Assignment 2 – Creating the Speeding Ticket Database

Purpose

To develop a complete SQL script, for SQL Server 2019, that will create all the necessary database objects needed to fully implement your Speeding Ticket database.

Background

In the previous assignment, you designed an efficient issue tracking database and created supporting documentation for that design. Now you must take that design and turn it into an actual SQL script that can be used to create the SQL Server 2019 database. Along the way, you may determine problems with your initial design. This is the time to fix those problems before the database goes into production.

Task

1. Create the Structured Query Language (SQL) script necessary to implement your database design on Microsoft SQL Server 2019.
   a. The script must be contained in a single text file.
   b. The script must create (and drop) the **entire** database, including: all tables, all fields, all keys, all constraints and any other related items specified in your design documents.
   c. **All elements of your script must match your design documents exactly!**
2. Modify your ERD and Data Dictionary to include any modifications needed to correct your initial database design.
   a. Include the changes in your SQL script.
3. Enhance your initial design by adding advanced database concepts to both your design documents and SQL script.
   a. Add appropriate check constraints to non-key fields with limited values.
   b. Add appropriate unique constraints to non-key fields with unique values.
   c. Add appropriate default constraints to non-key fields to simplify inserting records.
   d. Add appropriate indexes to non-key fields used for searching records.
   e. Update your design documents to include the changes.
   f. Highlight the changes by including a document that details only the changes and references the design documents appropriately.

Assignment 2 Marking Rubric

	Criteria	Unsatisfactory 0	Acceptable 1	Good 2	Exceptional 3	Mark
SQL Script	**Table Creation Queries**	- do not exist - contains too many errors	- most tables depicted in ERD can be created - most of the queries match ERD - some errors exist	- all tables depicted in ERD can be created - most of the queries match ERD - a few errors exist	- all tables depicted in ERD can be created - query matches ERD exactly - no errors exist	x3 _____
	Table Deletion Queries	- do not exist - contains too many errors	- some tables depicted in ERD can be deleted - some errors exist	- most tables depicted in ERD can be deleted - a few errors exist	- all tables depicted in ERD can be deleted with any data stored in tables - no errors exist	_____
	Constraint Creation Queries	- do not exist - contains too many errors	- some constraints depicted in ERD can be created - some errors exist	- most constraints depicted in ERD can be created - a few errors exist	- all foreign key constraints depicted in ERD can be easily added to existing tables - no errors exist	x3 _____
	Constraint Deletion Queries	- do not exist - contains too many errors	- some constraints depicted in ERD can be deleted - some errors exist	- most constraints depicted in ERD can be deleted - a few errors exist	- all foreign key constraints depicted in ERD can be deleted with any data stored in tables - no errors exist	_____
	Query Formatting	- SQL script is very poorly formatted and commented - most SQL keywords are not capitalized	- some of the script is well formatted and commented - some SQL keywords are capitalized	- most of the script is well formatted and commented - most SQL keywords are capitalized	- all SQL keywords are capitalized - all SQL is appropriately indented and formatted - all SQL is appropriately commented	_____
Design	**ERD**	- ERD was not updated to include changes	- ERD includes most changes and enhancements - some errors or omissions exist	- ERD includes nearly all changes and enhancement - a few errors or omissions exist	- ERD includes all changes and enhancements - no errors or omissions exist	_____
	Data Dictionary	- Data Dictionary was not updated to include changes	- dictionary includes most changes and enhancements - some errors or omissions exist	- dictionary includes nearly all changes and enhancements - a few errors or omissions exist	- dictionary includes all changes and enhancements - no errors or omissions exist	_____
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