Contents

1 Abstract

This project is about designing and implementing the website of a nonprofit organization called Anemone, whose purpose is to assist women who are abused or in need of assistance. This document mainly introduces the technical aspects of the website, including the hosting service, structure, external libraries, and other relevant details.

2 Hosting Service

We have chosen Vercel and Supabase as our website and database hosting services.

2.1 Website service - Vercel

We opted for Vercel because it is easy to use and offers a free tier for small websites like ours. Vercel provides a seamless deployment process, automatic Git integration, and a global CDN, which ensures fast load times for our users. While Azure and AWS offer more extensive services and customization options, they are better suited for complex, large-scale, or highly customized applications. For our needs, Vercel's simplicity and efficiency make it the perfect choice.

2.2 Database service - Supabase

Similarly, we selected Supabase for our database hosting. Supabase provides the simplicity and ease of use we require, along with real-time capabilities and built-in authentication. It offers a comprehensive set of features that cater to our needs without the complexity of larger platforms. Like Vercel, Supabase has a free tier that is suitable for our project size, making it an excellent match for our requirements.

2.3 Render Mode - SSR

We adopt SSR in our project because it provides fully rendered HTML to search engines, allowing them to index the content more effectively. This is crucial for SEO optimization. In our project, we hope that more and more people can find it through search engines like Google and Bing to help hopeless women. Thus, SSR is the best choice compared to CSR and SSG.

3 Project Structure

The server/ directory is used for backend services, while the pages/ directory is for website page endpoints.

3.1 Pages

3.2 Server Endpoint

1. GET /api/employee?query={id}: Fetches the full content of a specific exployee identified by its ID. If no ID is provided, it returns all employees that match the query condition.

2. GET /api/project?query={id}: Fetches the full content of a specific project identified by its ID. If no ID is provided, it returns all projects that match the query condition.

3. GET /api/service?query={id}: Fetches the full content of a specific service identified by its ID. If no ID is provided, it returns all services that match the query condition.

4 Implemented Components

Those components are made for better code organization.

1. navbar(components/anemoneNavbar.vue): This component is used to render the header section of the website, including the logo and navigation menu. It works responsively in PC and mobile views.

2. footer(components/anemoneFooter.vue): This component renders the footer section, providing links to important pages like the privacy policy, terms of service, and contact information.

5 External Libraries

Apart from Vue.js 3 and Nuxt.js, the following external libraries were also imported:

1. Supabase.js: It is primarily used to connect to and interact with the Supabase database, and it works on our Node.js server.
2. less.js: It's used to compile LESS code into CSS, enabling easier and more efficient styling for the website, we use it to organize our stylesheet in creating CSS-like components, enabling modular styling.
3. Tailwind.css: It's used to quickly style the website using utility-first CSS classes, allowing for rapid and responsive design without writing custom CSS.

6 SEO and Accessibility