# Google Summer of Code, 2016

# **MIT Appinventor**

Component Projects - Menu Options

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#### **About Me:**

I've been a student of Computer Engineering in D.J. Sanghvi College of Engineering, Mumbai for two years now. The journey has been amazing;

- Currently building Android Applications under a course sponsored by a Scholarship by Google and Tata Trusts.
- I have explored Web Development built a number of websites set up a Web Development Team (<u>CC Developers</u>) having worked on projects for clients from India, China and Dubai;
- We have just completed building a website to be used by the Government of India as a Landing Page for a Garbage Locator Application, to be launched in the next few days: Let's Make India Clean
- I have worked extensively with technologies including the likes of Java, HTML/CSS, PHP, Python and Javascript.

I've developed other applications such as:

• Student Management System for NGOs to keep a track of their wards.

I have explored other fields during the two years that I have spent in College:

- A fighting robot from scratch for the RoboWars Contest in our College
- I've been a Semi-finalist in a National Level Robotics Contest organized and sponsored by IIT-Bombay in association with the Ministry of Human Resources and Development.
- I have also developed a basic game in Unity available on my Github Repository

The point being, I have explored a lot of fields and finally figured out that Android Applications are what I want to work on. Ideally I want to build something that would be productive enough for generic users while catering to the functionality requirements of niche users that would be greatly reliant on this application which is why I've applied for this Project.

I have already spent time reading the Documentation for Components and using the Designer and Blocks Editor in order to familiarize myself with the software and understand the requirements a user would look for when they use the application.

I will also contribute to resolving bugs and contribute to the Git Repository at the earliest in order to demonstrate my understanding.

#### Timeline

### April 22nd - May 23rd : Community Bonding Period

This period will be for discussing the various components and functionality with my Mentors, including building a realistic model of what I intend to implement, gathering the resources that I will need and include time to prepare for my examinations that will be commencing from the 10th of May.

# May 23rd - June 23rd : First Half

#### Week 1

The initial period is reserved for Documentation on Components that is to be read and utilizing the development environment I have setup to test various features and understand the software.

#### Week 2

I have kept this week as a buffer which is to say a lesser allotment of work to be completed as I will be preparing for my Examinations during this period. They will get over by the 13th of June, tentatively.

Hence, this week will continue to focus on reading Docs and testing functionality in my development environment.

#### Week 3

I will commence working on building the code for my Component and understand how to add options to it triggered by events.

#### Week 4

This week will be utilised to develop a UI for the button or alternative option to be specified for this implementation.

#### MIDTERM EVALUATION

By this duration I expect to have built a Component that offers a button (or a similar element) that is clickable and enables addition of Menu Options. While the backend may not be complete the front-end should be prepared and completed.

#### Week 5

This week is ideally for reading up on Menu Options and discussing with the Mentor about the automated entries that users may require into a Menu. I will be updating my blog with the major chunk of progress made in the initial term of GSoC 2016.

#### Week 6

The backend implementation should continue this week and an initial foray into modifying/creating the appropriate Menu Component is the goal so far.

# Week 7

There should be progress made as decided by the Mentor, with regards to the building the Component.

#### Week 8

Completing the backend of the Component development should be the goal with basic functionality of adding Menu Options with a simple interface.

#### Week 9

I have kept this week as a buffer week to complete the pending work, resolve bugs.

#### Week 10

This time is for extending the Component to offer better functionality actively discussing suggestions that I will develop through the timeline with inputs from the Mentor. Adding Events based on which the Menu Options can be triggered is to be completed by the end of this week.

#### Week 11

The final week has been allotted to testing and documentation to be generated in order to enable a streamlined process flow.

#### Week 12

Ideally this entire week should not be required but life has a way of surprising you and testing is never really complete which is why this week is necessary to wrap up the Project, complete the Blog Posts and ensure at least some sort of User Guide/Documentation is available to help someone out in case they want to contribute to this extension in the future.

According to the schedule I have planned out this is how long my Project should take for completion. I have allotted buffer time slots accordingly as and when I have felt the need for them as I realize that one needs to have a backup plan and I wish to stick to my schedule in order to meet my targets on time.

- I will, in my spare time, be publishing a weekly blog with updates of how I'm faring and how the Project is coming along, at my website <a href="CC Developers">CC Developers</a>
- This is primarily with the goal to help inculcate the spirit of development among
  my peers and hopefully motivate more of them to take part in such Contests over
  the years.

#### Other Commitments:

- I will (probably) be undertaking another Project during my Summer that is yet to be finalized. I would like to make the most of my Summer since this is the time I could utilise to strengthen my coding skills as well as learn a new language. I wish to learn more about Blender and Computer graphics which is tentatively the focus of my other Summer Project.
- That said, my priority is going to be to complete my weekly target for GSoC following which I will work on my other Summer Project. I aim to spend approximately 40-50 hours per week with 10-odd hours devoted to research and reading up on the subject of implementation for that respective week.

# Other Applications under GSoC 2016:

- 1. My interest also lies in Computer Graphics and Python because of which I shall be applying for another Organization under GSoC CopyleftGames for a Project to develop an Original Game in PySoy; their 3D Game Engine.
- I have also applied for a project in Joomla as I have considerable exposure to OOP and PHP at this point in my career and it fits my skill set as well as area of interest.
- 3. I have applied for an Android Project under BuildmLearn Org.
- 4. I have also applied for a project under Moodle.

# Why I deserve this spot:

To be quite honest, I kept asking myself this very question over and over again. I didn't have an answer. Until a few days ago. I realized I wasn't able to focus on the other aspects of my life because I hadn't applied for GSoC. I had lost my way somewhere along this process when I realized there are a lot of people possibly more qualified than me for this Project. It was then that I dawned upon a realization.

I could say I have built a Web Development team from the ground up. I have built a website for the Government of India. I have received an Android scholarship upwards of INR 1L. I have won accolades for my work. But the only reason that sets me apart is very simple.

# I really want to do this. More than anyone or anything else.

People spend their entire lifetimes doing something they don't love. I have been privileged enough to be given a choice to learn what I want and believe it or not, that choice is the reason I am what I am today. I tend to get philosophical.

My point is, I am exceptionally good at what I want to do. I have been working in this very field for a little over a year and I have what it takes to get the job done. I take my time figuring it out, but once I do, I am an extremely fast learner and my <u>GitHub</u> repository is proof of that.

I have spent close to a year figuring out what I want to do and I can say without a shred of doubt that the only reason I am applying for this project is because I really, really want to do it. Not for anyone else, but for me.

I want to make a difference by building something different. I am not perfect. I would never be naive enough to expect myself to complete every single task on time and not require any help whatsoever.

The entire reason I am applying to GSoC is to learn. I wish to gain knowledge and insight into the world of Open Source Development, talk to people that are engaged in the field I want to pursue and use their advice to go further in life.

The determination to learn, I would say, far outweighs any other reason to pick me over any of the other (qualified) candidates that have applied for this project.

Thanks for devoting your time to reading this proposal. Hope to be working with you soon!