
  - ii. Github
  - iii. Twitter
  - iv. Facebook

*Mockup of Landing Page | [signup](#) | [signin](#)*

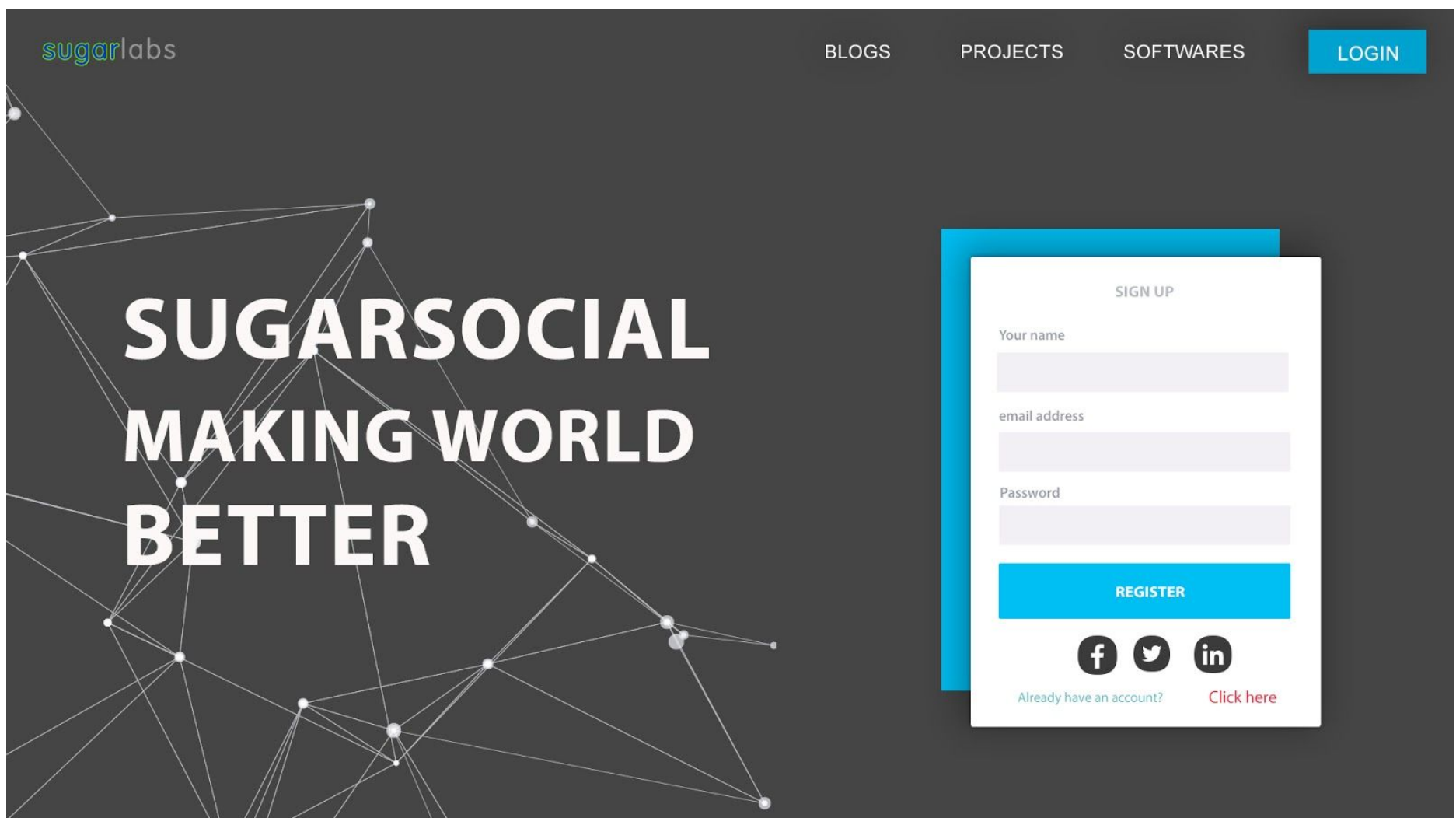


Fig-1. Landing page

### **B. News feed**

- a. Newsfeed includes info about these:-
  - i. project uploaded/updated
  - ii. software released
  - iii. Activity uploaded
  - iv. Blog posted
  - v. Discussion started(can be filtered by tags i.e discussion, question etc)
  - vi. Thread of discussion on any of the above
- b. Newsfeed will be a part of the Home page , other things which will be available on home page are follows:-
  - i. Search box(for searching anything on the website for ex: Posts ,People, Tags, projects)
  - ii. Action button to visit user's own profile
  - iii. Notifications received (if anyone commented on user's post etc.)
  - iv. Messages received (*secondary feature*)
  - v. Option to share an update(post, discussion) and write a blog
  - vi. A list of tags which can be used to filter the posts
  - vii. Action buttons

