

Google Summer of Code 2022

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

Name and Contact Information

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Introduction

My name is Alena, I am a 4th grade Software Engineering student and I'd like to make a contribution to Open Source software.

I have experience building webapps using Vanilla JS, React and Express.js in combination with relational and non-relational databases. Building web projects is my primary interest for the moment.

Motivation

The chance of getting started with contribution in Open Source while communicating to a mentor and working in a huge community of those who are making their first steps in such projects seems to me to be extremely valuable. I would like to understand the basics of contributing to Open Source software working alongside other developers and to find ways for me to contribute in the future.

Also, PostgreSQL was the first database, which I used in one of my fullstack projects, and I'll be happy to produce some value to it.

Project Overview

The project aims to rebuild and improve the pgjdbc website.

Currently the website uses redcarpet as a markdown renderer and old version of Jekyll.

The goals would be to move to the latest version of Jekyll, implement use of kramdown as a markdown renderer and move to one of the industrial standards of modern UI design.

Also I'd like to suggest working on website's accessibility and responsiveness.

Deliverables

- Jekyll updated to the latest version;
- website uses up-to-date markdown renderer;
- modern design, simple and easy understandable website structure;
- layouts for all the types of website pages and reused components (like menus, header, footer, etc.) written in HTML & Liquid;
- accessibility;
- responsiveness;
- deployment with github actions;
- proper documentation.

Timeline

Week	Step	Tasks
Week 1 (40 hours)	Investigation	<ul style="list-style-type: none">- explore and analyse current project structure- find references for future design and/or choose Jekyll theme
	Planning	<ul style="list-style-type: none">- make a decision on whether the website structure should be updated- finalise decision on stack, versions and Jekyll plugins- create a list of website pages and components, drafts, layouts and elements that will be included in different pages- design decisions: use Jekyll specific theme or update chosen Jekyll theme for project purposes or use custom design based on found reference
	Setup and configuration	<ul style="list-style-type: none">- setting up Jekyll development environment- create config file- create Gemfile

Week 2 (40 hours)	Design and development	<ul style="list-style-type: none"> - develop required responsive layouts for pages (in accordance with accessibility standards) - develop included components - develop drafts for pages, posts, etc.
Week 3 (40 hours)	Data transfer	<ul style="list-style-type: none"> - fill new website with all the data from the old website - perform design fixes where needed
	Github actions	<ul style="list-style-type: none"> - create deployment workflow using github actions
Weeks 4-5 (55 hours)	Refactor, bug fixes, documentation, reserved time	<ul style="list-style-type: none"> - test manually - fix bugs if found - check accessibility - refactor where needed - write documentation + reserved time for any work that wasn't planned

My Technical Knowledge

Solid skills	Basic skills
JavaScript HTML CSS React Node.js (Express.js) Bootstrap	Jekyll Liquid Accessibility PostgreSQL MongoDB Docker

Availability

Starting from May, 15 I'll have my summer break and will be ready to work 40 hours per week on this project. Hence the project will be finished in Phase 1 of the GSoC.