

SystemS 2018 GSoC Student Application

General Questions

- Full Name: Prathamesh Prabhakar More
- University/Current Enrollment: Zeal College of Engineering and Research, Pune, India.
- Major(s): Computer Engineering
- Short Bio/Overview: I have experience in programming in C, C++, Java, Python, HTML, CSS., most of the time I am doing Android Development. I have familiar with SystemS for last 1 month. I have done one quick PR [[#1030](#)] and submitted. By doing this PR I learned how to use Git and GitHub, make changes in the source code, in this PR, I fixed hardcoded strings in XML files. I am an active member of Zeal Mozilla Club at the institute. During the summer GSoC will be my first priority since I won't have any other commitments during this period.
- Join the [SystemS OS Slack](#) & introduce yourself in #intro channel, then read the [Code of Conduct](#) & write "I have read the Code of Conduct" in the #code-of-conduct channel.
- Contact Info?
 - Email: pmore7006@gmail.com
 - GitHub Username: pprathameshmore
 - SystemS OS Slack Username: Prathamesh M
 - Web Page: prathamesh-more.firebaseio.com
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Community Involvement Questions

- ❖ Do you understand SystemS' mission? Give us examples of your community involvement (i.e. Women TechMakers, WomenWhoGo, Python, PyLadies, SystemS, Ruby, Rails, etc).
 - Yes, I understand SystemS' mission, encouraging the participation of all women involved in technology. I actively attend in local [GDG Pune's](#) meetups. [Women TechMakers](#) also arranges many events for enhancement skills of women's.
- ❖ What kind of contributions have you made to the SystemS Open Source Community that is not related to code?
 - Welcoming new community members. Helping other community members with discussing and suggestion on their ideas.

- ❖ Do you consider yourself as a team player? Tell us why. If you are selected, how do you plan to cooperate with fellow community members (including other students, mentors, etc.)?
 - Yeah! I consider myself as a team player. Working in a team makes you more creative. Everyone has a unique talent, ideas, creativity that makes more productive work. When people work together they can complete tasks faster by dividing the work among people of different abilities and knowledge. If I get selected, I will work as a team member. I will discuss my ideas before implementation with other students, community members, and mentor. Taking proper feedback, suggestions from all. I will try to give suggestion on other students' ideas, improvements.
- ❖ Give us 3 examples (max. 2 lines per example) of unacceptable behavior in a multicultural community.
 - Unacceptable behavior in a multicultural community.
 1. Some people don't respect and celebrate the various ethnic, racial, cultural, gender, and other differences in the community because they think they are different from them.
 2. Respect – Some people in the community, don't understand, respect each other. Understanding how people communicate is the first step toward understanding and respecting each other.
 3. Proactive - Some community members are not proactive in listening, accepting, and welcoming people and ideas that are different from own.
- ❖ How do you plan to stay involved with open source after this program? (Becoming a regular committer, maintainer, mentor).
 - This is my first participation in GSoC. I hoping that this will be a kickstart for open source development. This would be a great way to exposure to real-world applications, a collaboration of code and interacting with the open source community. After GSoC period, I want continuous involved with open source as a regular committer for Systems. I would like to be a mentor for Google Code-In for next year because of mentoring 13-17-year-old students, it will be an awesome experience.

Background Questions

- ❖ Do you have any work that you improved User Experience or User Interface on an application? Give us a few examples.
 - I have one PR [[#1030](#)] for fixing hardcoded strings in XML files. I tried adding new color dress for a game character, still working on this

feature, actually understanding code base. Soon I will add these new colored dresses.

- ❖ Do you have any experience with creating unit tests, integration tests, or regression tests? Give us a few examples.
 - I know concepts of software testing learned in Diploma, but I don't have any real project-based experience with creating unit testing, integration tests, or regression tests. But I would like to learn software testing in real projects-based testing.
- ❖ Do you have any programming or developer experience? Give us a few examples.
 - [Zeal Math Olympiad Android App](#) : The Aim of this project to help HSC students. It provides the best platform for to make mock practice for MH-CET Exams for HSC appeared student.([GitHub](#)).
 - Android App for [Computer Engineering Department](#): This app provides Notices, Event Notification, Timetable, Important Messages to students.
 - [All projects are available on GitHub.](#)
- ❖ Do you have any experience working remotely? What struggles did you have?
 - I had done a project with my friend [Santoshkumar Vijapure](#). We had done [Zeal Math Olympiad Android app](#). We had used GitHub for remote work.
- ❖ Do you have previous open source experience? Tell us what you have done. (i.e. Hacktoberfest, Google Code-in, etc.)
 - I am regularly attending a local open source meetups, events, and workshops at Pune. I had attended [Python Pune's Hack the lights](#) meetup. I learned how to use Git, GitHub. I got basics of Python programming. I got an idea about How open software is built with the community.
- ❖ What motivates you to be a part of GSoC 2018?
 - GSoC is my first move to open source development. This makes me learn more. One of my initial motivations to contributing to GSoC was to improve my skills. I feel open source and communities make it easy for people to join and be a part of software development .