1. Projects | Softwares | Activities | Events(*secondary feature*) | All Blogs
2. Settings | Help

### Mockup of Home page

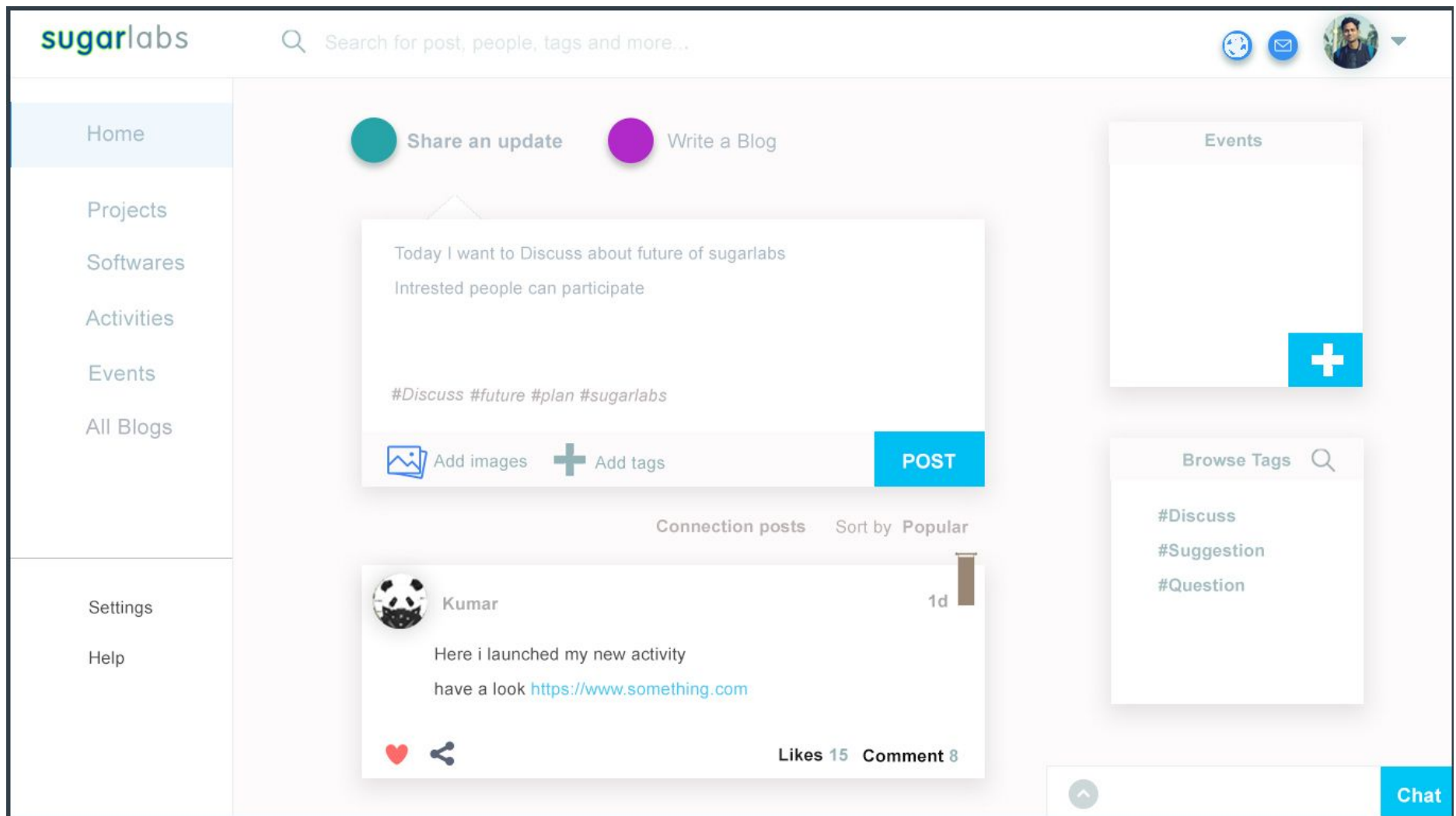


Fig2. Home page

### C. Blog and discussion post

- a. User can write Blogs from Home page
- b. Feature for doing comment on blogs
- c. Blogs can be liked by another user
- d. Users will be able to bookmark the blog for future read
- e. Blogs can be filtered by tags
- f. **Starting a Discussion or asking a question feature**
  - i. Same as blog user can start a discussion simply by putting #discussion tag
  - ii. Can ask a question using #question tag
  - iii. All the feature of the blog will be available for Discussion also
  - iv. Discussion can be accessed by respective tags (tag option available on home page)

### Mockup of Discussion starting

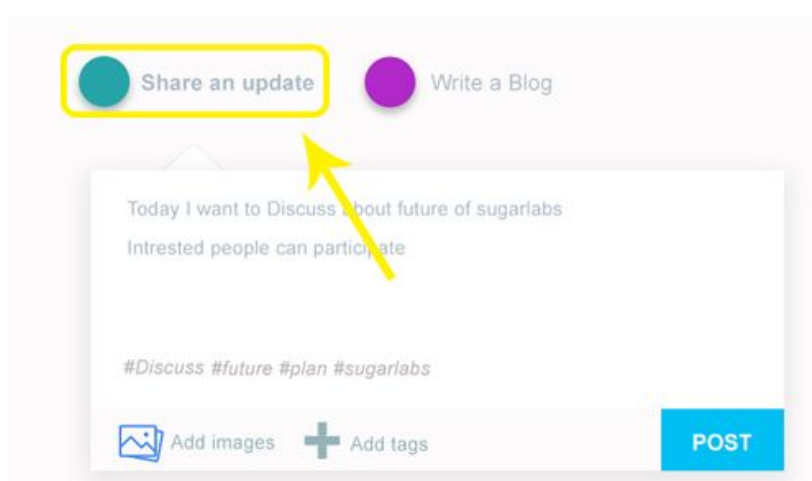


Fig3. Discussion starting

## D. User Profile

- a. Every user will have a profile which will contain the following
  - i. Short info
    1. Name
    2. Role
    3. Status
    4. Other developers profile(GitHub, StackOverflow etc.)
    5. Social link (Linkedin, twitter, facebook etc.)
  - ii. Edit profile option
  - iii. Option to follow[secondary feature]
  - iv. counter(no of blogs/ post)
  - v. counter(no of followers / following) [secondary feature]
  - vi. All the post(discussion thread) by user
  - vii. All the blogs by user
  - viii. Recent actions(commented on any post, liked any post)
  - ix. Assigned projects(projects working on) \* for developers
  - x. All the activities (ASLO)

*Mockup of user profile*

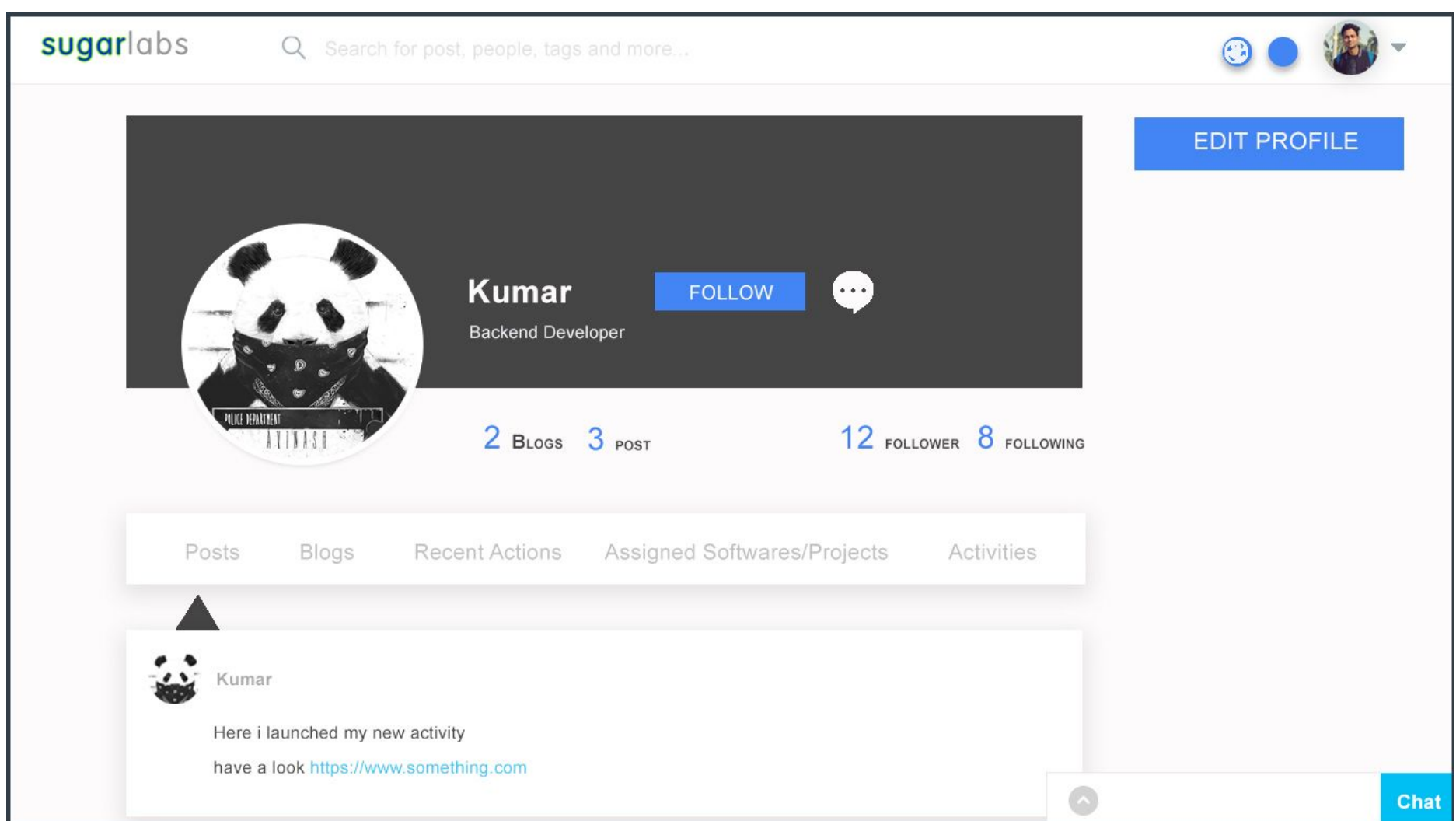


Fig4. Users Profile

## E. Project section

- a. All the projects
  - i. Completed
  - ii. Running
  - iii. Planned
- b. Option to propose a project
- c. Following things will be there for every project



- i. Info
- ii. suggestion | feedback |discussion [for teachers parents]
- iii. Developer section
  - 1. Setup guide | contribution guide
  - 2. Feature Suggestion
  - 3. Technical discussion

