**Database Description:**

* The database, DANIELS2023, is designed for the use of Daniels College of Business at University of Denver. As the university continues to digitalization of its data, DANIELS2023 serves as the center of information for future business uses.
* The database keeps records of students, faculty, staff members, classes, departments, and scholarships.
* Tables include: STUDENT, PROFESSOR, STAFF, COURSE, TAKE\_SCHEDULE, TEACG\_SCHEDULE, SALARY, DEPARTMENT, SCHOLARSHIP, STUDENT\_SCHOLARSHIP.

**Key Business Needs**

Designing the right database to run a school is essential. With numerous data points to capture, multiple people to connect and complex processes to undertake, finding the right solution for your school environment needs careful consideration. With that in mind we have identified the key business needs for a school to be:

**1. Data accuracy and security**

Data privacy and security is especially important when dealing with student’s sensitive academic, health and family records. The database solution needs to be bullet proof and able to surface information based on specific role permissions.

**2. Planning for future years**

The school’s database needs to support the planning and transition process for future academic years. It is important to plan next year’s classes, predict and plan future year enrolments, and support a dynamic process to roll forward from one year to the next.

**3. Scalability**

The population presents opportunities for schools to grow. It is important that the school database can scale current student numbers to accommodate future plans of growth.

**4. Complex relationships**

The database needs to allow for complex relationships between students, courses, lectures and non-teaching staff members to be accurately reflected in the day-to-day business operations.

**5. Analytics**

Harnessing the data generated by the database to support decision making is where real value can be found from the right database design.

**Business Rules & Assumptions**

* Each student in the school is identified by a unique ID.
* A student can take one or more courses.
* Each student must take at least one course.
* Each course is identified by a unique course ID.
* Each professor and staff have only one department.
* Each professor and staff are identified by a unique ID.
* Each department is identified by a unique department ID.
* A department can have one or many professors or staff members, but each professor or staff member can work for only one department.
* Effective date is characterized as the first day of work.
* A professor takes one or many classes. Every professor has to take at least one class.
* Each lecturer/professor has only one salary. A salary level is applicable to many staff members.
* Each staff member has only one salary. A salary level is applicable to many staff members.
* Not all students will have a scholarship, but a student can have multiple scholarships. A scholarship can be given to multiple students.
* Quarters are “Spring, Summer, Fall, Winter.”