

Systers 2017 GSOC Student Application - HopperApp(Android)

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1. [Optional] Are you a Syster (www.systers.org)? Would you join if you are accepted? (Note: Systers is only open to women in computing; if you are male, you may not join, though you are welcome to join [systers-dev](#) and our [Slack](#) team channel.)

Answer. Since, i am a male participant, i would like join systers-dev and slack team channel.

2. How can we reach you (email, GTalk, Slack etc.) if we have questions about your application?

Answer. You can contact me via. Mail and Google Hangouts (ayush13mishra@gmail.com) or use Slack (@ayushmishradtu).

3. What is your github username(s):

Answer. My username is ayush13mishra (<https://github.com/ayush13mishra>).

Project Specific Questions

4. Which Systers GSOC project are you applying for (***please submit a separate application for each project***):

Answer. Well, i am applying for two projects 1.Hopper App-Android 2.Conference App-Android.I would like to work on these two application and to create a robust, user friendly, clean application.

4a. What do you plan to accomplish over this summer for this project? (Should be in timeline format. Please tell us what project you want to work

on, how you will approach working on that project, and what your milestones are with dates included. You may ask for help from mentors in Slack in the #gsoc-questions channel if you are unsure about this process. Although, being able to realistically estimate how much you will be able to accomplish is an **important part** of this proposal.)

Answer. I plan to work on the Android version of the Conference application first, as that is the main priority.

Deliverables

- A login system that allows users to create their accounts manually or with various social media APIs.
 - After retrieving the user information from APIs or from manual input, we need to send the data to the etouches API.
- Loading all Conference data from Etouches (listSessions under EReg and listSpeakers) for display to the user.
- Creation of a local SQLite database to store offline data after being preloaded from the server.
 - This database will store conference content (i.e. speakers, schedules, content)
- Integration with Google Maps API that allows users to be able to find their way to the venue.
- Mockups of the basic Activity UIs with basic functionality will be completed and will be implemented after further iterations through talks with mentors.
- Implementation of the final iterations of the Activity UIs. Hopefully, there will be collaboration between the Android, iOS, and Windows Phone teams.
- After completing the application for attendees, work will begin on the Organizers application, allowing organizers to add/edit and keep track of events from their Phones.

Timeline

A week by week timeline on the project is below:

| | |
|-----------------|---|
| April 3- May 16 | <ol style="list-style-type: none"> 1. Familiarize myself with the community 2. Set up the project, initialize the SQLite databases, RecyclerViews for the Android (creating the lists of events) 3. Familiarize myself with LinkedIn, Github, and Facebook APIs for creating user logins. 4. Work with mentors and members of the other teams for a finalized UI design |
| May 17- May 30 | <ol style="list-style-type: none"> 1. Complete the login page as well as the manual registration page, 2. Obtain API-keys for the organization for all three applications. 3. Begin working on threading for stashing data from the E-touches API into our local database. 4. At this point, the main Activities should be finished (Conferences, Speakers, Surveys). |
| May 31- June 6 | <ol style="list-style-type: none"> 1. Complete all the offline capabilities for the application (i.e. making sure that the app is fast when stashing occurs and making sure that pulling data from the database is fast as well) 2. Finish the Google Maps portion of the application |

| | |
|---------------------|---|
| June 7- June 20 | <ol style="list-style-type: none"> 1. Work on connecting the UI to the backend 2. Finish the Notifications 3. Complete the sidebars for all screens except for the login page. This means I'll have to finish the sidebar fragment. |
| June 21- July 11 | <ol style="list-style-type: none"> 1. At this point, v1.0 of the app should be out and ready for testing. 2. While testers are trying to find bugs, I will be creating a JavaDocs file to document and make it very clear what each class within the project does for the application. |
| July 12 - August 1 | <ol style="list-style-type: none"> 1. With community input on various improvements and enhancements of the application obtained through github, I will be able to work on further enhancements on the attendee application. 2. At this point, the organizer application should be completed. |
| August 2- August 16 | <ol style="list-style-type: none"> 1. I will create more unit tests for the application and further document the application while talking to the mentors and the organizers for more feedback. 2. A finalized Android version of the attendee app will be ready to deploy to the App Store and hopefully I will be able to give the organizers access to the finalized organizers app. |

5. Please answer questions appropriate to the stage of the project/your contribution level:

5b. [Optional] Include wireframes of the new applications. Which prototyping tool did you choose? Include [notes](#) of each element (i.e. [accordion menu](#), [bottom navigation](#), etc.) and why you chose that method/icon.

