**Assignment Overview**

Welcome to the Data Engineering Capstone Project.

This video will give you an overview of the third module – Data Warehousing,…

and its first assignment – Staging Warehouse.

In this module, you will perform a couple of assignments. In the first assignment, covered in this video, you will design and create a staging data warehouse environment using PgAdmin and PostgreSQL.

In the second assignment, covered in the next video, you will deploy the production Warehouse for reporting purposes using Db2 on Cloud.

The first exercise in this assignment requires you to design a data warehouse. The e-commerce company has provided you with sample data. You will start your project by designing a star schema for the warehouse by identifying the columns for the various dimension and fact tables in the schema.

You will name your database “soft cart”, and then use the ERD design tool in PgAdmin

to design the table soft cart, “Dim Date”, using fields such as: Date ID, Month, Month name, and so on.

The company would like to have the ability to generate reports on a yearly, monthly, daily, and weekly basis.

You will use the ERD design tool to design the dimension tables soft cart Dim Category, soft cart Dim Country, and soft cart Fact Sales.

You will also use the ERD design tool to design the required relationships, for example, one-to-one, one-to-many, and so on - among the tables.

And finally, after performing each task, you will take a screenshot of the entire ERD, clearly showing all the field names, data types, and relationships - among the tables.

In the second exercise, you will load the data into the data warehouse. Your senior data engineer reviews your design and makes a few improvements to your schema design. The data, as per the improved schema, is available at a link.

You will download the data, and restore it, into a database named “staging” using the pgAdmin tool. After performing this task, you will take a screenshot showing the success of data restoration. Good luck and let’s get started!