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Managing, Querying, and Preserving Data

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1. How did your structure evolve from the Conceptual Diagram to the final design?

My structure actually remained the same throughout the entire process. I was super careful when designing my diagram, and I didn't overcomplicate it to avoid struggles in the future.

2. Did you make any last-minute changes while loading data? If so, what were they?

Yes, I made a few tweaks here and there to the database itself, but nothing too major. One change I made was that my ISBN and ISBN13 columns got changed from INT types to TEXT types to make data upload easier. I also changed columns to allow for characters since books and publishers had huge names at times. The dataset itself took a lot of cleaning. I had to use Python to separate authors because they had multiple authors share a cell multiple times. I had to correct formatting errors, data types, and spelling mistakes.

3. Were there any duplicate or missing records? If so, how did you resolve them?

I'm very lucky to have at least not had duplicate or missing records.

4. Would you feel confident allowing others to query your database? Why or why not?

Yes I feel very confident letting others use my database because I spent so much time making sure everything was perfect. I kept my design simple as too avoid major errors.

5. Any key lessons learned in this process?

Yes, I learned so much about cleaning data and separating values that share cells. I learned how to change data types and correct formatting errors. I also learned how to find and get rid of duplicates and missing values, that's why I know my dataset had nothing missing.

6. If you had more time, what improvements would you make to your database structure?

I took the time to make sure everything was perfect, but I didn't fix issues where the same values were written differently since I took care of the more major stuff.

7. Difficulty level of each stage (Conceptual, Logical, Physical Model, and Loading)?

I personally think that figuring out the conceptual design makes creating the logical and physical designs so easy. When I made my conceptual design, I already knew where my keys would go and what the relationships would look like. Loading the data was by far the most difficult part due to the data cleaning and how the CSV file interacted with MYSQL. I also learned the hard way that MYSQL hates Mac users, so I switched to my PC to complete the rest of the assignment.