
Kunal Kashyap

kk4564@nyu.edu

New York City, USA (Eastern Daylight Time: GMT -4)

[GitHub](#)

New & Improved Website for PgJDBC

Google Summer of Code 2022 PostgreSQL Project Proposal

MOTIVATION

In my 4 years of being a full stack developer, I have used numerous open source softwares, frameworks and libraries. I've always marveled at the quality of these frameworks and how they enhance the developer experience. A passion for coding and development, along with the urge to contribute to and get to know other people within the open source community, gave me a strong reason to be a part of Google Summer of Code.

Among the various databases I have used across my projects, Postgres is the one I have used the most. Consequently, contributing to Postgres and providing some value to this open source project seems like the perfect opportunity.

PROJECT OVERVIEW

The primary objective of this project is to create a new and improved website for the PostgreSQL JDBC Driver (PgJDBC). The current PgJDBC website is based on a dated UI template and is very inefficient when it comes to updating old information, for e.g., download links for older versions. The project aims at creating a modern, responsive and clean user interface for the website along with the latest, more efficient ways of updating and publishing information.

POTENTIAL IDEAS

1. Completely changing the user interface to a more modern and minimal look. Making it more uniform with the main PotsgreSQL website.
2. According to me, a good solution would have been using GatsbyJS, a React framework, as it can act as a static site generator and is extremely fast. In Gatsby, we could have also utilized the advantages of React, for reusable components. But as the mentor suggested, he would like to continue with Jekyll, so we can just migrate the website to the latest version of Jekyll, and handle the reusable components part through HTML and CSS.
3. To tackle the problem of efficiently updating old information, we can implement dynamic links, where we create a link url using variables for the version number. This way when the links need to be changed, we can just change the version number variable in one place, which will change the links everywhere.
4. Since we will be using Jekyll, publishing through GitHub pages would be easy, since it is also powered by Jekyll.

DELIVERABLES

1. A modern and clean design for the website.
2. Responsiveness for all screen sizes.
3. Migrating to the latest version of Jekyll.
4. Implementing kramdown as the markdown renderer as that is what Jekyll uses by default.
5. Deploying the website through GitHub Pages
6. Proper documentation of the project

MILESTONES

The estimated time given for the project is 175 hours. I will be able to work 15-20 hours per week, starting in June. So that will make the duration of the project to about 10-12 weeks or 2 and a half months. The detailed timeline is as follows:-

May 20 - June 12

- Bonding with the mentor and the community.

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- Understanding the codebase thoroughly.
 - Planning and finalizing expectations.

June 13 - June 24 (2 weeks)

- Designing the new look for the website according to the objectives stated above.
- Getting the design reviewed, discussing user experience and making suggested changes.
- Finalizing the new modern and clean user interface design.
- Setting up the development environment.

June 27 - July 15 (3 weeks)

- Working on the development of the website.
- Creating layouts for the reusable components.
- Creating templates for various pages.

July 18 - July 29 (2 weeks)

- Populating the website with all the content and data
- Implementing the kramdown markdown renderer for the content.
- Refactoring the design according to the data wherever needed.

August 1 - August 12 (2 weeks)

- Setting up deployment through GitHub pages.
- Starting work on the project documentation.
- Bug fixes and improvements.

August 15 - August 19 (2 weeks)

- Final deployment.
- Finishing up with the project documentation.
- Time for any unplanned or unexpected work.

ABOUT ME

I am a Computer Engineering graduate student at New York University and I completed my graduation in Electronics and Communication Engineering from Delhi Technological

University in India. I have always been more interested towards the software side of things than hardware. I'm a self-taught web developer and I have done numerous internships as a frontend and a backend developer. More recently I have worked as a freelance developer and my first full-time job was that of a Software Engineer for Web Applications. Across my various work experiences and projects, I've worked on frontend technologies like HTML, CSS, React, Angular and on backend technologies like Node.js (with Express), Django, Spring Boot, and also on databases like PostgreSQL, MySQL and MongoDB. You can find my resume [here](#).

I have some experience in contributing to open source projects as a part of Hacktoberfest 2020. I have also been a mentor in an open source project as a part of [Cross Winter of Code](#) 2021 organized by IEEE Delhi Technological University. CrossWoC is an open-source event similar to GSoC, but at a smaller scale. As a mentor, I had created an [open source project](#) along with some issues (bug fixes and new improvements) that were supposed to be worked on by budding open source contributors.