

SQL-Driven Training System for



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Introduction

- Guardian Group Services is a Brooklyn-based security guard training school
- Offers NYS-mandated and supplementary safety training courses
- Classes are virtual, in-person, or asynchronous depending on the type
- Trains thousands yearly through public and agency-sponsored cohorts
- Current system uses over 56,000 rows across multiple manual Google Sheets

Objective

- Replace manual spreadsheet system with a centralized SQL database
- Streamline student recordkeeping and course administration
- Enable efficient roster generation for state reporting
- Provide better visibility into student history and package enrollment
- Improve accountability and auditability among staff users

Target Users



- Primary users: office administrators and management staff
- Instructors do not handle student data—only sign off on rosters
- All staff will share similar system permissions
- Secure roles and audit trails to track changes and reduce finger-pointing
- Designed for backend use, with future front-end app compatibility

Value Proposition

- Eliminates tedious manual data entry and reduces human error
- Enables smarter decision-making through searchable, structured data
- Promotes user accountability, trust, and staff morale
- Supports organizational growth with better operational visibility
- Creates a reliable source of truth for student and class data

Application Features

- Tracks students, classes, instructors, packages, and locations
- Manages bookings, enrollments, and instructor course authorizations
- Generates DCJS-compliant rosters for upload
- Supports reporting on attendance, completions, and registration patterns
- Scales with future needs like certificate generation and outreach tools

Tools and Resources



- Built using SSMS
- ERD created in dbdiagram.io , normalized to 3NF
- Features include views, stored procedures, triggers, and UDFs
- Role-based security for admins and managers
- Schema-level permission control for clarity and consistency



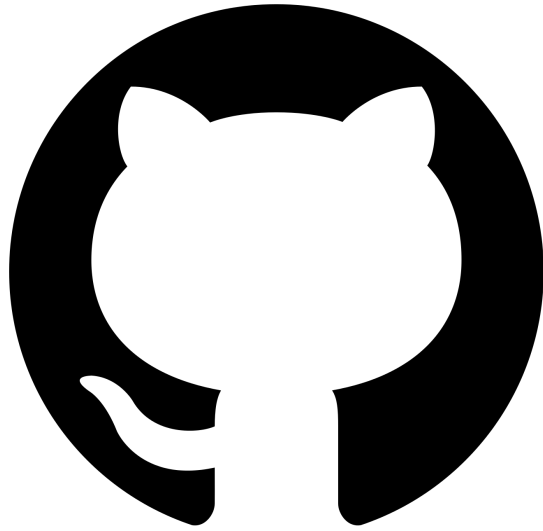
dbdiagram.io

Challenges

- Designing procedures that deliver real business value
- Normalizing inconsistent, redundant data from legacy spreadsheets
- Maintaining relationships between intake forms, bookings, and attendance
- Ensuring flexibility for future integration with web forms and external tools
- Balancing current needs with scalable future enhancements

Expected ROI

- Significant time savings for office staff through automation
- Improved data quality and reduced administrative errors
- Increased class capacity and ability to scale services
- Enhanced auditing to support staff training and oversight
- Strong foundation for future growth and integrated services



<https://github.com/CesarASLuna/DatabaseProjectCST4714/tree/main>