#### Mockup of project section

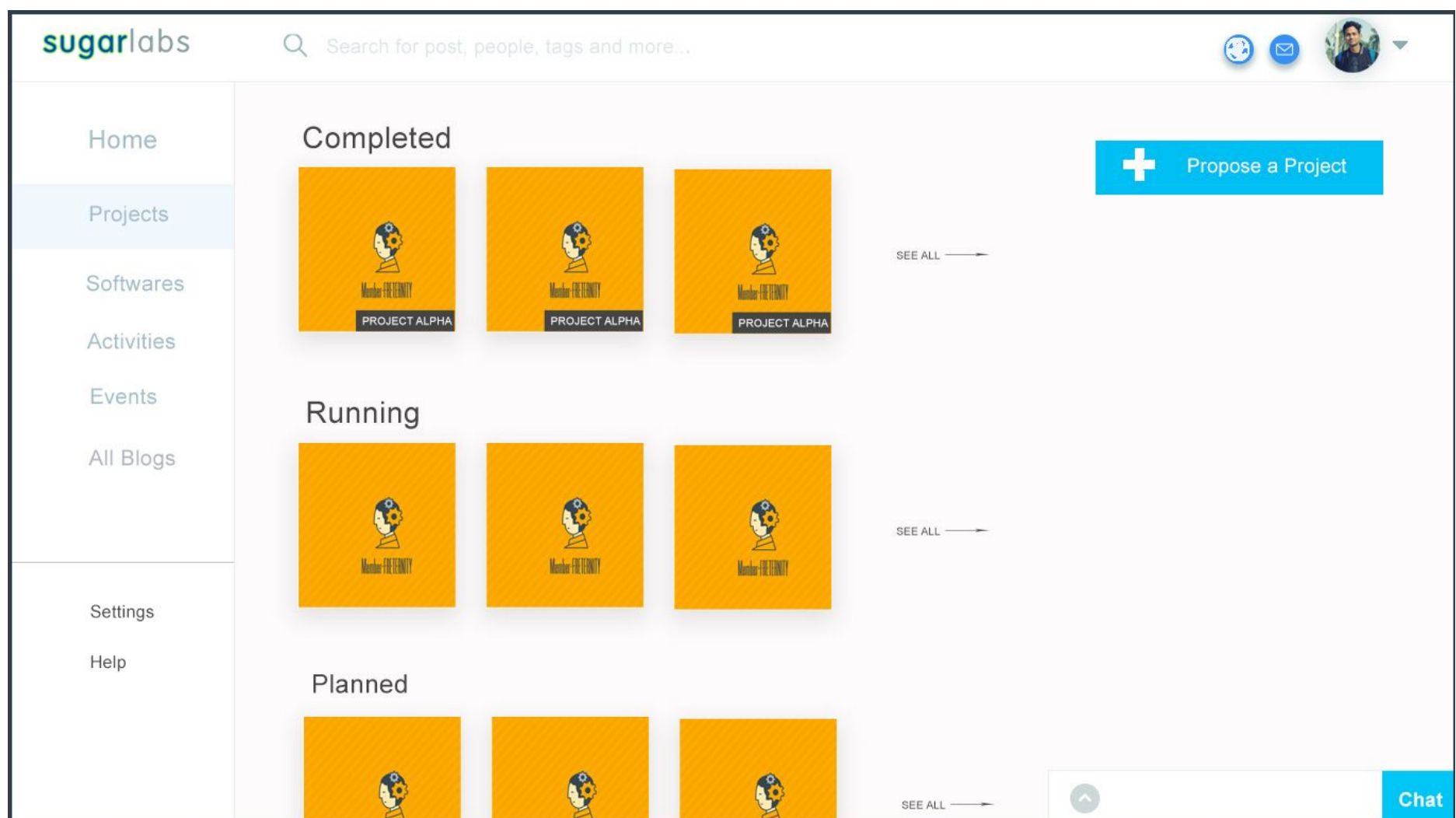


Fig5. project section

#### F. Software section

- a. All the software(web/sugar)
- b. Following things will be there for every project
  - i. Info
  - ii. download/setup
  - iii. feedback/rating
  - iv. Discussion

#### G. Activities (ASLO) section

- a. All the sugar activity(web/sugar)
- b. Following things will be there for every Activity
  - i. Info
  - ii. Download
  - iii. Feedback | Rating
  - iv. Upload activity
  - v. Developer profile