ANSWER. I am posting some of my prototypes for the application that i have designed. Although, this is not the final one , definately with the help of the mentors the application will look much much better than this.

Here is link - <https://pr.to/X9R9LP/> ,(used proto.io)

Inro Screen :



**Welcome to Hoppers
App**

PROCEED

This will display the screen when app is opened.

Login Screen :



LOGIN

E-MAIL



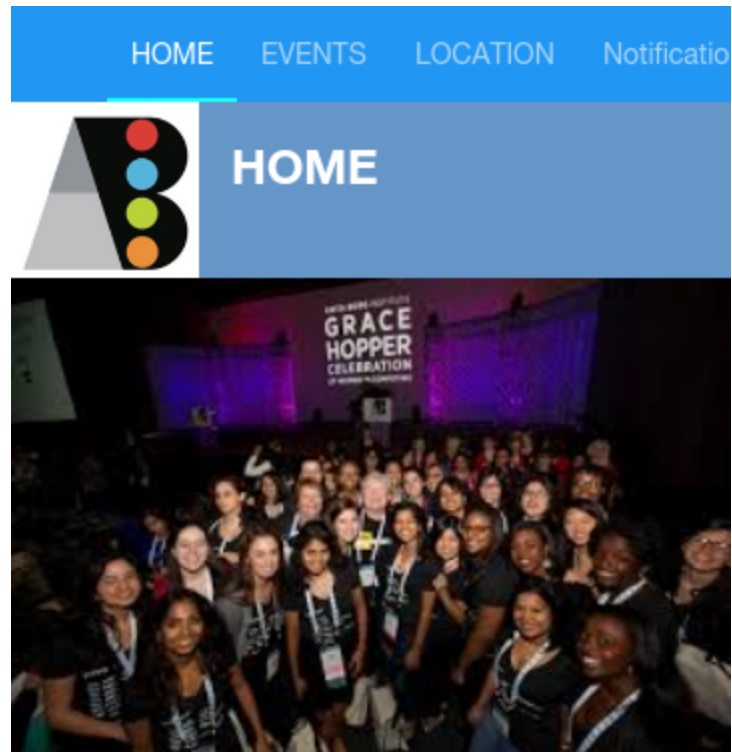
Password



SIGN UP

GO

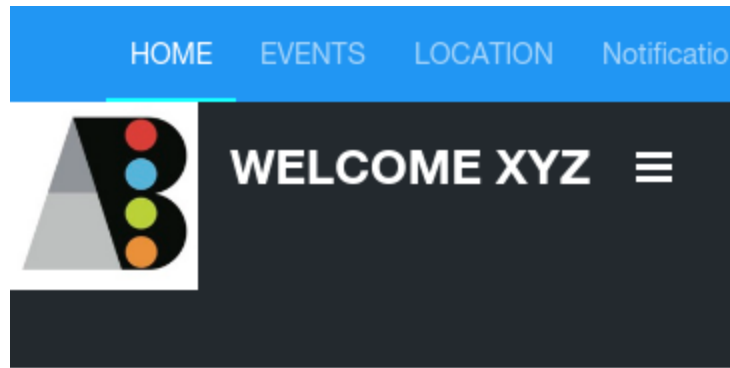
Home page :



ANITA BORG INSTITUTE

GRACE HOPPER CELEBRATION

User page :



XYZ



xx99774930

Mobile



contact_name@sample.com

Personal

SCHEDULE

Inviting Guests

Collecting Items

Volunteer Workshop

5c. [Optional] For new apps, what do you believe are the minimum features required? Why? For established apps, what areas do you believe can be improved? How?

Conference/Hopper App

If you are interested in Conference/Hopper projects, please answer question 11-12.

Answer. I am answering this question with respect to the Hopper app, I think minimum features for any app should be it should complete its objective for which it is made. Also, for Hopper app it should be able to communicate with the volunteer, telling them about their work, schedules etc.

For an established app, one needs to improve its performance, UI, user experience, should be an one stop application.

11. What kind of experience do you have with Android, iOS, or Windows Phone development? Do you have any design or UI experience? Describe in detail. Include any links to previous work/projects.

