Final Project Dimensional Model

CIS 9440 - Data Warehousing for Analytics

Final Project Milestone 2

Group Number - <number>

Student(s) - <name>

For your Final Project, you/your project group will design and develop a Data Warehouse for Analytics following the Kimball Lifecycle.

In Project Milestone #1, you/your project group completed a Project Proposal that included:

* A project idea, motivation, and description
* Business Justification for the project
* Technical Justification for the project
* Identified at least 2 data sources to use for your project
* Created at least 5 KPI’s your Data Warehouse will measure

For Milestone #2, you/your project group will use Dimensional Modeling to turn your >= 2 data sources into Fact Tables and Dimensions. To do so, **submit each of the following as a PDF.** Please include your group number and members of your Final Project team as a “**Text Submission**” when you submit the Milestone. Only 1 member from each Project Group must submit the Milestone.

1. Complete a Kimball Bus Matrix for your project. This Matrix must include all your Fact tables on the left-hand side (this project requires at least 2 Fact Tables), and all your Dimensions on the top. Use an ‘X’ to show which Fact Tables will be connected to each Dimensions. You must have at least 1 Dimension that is connected to more than 1 Fact Table (a Conformed Dimension. The link to Bus Matrix template is here: [link](https://docs.google.com/spreadsheets/d/1u0qVE4Th_HZ8ES4aEd0n0kGMJNNE8Nd49oPEGNRmGA4/edit?usp=sharing)
2. Submit a Dimensional Model that includes all your Fact Tables and Dimensions. This model will be a Multi Fact Star Schema (or “Constellation Schema”). The Dimensional Model should include Primary Keys and Attributes for each Dimension, and Foreign Keys and Measures for each Fact Table. You may use any medium necessary to create this model, such as draw.io, lucidchart.com, or copying and editing the template we used in class ([link](https://docs.google.com/drawings/d/1eW6Em1cVtgVJDxzvNftC5hq9_ugSidwhNFZRBTtnLtc/edit?usp=sharing)).
3. Now that you have a Dimensional Model, refine and submit a list of your project KPI’s. Your KPI’s should guide your Data Warehouse users/audience to make data-driven decisions. The best KPI’s are not merely nice to know, they may be acted upon. Along with your KPI’s, write a short description (one short paragraph) of how envision your Data Warehouse users/audience using the KPI’s.