Mockup for project/ activity section

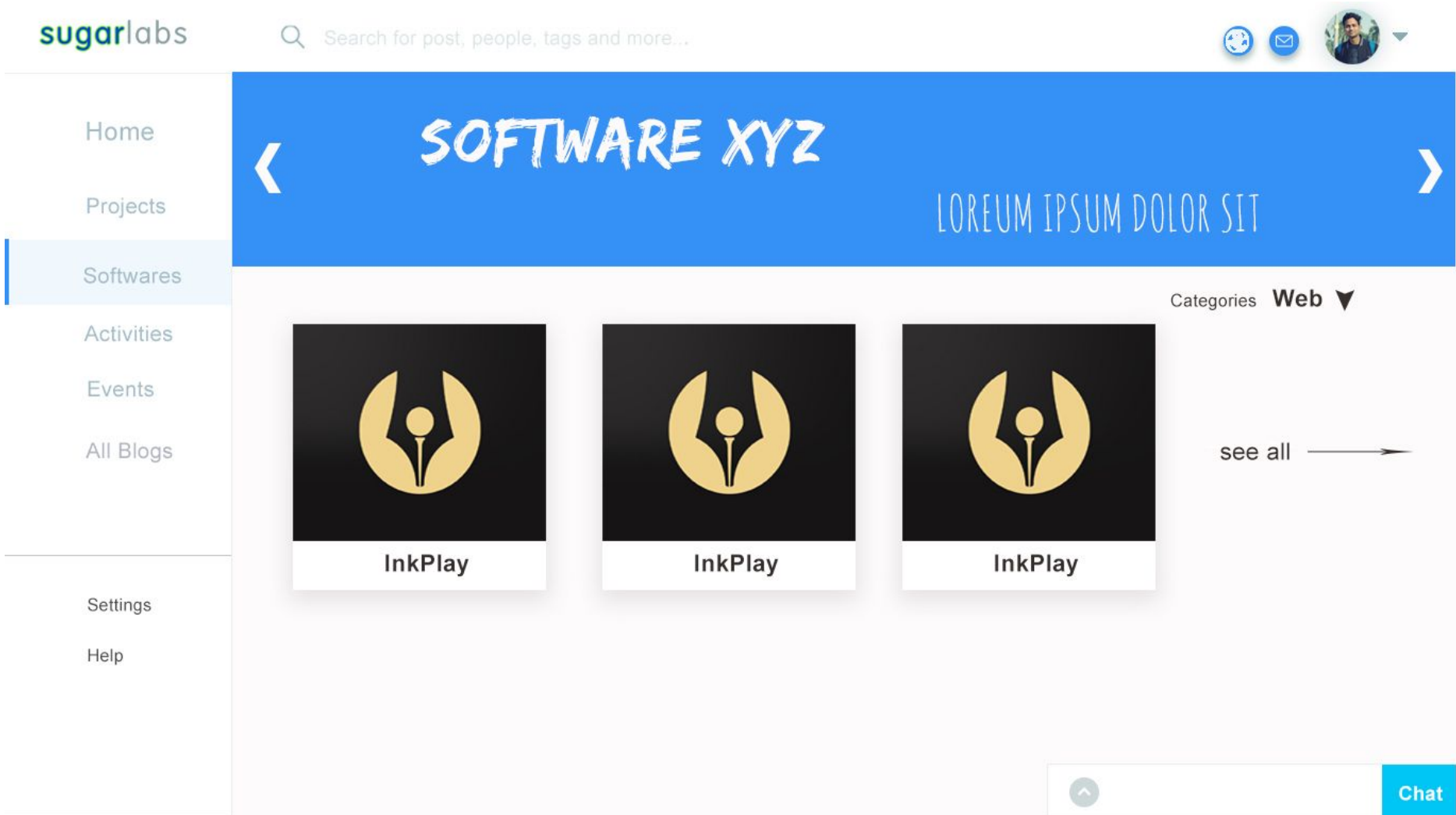


Fig6. software section

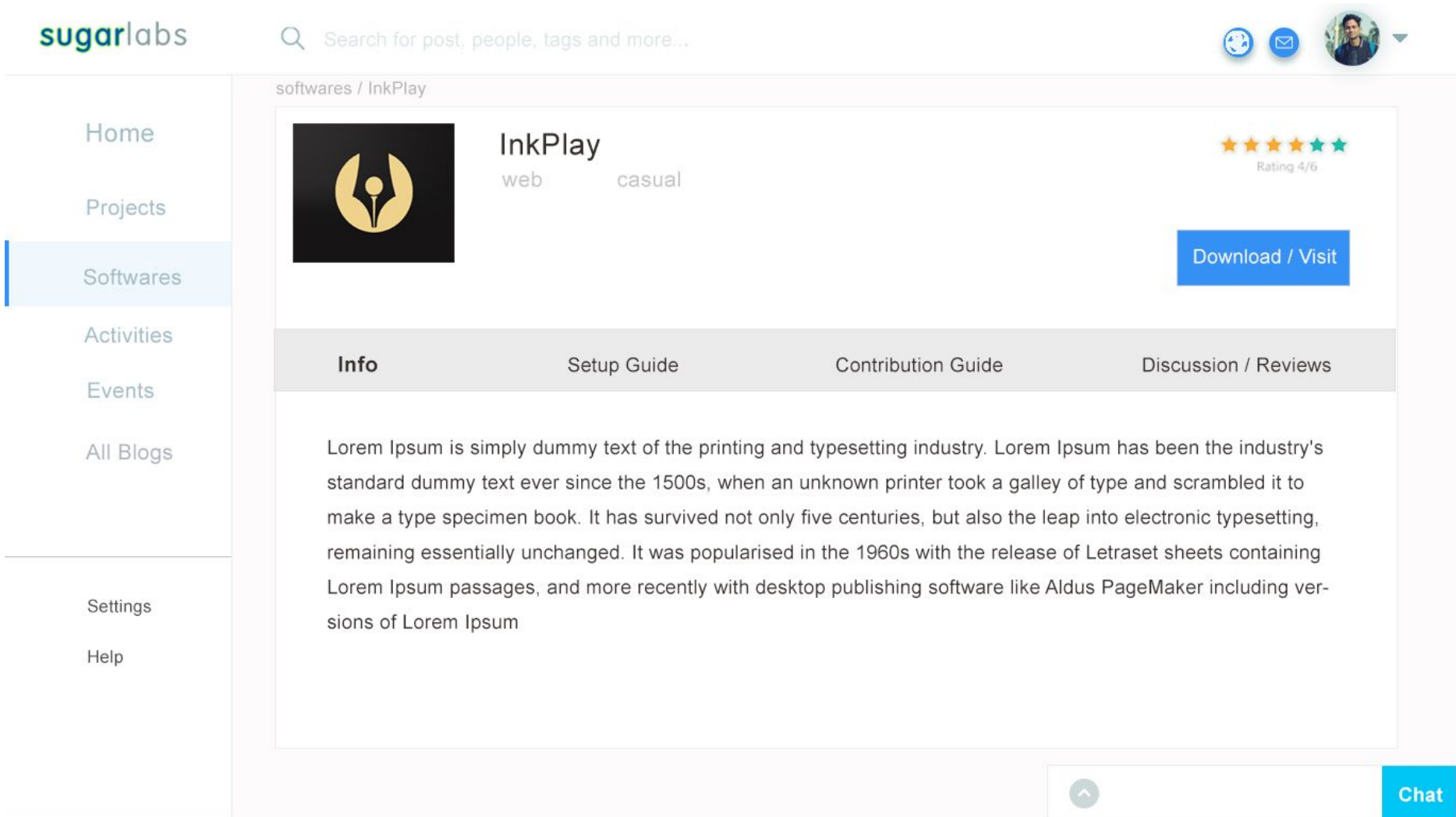


Fig7. individual software

H. Responsive site

- a. Sugarlabs social will be completely Responsive to mobile and tablet platform

## Secondary features proposed

### **A. Chat / Direct message sending option**

- a. This feature will allow users to send direct messages to other users

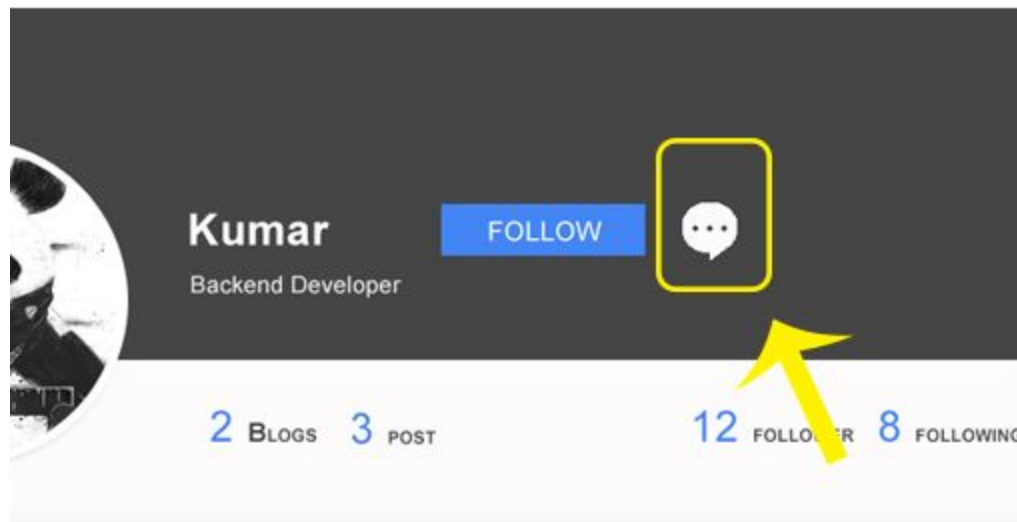


Fig8. direct message option

### **B. User follow feature**

- a. Feature to follow another user as like on twitter, facebook etc
  - i. After following any other profile user will be able to see all the actions performed by that profile on their newsfeed i.e, if liked any blog, commented on any blog etc

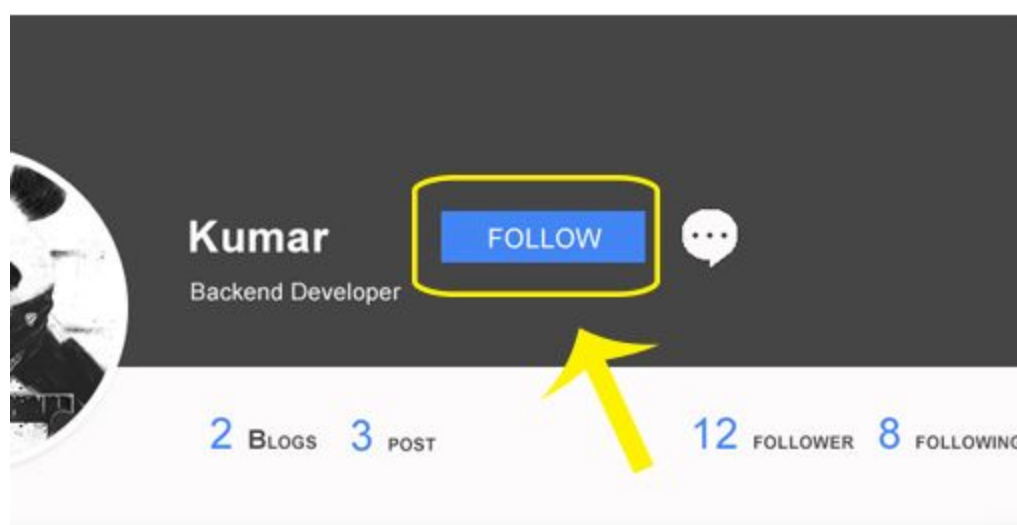


Fig9. User follow option

### **c. Event Hosting and attending feature**

- a. The organisation will be given a feature to schedule events whose info will be available to all the users
- b. Users will be able to mark as 'going to the event'
- c. Also, user can send a request to create an event which will be granted by organization
- d. Events can be of a different variety:
  - i. Any international conference was done by sugarlabs
  - ii. Any local meetups between developers or teachers and developers etc.

