Small Business Navigator

Creating Tailored Insights for Businesses

Client

Chris Offensend, Co-founder & CEO (chris@qwal.ly)
Emily Gabbard, Software Engineer (emily@qwal.ly)
Lana Sedova, Software Engineer (lana@qwal.ly)

Company Description

Qwally is a Golden-based startup developing a platform for cities and local governments to better engage with and support entrepreneurs and small business owners in their communities. We work with clients across the country to make processes such as business licensing, permitting, and certification easier to understand and navigate for entrepreneurs who are short on time and may not have a law degree to decipher legal requirements imposed by Federal, State, and Local laws and regulations.

Project Description

Location: Remote, with team meetings either on campus or online

Team Size: 3-5 students

Technology: OpenAI, Python, Pinecone, Snowflake, Azure DevOps

Qwally is transforming how small business owners navigate complex governmental regulations. Our Small Business Navigator combines curated content, expert insights, and user-friendly templates to guide entrepreneurs through regulatory compliance efficiently. Traditionally, creating this tailored content for each new city involves manually gathering and processing information from municipal codes, city websites, and other resources. This process ensures small business owners have the necessary tools and resources to tackle legal tasks and access essential services. However, as Qwally expands, the manual content generation approach is becoming a scalability challenge. This project aims to automate the

content creation process, making it more efficient as we serve more communities. Students will develop a system to dynamically generate relevant content for small business owners, facilitating Qwally's growth and enhancing our ability to adapt to the diverse regulatory landscapes of new cities.

This project is a continuation of the Qwally Small Business Navigator project from last summer's field session. During that session, students crafted a system that combined several powerful tools: Pinecone's vector database, Snowflake's database, and OpenAI's GPT models, all within a Python environment. This setup effectively transformed municipal codes into customized content, equipping small business owners with crucial legal and regulatory insights. Building on this successful foundation, the next phase aims to enhance the system's reach and utility by incorporating a wider array of data sources, including direct information from city websites. The proposed steps for achieving the project goal include:

1. **Data Collection**: Leverage web scraping tools to methodically gather publicly accessible data from various city websites while adhering to ethical guidelines and legal standards, ensuring minimal impact on the websites' functionality.
2. **Data Processing**: Develop a method to filter and clean scraped city website data, using LLMs, based on predefined criteria, focusing solely on retaining crucial information for small business operations, such as licensing, regulations, and permits.
3. **Data Integration**: Ingest filtered data, then transform textual information into numerical vectors utilizing Pinecone. Subsequently, integrate and store this data into Snowflake within the pre-existing system developed by prior students.
4. **System Updating**: Update previous methodologies as necessary, taking into account the structure of your data and system setup, to achieve seamless integration with the latest system additions.

Career Opportunities

Qwally is a growing company and is constantly exploring new talent. Internships and full-time opportunities may be available at the end of the project.

Intellectual Property & Proprietary Information

Students will be asked to sign a proprietary information and intellectual property assignment agreement (NDA). Intellectual property rights to all code, data and documentation will be retained by Qwally. However, students are free to use the knowledge and know-how they learn to help their own careers going forward.