Final Project ETL

CIS 9440 - Data Warehousing for Analytics Final Project Milestone 3

Due: April 24th, 2021

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

In Project Milestone #2, you/your project group designed a Dimensional Model that included:

- Completed Kimball Bus Matrix
- Dimensional Model that will be able to produce your KPI's
- Refined list of KPI's

For Milestone #3, you/your project group will implement a Extract, Transform, Load (ETL) process on your datasets found in Milestone #1 to physically load them onto Google BigQuery in the Dimensional Modeled tables you designed in Milestone #2.

To accomplish this, you/your project group can use python, SQL, Excel, any programming language, or any ETL/Dimensional Modeling tools necessary to Extract, Transform, and Load your datasets into Fact Tables and Dimensions on Google BigQuery. Along the way, you must document all ETL steps taken to show your process. To document steps, you may include screenshots, write summary text, and/or include pieces of code. Only one member of each Project Group must submit this Milestone on Blackboard.

To submit this Milestone #3, please submit the following:

- (1) <u>Step-by-step summary of ETL process</u> submitted as a **PDF**. This document will include summary text and may include screenshots where necessary. There is no template for this document, please organize the document to make it easily readable.
- (2) (Optional) Files that contain code used in your ETL process. For example, you may submit a .py file that you reference in your ETL Summary. This does not apply if you do not use any code to implement ETL.