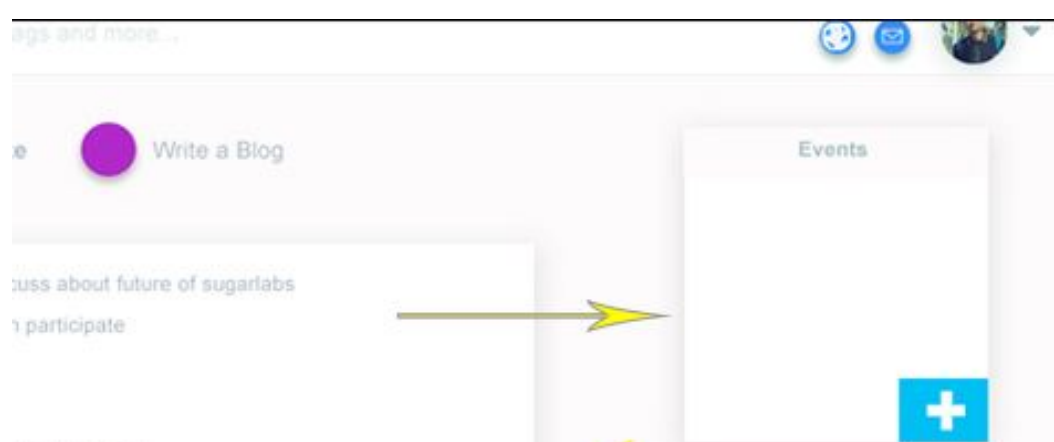


Fig10. Events



## Overall Design flow :

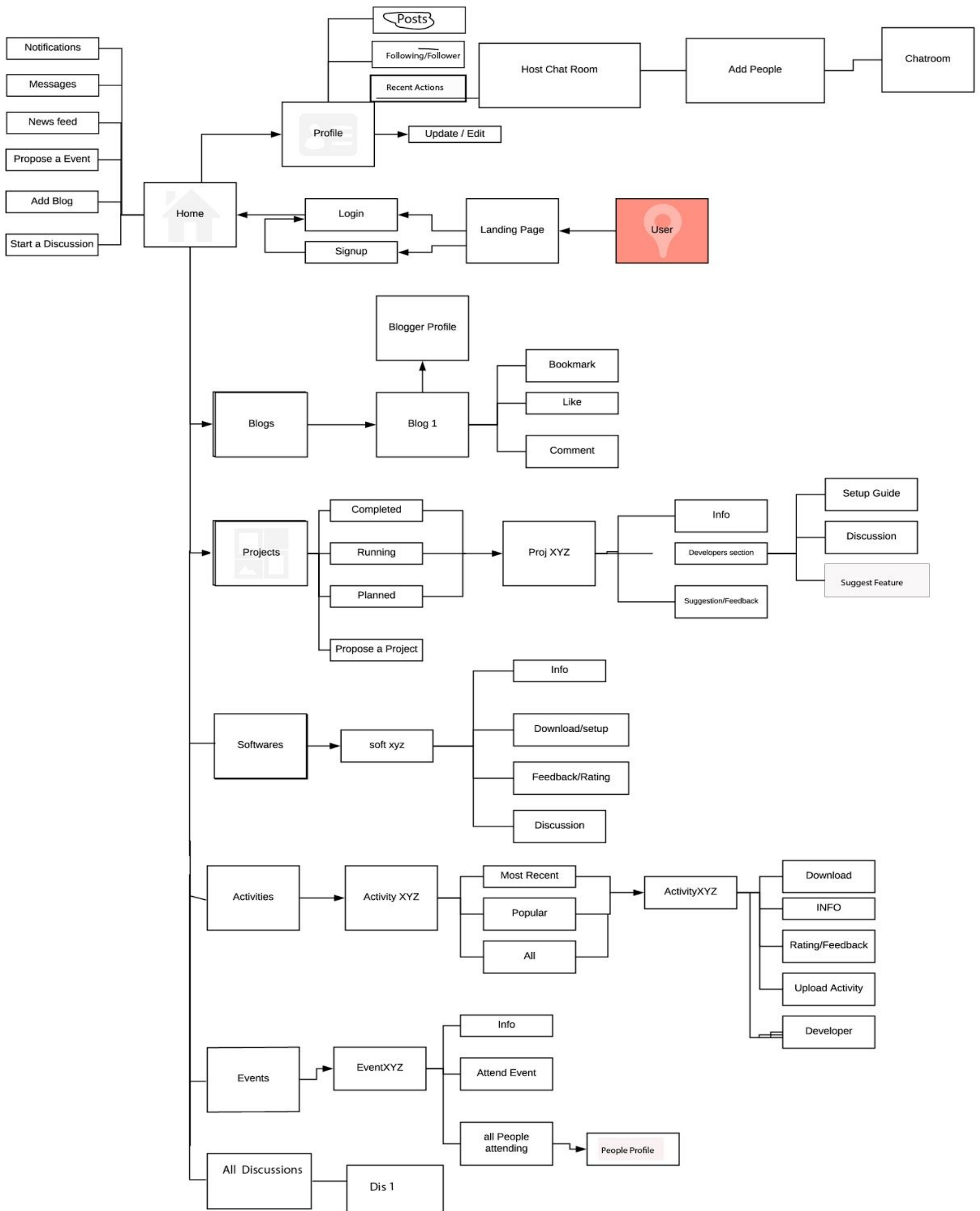


Fig11. Overall design flow

## Implementation:

- The Sugar Labs Social application will be Horizontally scalable so that additional feature will be easily added in the process of development.
- Sugarlabs social application will be based on Django's MVT ( M = Model, V = View, T = Template), Actually MVT is same as MVC ( M = model, V = view, C = controller )which is quite Popular and the only difference between MVC and MVT is that Django itself act as a controller.
- I will be using NOSQL(MongoDB) database rather than the relational database
  - a. Reason for using NoSQL database instead of relational database are:
    - i. As the functionalities that will be implemented on Sugar Labs Social are little complex so it will be always easy to update the data
    - ii. We will have to handle with unstructured data in this project and NoSQL is designed for this.
    - iii. As I mentioned above, application will be horizontally scalable it will be easy and cheaper to scale the application using NoSQL
- For discussion forum, I will be using Disqus or Discourse.
- **Sugarlabs social application Architecture will go like this:**