- ❖ Describe the largest project you have completed. This is not limited to coding. You can include fundraisers, school clubs, hackathons, etc. (Include # of members, time zones, details, etc.)
 1. [Zeal Math Olympiad](#):(Dec 2017 - Feb 2018) I and one of friend [Santoshkumar Vijapure](#) had done the largest project for our college, building Android app for Zeal Math Olympiad Competition.
 2. [SMART University – Hackathon \(Apps\)](#):(15-18 Feb 2018) We had given a problem statement on which we have to work on for straight 30 hours.
- ❖ Do you know what a branch is? Use your own words to define a branch in a repository.
 - Branch is simply a pointer to commits, it is like a directory. It allows to work on multiple versions. When we start developing a new feature, we have create a new branch for it. If there's a bug in the current version, you can go back to the main branch, fix the bug, continues working on a new feature branch.
- ❖ Describe any commitments you have over the time period of GSoC (including the community bonding period), such as classes, a summer job, vacation plans, final exams, master's thesis, other internships, jobs, etc.
 - I have final university exam from 14 May to 29 May. But in this time period, I will try to complete a simple task like designing new accessories, clothing, and hairstyle in free time from the study. Helping another community member to implement their feature.

Project Specific Questions

Which Systems GSoC project from this [Ideas List](#) are you applying for (please submit a separate application for each project):

Powerup (Android)

Systems Project

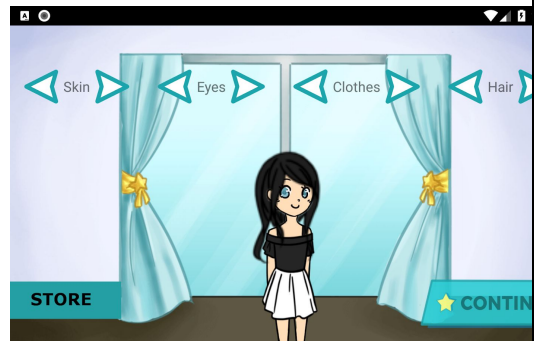
Powerup

- ❖ During installation, what problems, if any, were presented? Describe those problems. Was there anything that prevented you from getting the entire application up and running?
 - I don't get any problem during installation of the application.

- ❖ What kind of experience do you have with mobile applications? Have you ever worked on game development? Please describe your experience in detail.
 - Mostly I am doing Android Development for a third-year diploma. I have learned Android Development from YouTube tutorials. I have developed 3-4 mobile applications. Already mentioned above description. Still, I am at beginner level, but not for a long time.
 - I have little bit experience of Unity Game Development. Actually, I have worked with one of my friend [Nawaz Mujawar](#) for developing small Racing Game with Unity. I got little bit idea about How to use Unity IDE or Visual Studio 2015. How to design custom assets using Inkscape. How to attach an asset to C# code, make object working like the real world.

Project Features/Enhancements and Timeline

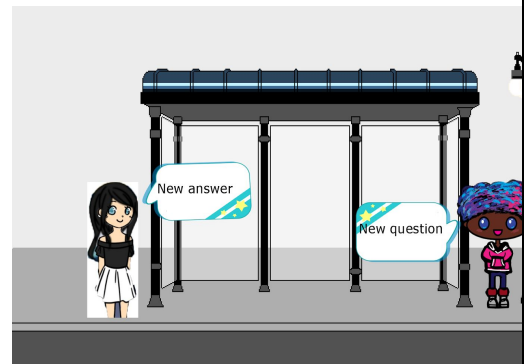
Ideas	Try to implement
<i>Designing new elements (Feature)</i>	<ul style="list-style-type: none"> • <i>Clothes</i> • <i>Hairstyles</i> • <i>Accessories – Spectacles, Headphones, Purses, Bangles, Ear wearing, hats etc.</i> • <i>As per user, user can select any clothing style or hairstyle or accessories.</i>



