Create a School Database

Creating a school database involves designing the schema, creating tables and defining relationships to improve performance. Here is how I created the database using SQL Server Management Studio (SSMS):

Set Up GitHub Repository

Before we start working on our SQL scripts, we can set up a GitHub repository to track our code changes. We can create new repository on GitHub, clone it to our local machine, and set up Git to track our changes.

Design the Schema

Designing the schema for our school database. Based on the requirements, we will need three tables: Student, Subjects, and Classes. We will decide on the columns for each table, considering data types, primary keys, and foreign keys.

Writing SQL Scripts

Open SQL Server Management Studio and connect to our database server RainbowSchoolDb.

Creating the 'Student' Table with following columns:

StudentID (Primary Key), FirstName, LastName, ClassID (Foreign Key)

Creating the 'Subjects' Table with following columns:

SubjectID (Primary Key), SubjectName

Creating the 'Classes' Table with following columns:

ClassID (Primary Key), ClassName, SubjectID (Foreign Key)

Define Relationships

We have already defined some relationships in the table creation scripts using foreign keys. Students are associated with classes through the ClassID column and Classes are associated with Subjects through the SubjectID column.

Push to GitHub

Once we are satisfied with the changes, we commit them using Git and push to our GitHub repository. This will track our SQL scripts.

git init

git add .

git commit -m "Creating a SchoolDatabase"

git branch -M Section2_SchoolDatabase

git remote add origin https://github.com/PrashastVats1/Practice-Projects.git

git push -u origin Section2_SchoolDatabase