

you have been tasked to design and implement a dimensional model that was previously designed. After several discussions, the team has decided to use dbt for the transformation layer .

Step 1: Develop a Dimensional Model (This has been done)

Step 2: Prototype Using Seed Data

Since real data is not yet available, you are asked to generate synthetic data. You can use Python's Faker library or a GenAI tool to generate this data. The generated data will serve as seeds for your dbt project.

Step 3: Implement dbt Models

- **Sources:** Create source models for the raw data tables, ensuring you define freshness tests for your sources.
- **Staging Models:** Implement staging models that map 1:1 with the source tables and apply only light transformations (e.g., renaming columns, casting data types).
- **Intermediate Models (Optional):** If needed, create intermediate models to further refine the data before feeding it into the final models.
- **Dimensional Models:** Build dimension and fact models based on your business process.

Step 4: Add Tests and Documentation

- Add generic and custom tests (e.g., uniqueness, non-null constraints, accepted values) to your models to ensure data quality.
- Document each of your models.

Step 5: Automate User Access Requests

Currently, a user (joseph) needs access to new tables/models after they are created. He manually contacts the team for access. How can access be given to this user after each dbt execution?

Note:

1. you can use dbt core or dbt cloud