Fig12. Overview of architecture

### → Backend (Django) architecture:

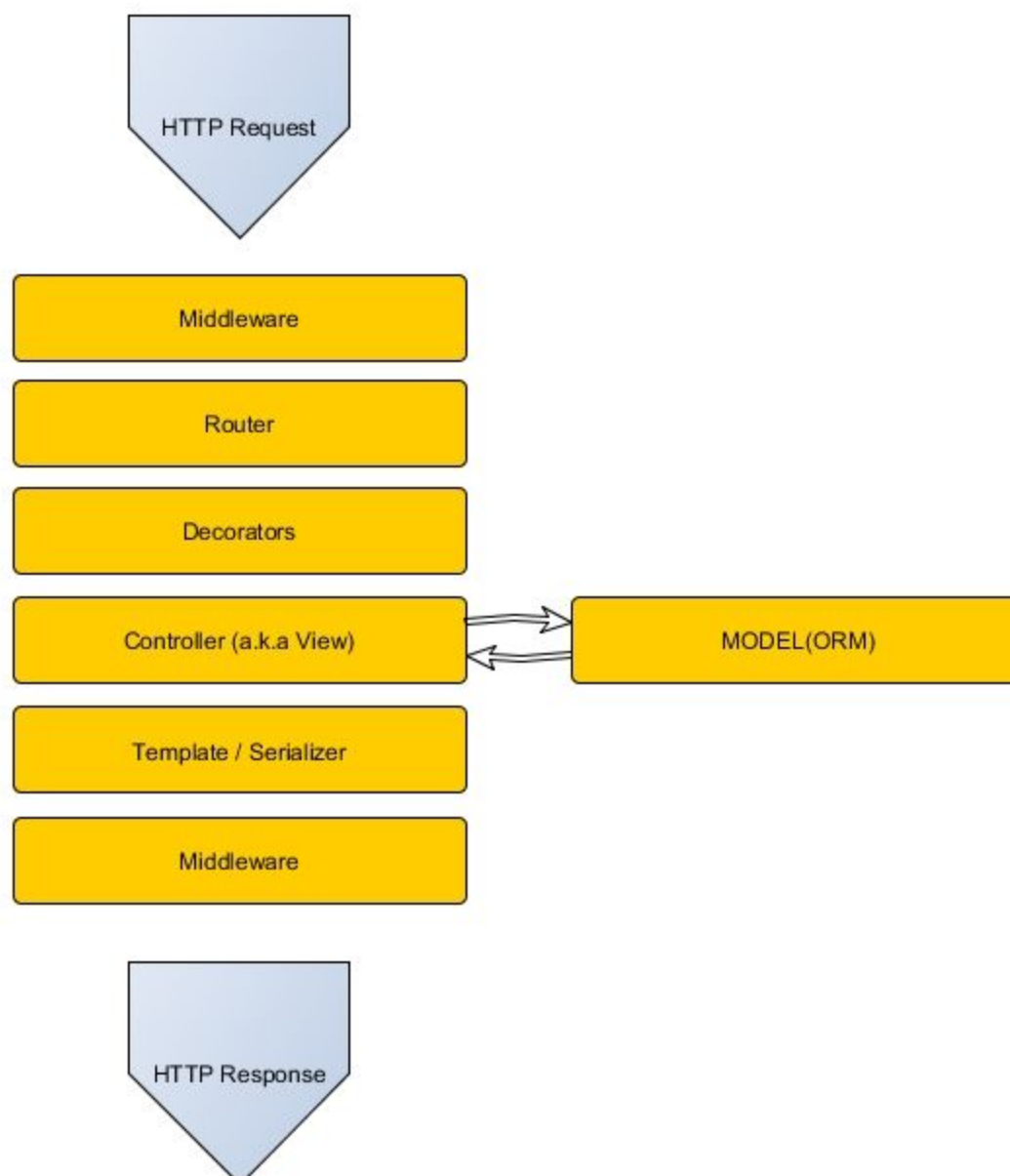


Fig13. Backend architecture

→ Frontend(Jquery) Architecture:

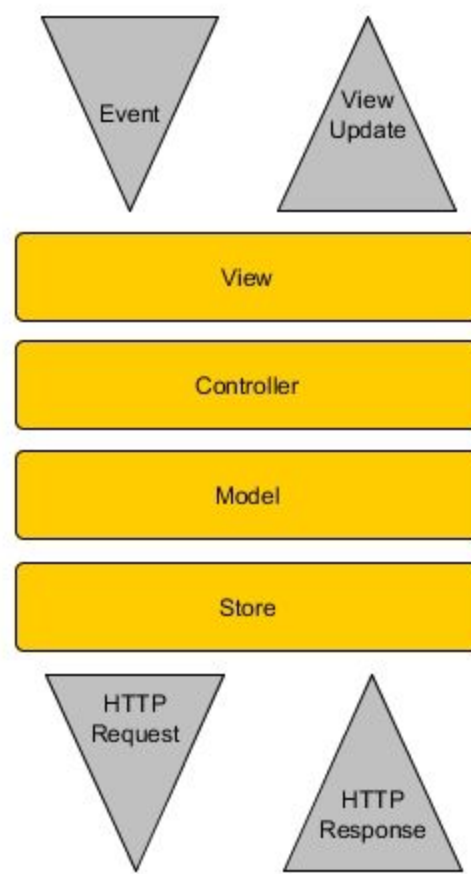


Fig14. Frontend architecture

→ Overall application architecture:

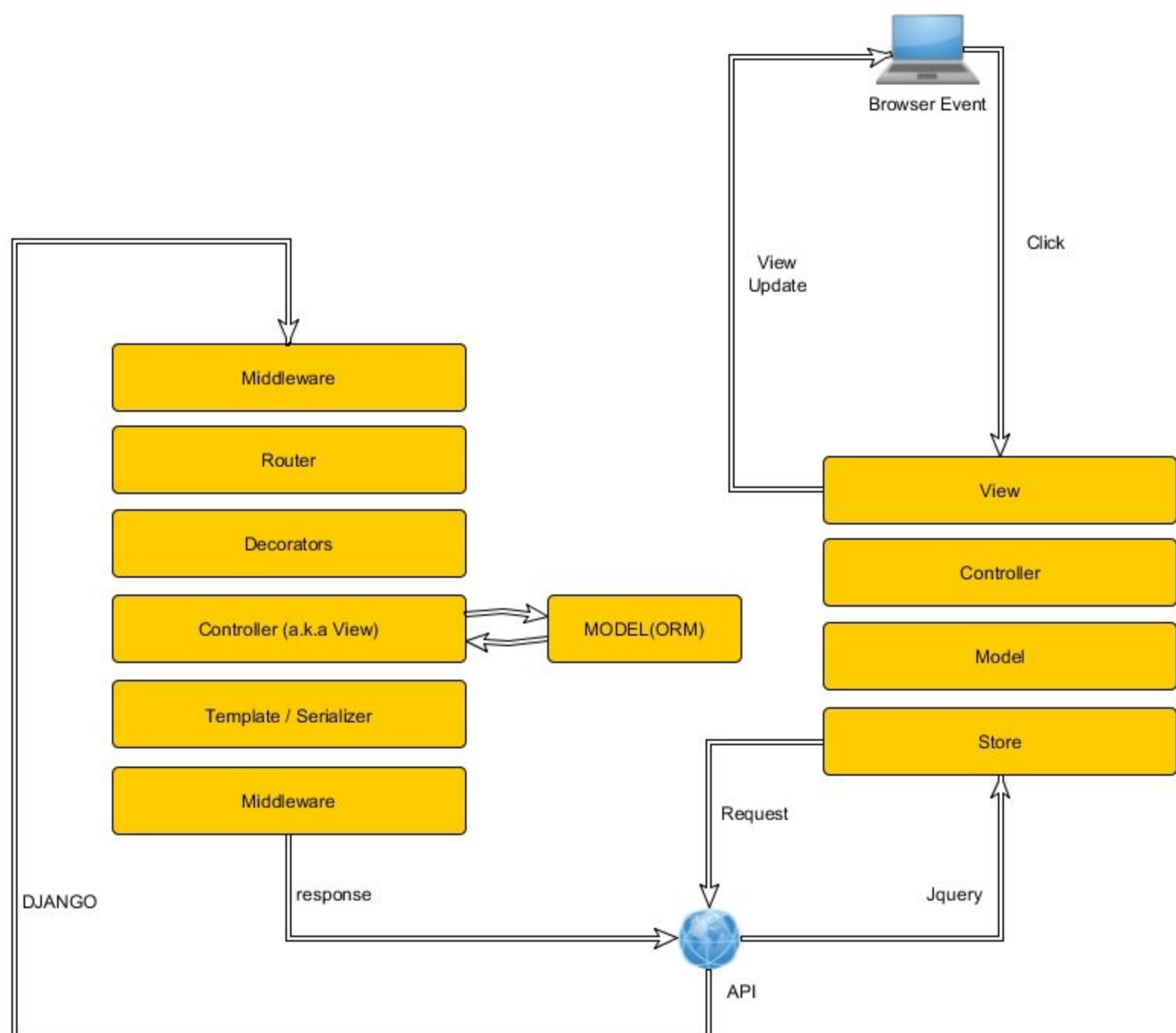


Fig15. Overall application architecture

### What technologies (programming languages, etc.) will you be using?

#### Technologies i will use:-

**Frontend:** HTML, CSS, Bootstrap, JQuery, Javascript

**Backend:** Python, Django, MongoDB

**10. What is the timeline for development of your project? The Summer of Code work period is from mid-May to mid-August; tell us what you will be working on each week. (As the summer goes on, you and your mentor will adjust your schedule, but it's good to have a plan at the beginning so you have an idea of where you're headed.) Note that you should probably plan to have something "working and 90% done" by the midterm evaluation (end of June); the last steps always take longer than you think, and we will consider cancelling projects which are not mostly working by then.**

