

During this project, our team gained significant experience with PostgreSQL and PL/pgSQL for creating functions and triggers to automate critical tasks, such as notifying applicants when job details are updated or when their application status changes. Although we had limited time practicing functions in our classes, this project provided an excellent opportunity to deepen our understanding and become proficient in managing a database through the use of functions.

We also learned how to design a normalized database schema, ensuring the integrity and scalability of the system by using foreign keys. One of the key aspects of the project was implementing a dynamic notification system, where we created targeted notifications for users based on job updates and application changes. We also practiced dynamic search and filtering in SQL, allowing users to query jobs based on multiple criteria like location, salary, and required skills.

Overall, this project gave us valuable hands-on experience in database management, automating tasks, and handling user interactions within a relational database. It was an invaluable opportunity to improve our SQL skills and apply them in a real-world setting, ensuring our system was both efficient and scalable.