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Databases & Data Modeling

Assignment 06

**Creating a Relational Database**

**Introduction**

Understanding the process of creating a relational database is an important skill to have since they provide assistance in managing large amounts of data. Below, I will walk you through the steps of creating your own.

**Creating Database and Tables**

The first step is to create the database. The next step is to create the tables you want in the database. Normalize your data and divide it into tables and columns. The normalization process ensures that the data is reliable and non-redundant. Once you have done that you can proceed to creating the actual tables and adding constraints. Constraints such as primary and foreign keys allow for bridging tables together for reporting views.

**Creating Base Views**

After the tables have been created, you must create a view to view certain combinations of the tables data or whole tables without accessing the table itself.

**Transactional Stored Procedures**

Creating stored procedures is important for inserting, updating and deleting data from your tables. Making transactional stored procedures allow for rollbacks if a mistake was made or there was an error in the code. When managing important data this is useful to preserve it when something goes wrong.

**Setting Permissions**

Similar to the stored procedures when managing important data, you don’t want everyone to have access to it. By setting permissions you can protect you data and grant, deny, and permit actions to certain users and or the public.

**Test Code for Stored Procedures**

The test code for stored procedures again is import for preserving the integrity of the data. In order to ensure that the stored procedures work correctly, we must write code to test scenarios that could potentially cause issues, such as foreign key constraints.

**Conclusion**

Once you have completed all these steps, you are ready execute your stored procedures and insert data. When you will eventually need to update and delete data you will have your previously made stored procedures ready to go.