- *Store Button is a need in AvatarRoomActivity.java. So the user can buy any accessories with existing karma points before playing. We need to Store Karma Points. Every time after playing the game.*



New sceneries (Feature)

- *Bus stop - We can create a new scenario for the bus stop with new conversion to educate a girl How to behave the strangers. How to tackle unaccepted situations.*
- *The overcrowded buses are becoming safe haven for predators to harass the girls by touching them inappropriately.*
- *So we can add new questions related.*



- *Friend's home - In some situations, the sexual behavior will happen in friend's home, so we need to add this scenario to educate a girl.*

	<ul style="list-style-type: none"> • Conversion text will be implemented after discussing with community members.
New sceneries (Idea)	<ul style="list-style-type: none"> • If you look at existing scenarios, there are common questions for every scenario. We need to add more questions in every scenario. This makes the game more interesting, every time user get playing the game, they will get new questions for every scenario.
ViewModel classes for all activities (Enhancement) (#1080)	<ul style="list-style-type: none"> • The ViewModel class is designed to store and manage UI-related data. • This makes the code more readable and maintainable.
Try to keep APK size small (Enhancement) (Reference)	<ul style="list-style-type: none"> • Remove unused code. • Remove unused resources. • Crush PNG files. • Compress PNG and JPEG files. • Reuse resources. • Use of vector graphics for icons. • Use of WebP file format for images - WebP lossless images are 26% smaller in size compared to PNGs. • Use MinifyEnable true and ShrinkResources true • Use only the required libraries from Google Play Services. • Create Resizable Bitmaps (9-Patch files). • (#1082)
Mini Game (Feature)(Idea)	<ul style="list-style-type: none"> • Mini-game on checking general Knowledge of user with simple questions related to women health with a multiple-choice question.

	<div> <div>Karma : 1</div> <div>Do You Need to Worry About Heavy Periods?</div> <div>  <div> <div>Yes</div> <div>No</div> </div> </div> </div>
	<div> <div>Karma : 1</div> <div>How Long Does a Typical Period Last?</div> <div>  <div> <div>1 Week</div> <div>15 Days</div> <div>2 Days - 1 Week</div> <div>2 Weeks</div> </div> </div> </div> <div>•</div>

Potential Timeline for the Features/Enhancements

(Please note that this timeline is only meant to be a guide for your work throughout the program, your goals and expectations will be adjusted during the Community Bonding Period after discussion with your mentors and admins.)

Period (Community bonding, First Coding Phase, etc.)	Milestone	Due Date
Community bonding		24 April to 14 May
	I will try to get to know more about my mentor and my GSoC friends.	24 April - 28 May
	I will understand relevant code base	29 May - 5 May

	in more detail.	
	Discussing new scenarios, mini games and accessories with community members.	6 May - 14 May
First Coding Phase		14 May to 15 June
	Finalizing new scenarios and accessories	14 May to 16 May
	University exams	16 May to 26 June
	Creating ViewModel for all activities	26 June to 31 June
	Implement new avatars with Wheelchairs, Hearing Aids, Walking Stick, Crutches, etc. created during Outreachy	01 June to 9 June
	Anu suggestion, improvements, bug fixes, unit testing, Code cleanup for submission	10 June 15 June
	Try to implement above features from me as possible as I can.	11 June to 15 June
Second Coding Phase		15 June to 09 July
	Two new sceneries discussing with the community. Try to implement them.	16 June to 26 June
	Try to implement Myth and Fact mini game.	27 June to 06 July
	Improvements based on the feedback responses received.	07 July to 09 July
Second Evolution		09 July to 13 July
Final Coding Phase		14 July to 06 August
	Adding family members – Mom, Dad, Brother, Sister to the game. So, the user can select any of them for every	14 July to 27 July

	scenario.	
	Analyzing apk for keep apk size small.	28 July to 01 August
	Bug fixes, unit testing, Code cleanup for submission.	02 August to 05 August
	Students Submit Code and Evaluations.	06 August to 14 August
	Mentors submit final student evaluations.	14 August to 21 August
Result	Final results of Google Summer of Code 2018 announced.	22 August
Celebration	Be an active member of the community. Participate in future programs as a volunteer, commiter, and a mentor.	22 August – Continuous

- ❖ What is your backup plan for time management in the event of unseen difficulties that you might encounter? (E.g.: computer breaking down, family emergency etc.)
 - In a family or any other emergencies, I'll tell my problem to my mentor and all pending work will be done after some time. I will try to complete work from me as possible as I can. And try to stay involved in this program.

Optional Question

Beginner, but not for long!