

Proposal of GSoC 2021

to Casbin Community

About Me

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An introduction to myself

I'm familiar with Golang, React and git. And I am good at reading documents. I can get started with a new thing quickly by reading it's official documents.

I learnt C and C++ in school, and learnt Java, a little bit of Python by myself. Now, I'm learning Golang and frontend technology. I'm interested in network protocols like IP, HTTP, etc.

I am now a member of the Casbin community. I have made some contributions to Repo Casdoor and Casnode. I've been working on Casnode recently, fixing bugs for it these days.

Some Questions

Programming languages

C/C++, Java, Go, React.

Participate in GSoC before?

No.

Can I use git and other development tools?

Yes.

Am I applying to other organizations this year?

No.

Which grade am I in?

Sophomore.

My plans in summer?

No other plans. Google Summer of Code will be my only plan during summer vacation.

Have I contributed to Casbin Community?

Yes. I made some contributions these months, and am now a member of the organization.

About GSoC 2021 Project

I'd like to participate in **Casdoor Casnode** and **casnode-website**.

Casdoor is a project established recently. For now, we need to add some features to it. Since Casoor is an authentication platform, I think we can add some features like sub users, linked accounts, to match with a variety of complex production environments.

Casnode is a forum project. It has almost all the functions that a forum should have, and is relatively perfect. At this stage, our main task is to get advice from our users and make the forum better. So I think I can fix bugs for Casnode and add features our users want. But above all, I noticed that there are still some functions displayed in the user interface that haven't been implemented. I'd like to implement them during Google Summer of Code.

Casnode-website Casnode has lots of APIs, and it needs a website to list all of its APIs to users, so they can modify Casnode as they wish. I'd like to work on casnode-website.

I am willing to follow the arrangement from the Casbin Community. I will complete the task no matter which projects are assigned to me.

My Ideas to These Projects

Casnode

Items in member page: Now, Items in member pages are not implemented. Q&A, tech, Play, Jobs and some other options are invalid. I will add these functions during Google Summer of Code to adapt our users.

Casdoor auth for Casnode: Casdoor is an authentication platform that can serve as an OAuth server. I think that we can use Casdoor as a login OAuth provider.

Admin Management: Now, the only way to add moderators is to edit Database directly in server backend. This is not a convenient way to do so, and is not elegant. So I'd like to add a panel to manage that.

Tags: We can add a function in backend to automatically generate tags for topics when they are published. Tags make a topic easier to read sometimes.

Subjects: Users will be able to use a pound sign to mark the keyword, and add there topics to a subject.

Casdoor

Website: Now, Casdoor generated a swagger UI to our users, but I think that's not enough. We can build a website like <https://casbin.org/> to introduce Casdoor to more people, and act as instructions to new users.

Other issues: Casdoor is a new project, so users may have some requirements based on their conditions. These ideas are valuable because they came from production environments. I'll help to solve these issues during Summer of Code.

Casnode-website

Add GitHub Pages continuous integration: GitHub Action is a convenient way to deploy websites automatically. And GitHub Page is a good place to serve static webpages. I'd like to add CI to Casnode-website to make this process easier.

Add Netlify Bot: We can add a Netlify Bot to this repository. When pull requests are made, the bot shall automatically deploy the code in request makers' branch to Netlify as a preview.

Write API documents: There is an issue said that there are few comments in casnode. This made casnode source code difficult to read. So in summer of code, I will add API documents to casnode-website. This may be an elegant to provide documents. I believe these documents will will serve as a reliable manual for our users.

Chat area: For some of our users, making an issue on GitHub may be difficult due to some reasons. So we can make a chat area to let our users talk about questions easier.

Timeline

Date	Work	Comment
now - June 8	Resolve issues for Casdoor and Casnode	
June 8 - July 13	Implement functions for Casnode	
July 13 - July 17	GSoC first evaluations	Fix bugs during this period.
July 17 - Aug 17	Add new functions for Casdoor	My summer vacation starts, so I will be completely free during this period.
Aug 17 - Aug 24	GSoC Students Submit Code and Evaluations	

Other information

My summer vacation starts on July 7. Before July 7 I may be a little busy, can't work a full day for Casbin. But I will try my best to make commits everyday.

I live in China, and my time zone is GMT+8.

During school days, I may work on Casbin projects from 19:00 to 22:00. During weekends, I can work for Casbin from 14:00 to 17:00. During summer vacation, I can work for Casbin almost all day.