**\*\*I have Designed the timetable in a weekly format, so that work done in a week is discussed with the mentors at a scheduled meeting, which will be held on every Thursday.**

Days	Task
Completed work	<ul style="list-style-type: none"> <li>Designed the UI</li> <li>Made a timetable</li> </ul>
June 1 to June 7	<ul style="list-style-type: none"> <li>Discuss with mentors for technologies to be used. <ul style="list-style-type: none"> <li>Js and Css frameworks</li> <li>Versions to be used</li> <li>Decide whether to use Docker and Gulp or not (having not any experience so prefer mentor decision.)</li> </ul> </li> <li>Development env and Project setup <ul style="list-style-type: none"> <li>Setting up things in virtual env</li> <li>Integrating techs with Django(i.e MongoDB, Django-bootstrap)</li> <li>Setting up all the static files(css , js )</li> <li>Setting up Docker env, if decided to use.</li> </ul> </li> <li>Writing a blog on project</li> <li>Inform mentors about project progress</li> </ul>
June 8 to June 14	<ul style="list-style-type: none"> <li>Work on feedbacks</li> <li>Implement email registration</li> <li>Design and develop landing page</li> <li>Take feedback on design and work on that</li> </ul>
June 15 to June 21	<ul style="list-style-type: none"> <li>Implement Blog and Posts Feature</li> <li>Work on feeds feature (Includes recently blogs and Posts)</li> <li>Implement Tag filtering Feature</li> </ul>
June 22 to June 28	<ul style="list-style-type: none"> <li>Discuss and confirm the way to implement Threaded commenting system(i.e using Disqus or Implement from scratch)</li> <li>Explore and learn for development of commenting system</li> <li>Work on robustness and functionality</li> <li>Write extensive documentation of work completed so far</li> </ul>
June 29 to July 5	<ul style="list-style-type: none"> <li>Implement Commenting system</li> <li>Add a section in feed for live comments</li> <li>Send project report to mentors</li> </ul>
July 6 to July 12	<ul style="list-style-type: none"> <li>Develop the Project section</li> <li>Work on Robustness and functionality of the code so that all the functionality work correctly</li> </ul>

	<ul style="list-style-type: none"> <li>• Take feedback from the mentors and work on that</li> </ul>
<b>July 13 to July 19</b>	<ul style="list-style-type: none"> <li>• Implement Softwares section</li> <li>• Work on Activities section</li> </ul>
<b>July 20 to July 26</b>	<ul style="list-style-type: none"> <li>• Continue Working on Activities section</li> </ul>
<b>July 27 to Aug 2</b>	<ul style="list-style-type: none"> <li>• Work on testing the application</li> <li>• Do all the necessary Documentation</li> </ul>
<b>Aug 3 to Aug 9</b>	<ul style="list-style-type: none"> <li>• Design and Develop Users Profile Functionality</li> <li>• Try to link the Developer's Dashboard project with Profiles of Sugar Labs Social</li> </ul>
<b>Aug 10 to Aug 16</b>	<ul style="list-style-type: none"> <li>• Work on social authentication</li> <li>• Send project report to mentors</li> <li>• Work on feedbacks</li> </ul>
<b>Aug 17 to Aug 23</b>	<ul style="list-style-type: none"> <li>• Work on event hosting feature</li> <li>• Complete all the Documentation</li> </ul>
<b>Aug 24 to Aug 29</b>	<ul style="list-style-type: none"> <li>• Work on Robustness and functionality of the code</li> <li>• Polish the UI</li> </ul>
<b>Aug 31 to sept 5</b>	<ul style="list-style-type: none"> <li>• Ready the application for production</li> <li>• Complete the all Documentation</li> <li>• Create and submit the Project report</li> </ul>

**11. Convince us, in 5-15 sentences, that you will be able to successfully complete your project in the timeline you have described. This is usually where people describe their past experiences, credentials, prior projects, schoolwork, and that sort of thing, but be creative. Link to prior work or other resources as relevant.**

## Related work:

- Developed the whole frontend, middleware(API callings) and admin panel for a sports fest website of my college.
  - Technologies used:- Html, CSS, Bootstrap(grid system for responsiveness), jquery, fullpage.js(javascript library)
  - Github Link : <https://github.com/KaranSharma-gawds/sports-fest>
- Developed a micro blog using flask
  - Github Link: [https://github.com/avinashbharti97/flask\\_micro\\_blog](https://github.com/avinashbharti97/flask_micro_blog)
- A famous 90's game using javascript
  - Github Link: [https://github.com/avinashbharti97/wall\\_will\\_fall](https://github.com/avinashbharti97/wall_will_fall)
  - Can be played here: <https://avinashbharti97.github.io/hit-that-shit>
- Developed a virtual Drum using JS which can be played on the browser using a keyboard
  - Github Link: <https://github.com/avinashbharti97/beat>



b. Can be played here: <https://avinashbharti97.github.io/beat/>

5. Developed a micro blog using Django

a. Github link: [https://github.com/avinashbharti97/Django\\_bloggy](https://github.com/avinashbharti97/Django_bloggy)

6. Developed the whole frontend in 5 hours of a Hackathon project and stood 4th rank out of 83 teams.

a. Hackathon link: <http://hackshetra18.hackerearth.com>

b. Team Name: BitsPlease

c. Github Link: <https://github.com/ghillu/hackshetra-2>

## About me:

Contact information:

Email: [avinashbharti97@gmail.com](mailto:avinashbharti97@gmail.com)

Phone: +91 8950123818

Facebook: <https://www.facebook.com/avinashbharti97>

Professional:

Linkedin: <https://www.linkedin.com/in/avinashbharti97/>

Github: <https://github.com/avinashbharti97>

Skills:

Languages: Python, C++, C, Javascript, Matlab, SQL, HTML, CSS

Framework/Libraries: Django, Flask, JQuery, Bootstrap, Materialize.css, sqlite

## Why will I be able to complete this project?

There are many reasons that I will be able to successfully complete this project

- I am good at UI design so in the initial phase I will be able to discuss design in the more effective way with mentors  
That will speed the whole process.
- I have an experience of working in a college group which provides web and graphics solutions [GAWDS](#)  
Under this group, I have worked on many web and graphics project and delivered on time.
- No prior commitments in this summer so I will dedicate all my time to this project
- I have experience in web development for a long period so not much difficulty would come in understanding new concepts
- I have much experience of working in a group
- I am in love with coding and development and that's why after being an Electronics and Communication undergraduate student doesn't stop me from doing code.
- Currently, I am working on a project similar to Sugar Labs social which will help in doing the project in a good flow  
Project link: [https://github.com/avinashbharti97/nano\\_socio](https://github.com/avinashbharti97/nano_socio)

## You and the community

**12. If your project is successfully completed, what will its impact be on the Sugar Labs community? Give 3 answers, each 1-3 paragraphs in length. The first one should be yours. The other two should be answers from members of the Sugar Labs community, at least one of whom should be a Sugar Labs GSoC mentor. Provide email contact information for non-GSoC mentors.**

**me:-**This project will create a different culture in the community, after this all the open source developers, Teachers, Parents will unite at a single platform to discuss the projects, software etc. which will not only enhance the product quality as demanded by people but also create an impact on the overall community in a positive way.

- After this project, every community member will have all the knowledge regarding the organization as updates will be available at one place
- This project will help in increasing interaction between community members.
- All the developers will know what is demanded by teachers and parents and that will help all the developers in working on a project in the right direction.

