

New and improved website for pgjdbc (JDBC) (2022)

Personal Details

Name: Vedant Gokhale

Email: gokhalevedant06@gmail.com

GitHub: [gokhalevedant06](https://github.com/gokhalevedant06)

Time Zone: UTC+5.30 or IST

I am a second-year student pursuing Btech in Artificial Intelligence and Data Science from Vishwakarma Institute of Technology, Pune. I've been interested in Full Stack Web Development for a couple of years now, having worked on some projects like:

1] Studify – A course management platform developed using MERN Stack

Link - <https://studify4.herokuapp.com/landing>

GitHub - <https://github.com/gokhalevedant06/Studify-UnScript-Hackathon>

2] Money Manager – A money management web application developed to provide financial solutions to meet your desired financial goals. This project is developed using HTML, CSS, Bootstrap, JavaScript in the frontend and Django and **PostgreSQL** in the backend

Link - <https://money-manager-vit-pune.herokuapp.com/>

GitHub - <https://github.com/gokhalevedant06/MoneyManager>

3] FollowUp – A platform where parents and teachers can connect. Student performance can be tracked by parents, data is visualized using graphs and charts for better analysis. This project was also developed using MERN Stack

Link - <https://followup2.herokuapp.com/>

GitHub - https://github.com/gokhalevedant06/HackNYU_Hackathon

3] Certificate Generator – A tool that automates the process of certificate generation and distribution. This tool is built using React.js, Node.js, and Express.js.

Link - <https://certificate-generator-dsc.herokuapp.com/>

GitHub - <https://github.com/gokhalevedant06/Certificate-Generator>

Apart from those I also have decent experience in developing modern websites and web applications. Some of my work:

1] <https://reticulo.in/> - I have worked on this website during my internship. [Click here](#) for details about the internship

2] <https://dscvitpune.com/> - This website belongs to the Developers' Students Club, VIT Pune. I am a web developer in this club and have contributed to the development of this website

With experience developing websites, especially with JavaScript and modern web technologies such as [React.js](#) and [Next.js](#), I would be a good fit for this project.

Furthermore, I have experience working with pure HTML and CSS, as well as libraries such as [Bootstrap](#), [Chakra UI](#), and [Material UI](#), which assist in creating modern user interfaces with great user experience

Why am I interested in PostgreSQL?

The first project I developed was with the help of the PostgreSQL database. It is a powerful, open-source object-relational database system. PostgreSQL is widely used in production because of its reliability and performance. I will be grateful if I get a chance to work with the organization.

Having done a couple of projects using required technologies before, I can also confidently say that I will be able to deliver a finished product with all features within the timeframe given.

So, to answer the title, both because of my excitement for the topic and my ability to contribute to this project

Proposal

I am interested in developing a new and improved website for pgjdbc (JDBC) (2022) mentioned in the [Project Ideas for GSoC](#). The current website <https://jdbc.postgresql.org/> is based on an old PostgreSQL template. The aim is to update the pgjdbc website.

The website I plan to develop will have these features,

- A simple, modular User Interface
- Easy to Use (Assuring a Great User Experience)
- Fully Responsive – Well optimized for devices of all sizes
- Use of CI/CD pipeline – to automate updates
- A well-documented codebase

I am super excited to work on this!

Benefits to the Community/ Why should PostgreSQL sponsor this?

The current website is designed with an old PostgreSQL template, making it non-responsive. In terms of user experience and modern features, there is room for improvement. At the moment, the website is not very user-friendly. All the links and notes can be better represented

Also considering the time constraint, a web application is a project that is definitely deliverable because I have worked on many projects developed using the required technologies and will greatly enhance usability. I can guarantee that this proposal can be developed into a product within the timeline given

Implementation Plan

I will start the work by researching all the new features which can be integrated in the website after discussion with the mentors. The mentors and I will determine which technologies will be used for the website development. If I am not familiar (which won't be the case) with the technologies will learn them as soon as possible

The current website contains 6 pages mainly

1. Home – This page contains all the notable changes and new releases and the links to them. This page also contains some shortcuts to the documentation and

GitHub repositories. Apart from this, the home page contains a navbar and a footer

2. About – This page contains information about the PostgreSQL JDBC driver and the features of the website.
3. Downloads – This page contains the links to current versions and all the previous/archived versions of the PostgreSQL JDBC driver. This page contains a table that contains links to all the previous/archived versions of the drivers.
4. Documentation – This page contains a small description followed by the link to the current official documentation of the PostgreSQL JDBC interface
5. Community – This is the community page, which contains links to the PostgreSQL weekly news and mailing lists available
6. Development – This page contains 4 sections
 - a. About the driver
 - b. Tools
 - c. Build Processes
 - d. Test Suite

At this point, I will set up the development environment and start the development of the website. Along with this, I will use GitHub actions to automate any future updates and development of the website.

Before pushing the final build to the GitHub repository, complete developer documentation to support both deployment and further development will be published by me.

Deliverable

A new and Improved Website for the pgjdbc project will be developed by me. Users will enjoy modern features and a pleasant experience on the website. In addition to being easy to use, the site will be automated for further updates and development using actions from GitHub. The site will also be deployed after a conversation with the mentor.

Timeline

May 20- June 12 - Community Bonding Period

- Research on all the required frameworks and libraries
- Getting familiar with PostgreSQL templates and color schemes and fonts
- Write a workflow diagram of the website

June 13 - July 29 - Phase 1

Week 1

Starting with the website

- Set up the development environment (color scheme and font)
- Creating a Figma design for the website
- Getting the Figma design reviewed with the mentor

Week 2

- Will make the changes required in the Figma design
- Finalizing the Figma design after approval from the mentor
- Starting with the Home page

Week 3

Home Page

- Developing the Navbar according to the Figma design
- A section for the latest releases and Notable changes in the releases
- Aside section for shortcuts, support us and some archives
- Developing a footer that will contain some useful links

Week 4

Starting with the about us page

- Developing About Us section
- Developing features section
- Adding a Favicon to the website. It will be the PostgreSQL logo.
- I will add more content/sections if required.

Week 5

Starting with the downloads page

- Developing a section for the current version.
- Developing a section for other versions and archived versions. These versions will be displayed in a tabular format just like the current website with a modern user interface.
- Making the website responsive developed until now

July 29 – September 4

Week 6

Starting with the Documentation page.

- This page has a lot of improvements. The current documentation looks old and can be modified into a better version.
- The documentation can be developed similar to this - <https://nextjs.org/docs> or <https://www.postgresql.org/docs/>

Week 7

Community and Development Pages

- The community and Development pages can be developed similar to this <https://www.postgresql.org/community/> and this <https://www.postgresql.org/developer/>
- These pages mainly contain links to the mailing lists, some dependencies, and some information related to the driver.

Week 8

- If some more sections are to be added to the website
- I will work on the responsiveness of the website
- Automation with GitHub Actions for further development and updates
- I will write some tests if required

July 5 – September 12

Week 9

The website should be completely functional by now. All that is left at this point will be:

- Minor bugfixes
- Small optimizations in code
- Apart from that, write documentation for the website

Week 10

Intentionally kept free, to sort out any issues that crop up before this and cause any unforeseen delay.

Deliverable

The project will be complete at this point. This website will be fully functional with a wonderful user experience and a modern look. The development of the website will be automated with GitHub actions.

Other Summer Plans

Of which I have none, so I will be free to work full time. Just to clarify, by full time I guarantee I can invest 30+ hours a week into this.