Answer. Well, I am an intermediate Android developer, with not much experience on Android development but I am working on some of my own projects like digital calculator app, book selling application. I am a self learner and learnt Android dev on Udacity. And if I am given a chance I can prove myself.

Not much, but I can create a decent UI, I had already posted some of suggested UI for the app.

12. Have you had any experience with accessibility design? How do you develop/design applications to be inclusive for people with disabilities?

Answer. I know accessibility design, but have novice experience in making. However, I can suggest some of the design that can make Hopper app more accessibility :

1.Option for change in the colour schema of the app for the person suffering from colour blindness.

2.Telling schedule by running audio for the volunteers who have hearing problems.

3.Using google maps directions speech option.

4.Emergency page to call other volunteers when someone faces any problem.

17. Why do you think you are a good candidate for this project? Describe the skills you confidently bring to the project, what you hope to learn from working on this project, and your interest in the Syssters mission.

Answer. I believe that I am an ideal candidate, because I'm excited and ready to learn new things! Though I have not much experience if I am given a chance I will perform my best. I'm enthusiastic and motivated to work on this project, because I believe that it will grow and strengthen my skills as an Android developer.

Also, I am a competitive programmer, electrical engineer and I love to code.

18. We have various projects in Python, Ruby, Android, iOS and Ushahidi. Describe the *largest* project you have completed in any of the programming languages mentioned.

(Include # of members, time zones, etc.) If you haven't used any of the programming languages, describe the programming experience you have that will allow you to learn a programming language quickly and be successful on this project.

Answer. From the above languages i know python, Android. I am a self learner computer science enthusiast and learnt these languages on my own.

I am currently working on mainly two applications 1. Digital Calculator application 2. Book selling application. I have learnt Android Dev on Udacity.

Also, i am a competitive coder and do programming in C++. I believe to learn a programming language quickly one needs to put his full thrust on learning new things either from books, internet. And i believe i will learn the Android SDK while practicing during Gsoc.

19. We use GitHub for our projects. Do you have experience with any version control software? Please describe the experience and list the different softwares.

Answer. I have lots of experience with Git using command line. I have no experience with other version control software.

20. 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, etc.

Answer. I am a 2nd year EE undergraduate at DTU, New Delhi. I will be having END Sem Theory & Practical Examination: 01.05.2017 (Monday), last date is not specified yet but it will not last more than two weeks. Other than that, my classes will over before May. Till now i have not got any summer Job (intern), but i have applied for one in my university but that will definitely not going to affect My GSOC project.

21. **Education:**

What year are you in school?

Answer. I am in 2nd year, B.Tech, Electrical Engineering at Delhi Technological University.

What programming courses have you taken?

Answer. We have Programming Fundamentals course in our first year in which we were taught C programming language, algorithms, Object Oriented Programming etc. Also i am taking online courses on Coursera and edX, CS50, learning Python.

What did you like about them? What did you not like?

Answer. Well, i was having previous experience on working on C++ in my school life, i was very much exposed to the programming world so i really liked the programming and how do we solve the real life problems by code.
There is nothing that you should not like about programming.

What is your major?

Answer. My major is Electrical Engineering .

Why have you chosen that?

ANSWER. I like Electrical Engineering as much as programming, i want to learn about control systems , microcontroller , their programming and combining the two areas electrical and programming.

Have you done group projects (programming or otherwise)?

Answer. I have done many group projects, with my college friends and classmates on electronic project and electrical projects. I was also involved in my college project team called DTU SUPERMILEAGE.

What was your primary contribution/role in the group?

Answer. I had worked as Electrical Head and contributed in Electronics Projects based on arduino programming.

What made working in a group better than alone? What made it harder?

Answer. Working in a group is very exciting and a better learning experience than alone. You will be able to share your knowledge to others and others will do the same.
Working in group is little tough also as you have to be in pace as your group members.

22. Do you have professional work experience in programming? Tell us about it.

Answer. I currently have not has professional experience working with a large firm.
But have worked on c++ programming for my project in 1st year.

23. Do you have previous open source experience? (Not including the work mentioned about Syssters' projects contributions.) Tell us what you have done. (i.e. Hacktoberfest, etc.)

Answer. Since i started few months back i have not much open source experience but i have a good command over git and github.

24. What would your dream job be if money was not a factor? (i.e. bookstore owner, dog walker, professional cupcake taster etc.)

Answer. Definitely, a traveller and learner.