**Samson Goddy:** “The aim of the project is to close the gap of communication and sharing of informations. A platform where sugar labs tools can be easily shared among educators, developers and users.”

**Seetarama Raju:** “The project will provide a dedicated communication platform for teachers, parents, etc. to interact and help each other out. The latest happenings around Sugar Labs such as new projects, new activities, etc. can be reached to the whole community in a much faster way through this project. The discussion forum will increase the interactions among the users and the blog posts will allow users to share their knowledge with the world. These important features help improve the outreach of the community and further expand it.”

**13. What will you do if you get stuck on your project and your mentor isn't around?**

- When mentors are not around I will do following:-
  - I will first head to IRC channel and will take help from other open-source developers
  - I will take help from the community via the mailing list or by creating an issue
  - From my past development experience, StackOverflow and other similar forum have been a lot useful. However, I love to tackle critical problems.
  - If all these won't work then:
    - I have a lot of seniors and classmates who had a great experience in open source and development and they always help each other.
  - In the worst case
    - I will head to the blogs and tutorials written by the professional developers around all over the internet.

**14. How do you propose you will be keeping the community informed of your progress and any problems or questions you might have over the course of the project?**

- I will keep informed to the community by doing follows:
  - On every stage of GSoC, I will be writing blog posts about my progress.
  - In this blog
    - I will be sharing my ideas
    - writing about advantages and disadvantages of different implementations
    - asking for feedback
  - I will regularly share project link with mentors via:-
    - IRC (whenever they will active)

- Will use the mailing list to share project progress.

## Miscellaneous

15. We want to make sure that you can set up a development environment before the summer starts. Please do *one* of the following:

- Send us a link to a screenshot of your Sugar development environment with the following modification: when you hover over the XO-person icon in the middle of Home view, the drop-down text should have your email in place of "logout".

### Proof of work

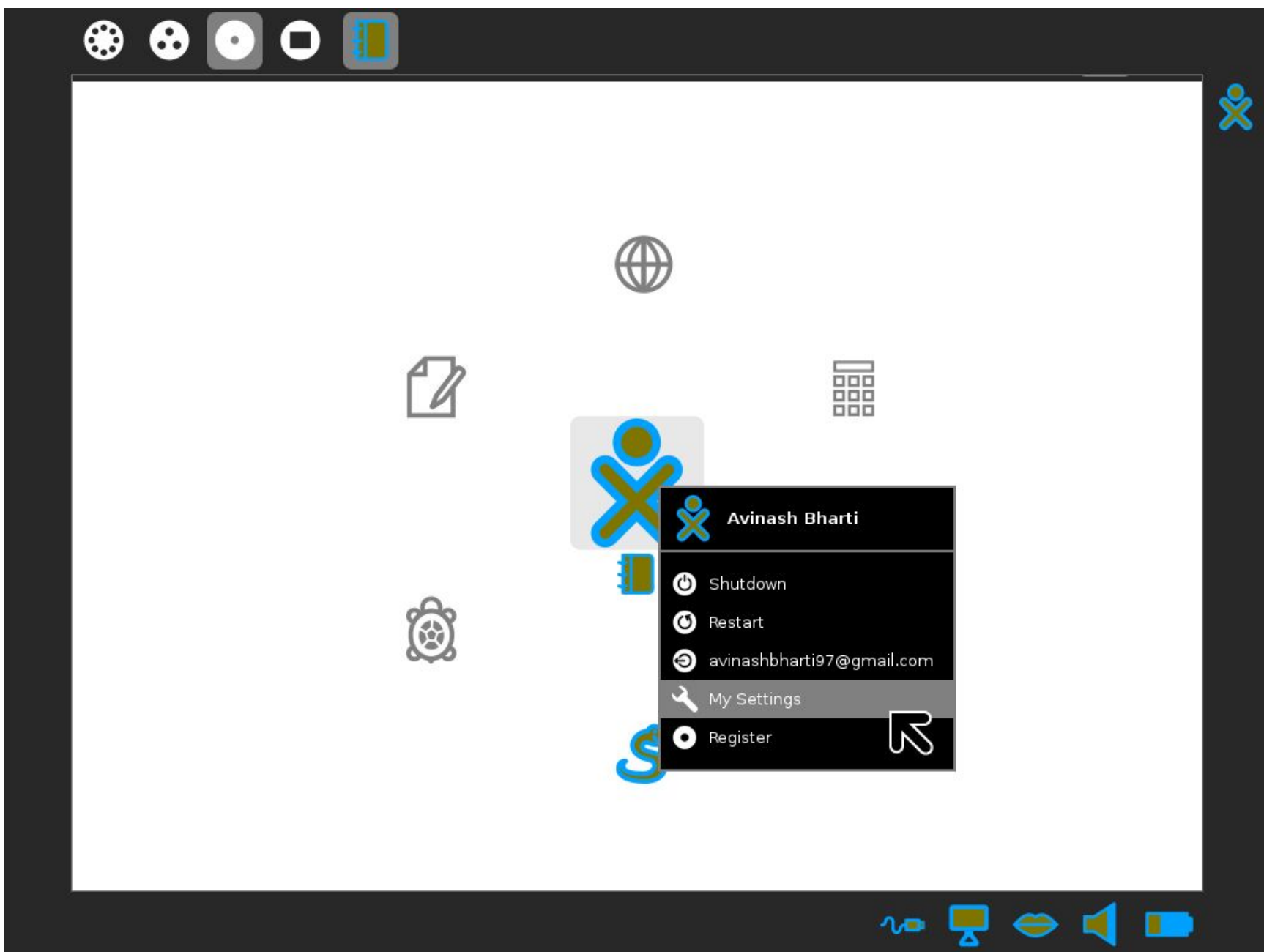
- <https://github.com/sugarlabs/sugar/blob/master/src/jarabe/view/buddymenu.py#L120>

```
$ git diff
diff --git a/src/jarabe/view/buddymenu.py b/src/jarabe/view/buddymenu.py
index 0a89ecb..e16f314e 100644
--- a/src/jarabe/view/buddymenu.py
+++ b/src/jarabe/view/buddymenu.py
@@ -117,7 +117,7 @@ class BuddyMenu(Palette):
     item.show()

     if show_logout:
-        item = PaletteMenuItem(_('Logout'), 'system-logout')
+        item = PaletteMenuItem(_('avinashbharti97@gmail.com'), 'system-logout')
+        item.connect('activate', self.__logout_activate_cb)
         self.menu_box.pack_start(item, True, True, 0)
         item.show()
```

Fig 16 . code differences

- Changed the 'Logout' string to '[avinashbharti97@gmail.com](mailto:avinashbharti97@gmail.com)' in *buddymenu.py* file



- Send us a link to a pull request or merge request you have made on a Sugar or Sugar activity bug.

It's normal to need assistance with this, so please visit our IRC channel, #sugar on irc.freenode.net, and ask for help.

**16. If you plan to work on Sugar-Web projects we want to be sure that you're familiar with web technologies, so:**

- Clone the [Sugarizer repository](#)
- Using instructions [here](#) develop your first Sugar-Web activity
- Send us a screenshot of your new activity executed in Sugarizer

**17. Describe a great learning experience you had as a child.**

I belong to a rural area where quality education is not available to everyone and good schools are situated at a distance of almost 20 km So when I was in middle school I used to teach science to my juniors and that used to give me so much of joy and happiness.

Comics were the main reason that developed my interest in science and computers.

When I was of young age (when internet was not much accessible to my locality )I used to read a lot of comics one of my favourite Indian comics characters was NAGRAJ (RAJ Publication) who always uses chemical reactions against his dumb enemies, and another character was SUPER COMMANDO DHRUV who didn't have any superpower but his great knowledge of physics and computers was sufficient to make his enemies lose.

**18. Is there anything else we should have asked you or anything else that we should know that might make us like you or your project more?**

No, I think all the required question that should be asked is covered in above questions, and throughout the process of answering a lot of things I learned and explored :)

**Category:** Sugar Labs Social GSoC 2018 application