

Data Warehouse Project

A team of 5 or 6 students should be formed to develop a data warehouse project.

- **Grades will be individual based on understanding the project**
- **Using Snowflake Schema**

Link for teams Form: <https://forms.gle/euXreuayTgTVTfp97>

Phase 1: Proposal and star schema

In the first phase of the project, you have to choose any online database to work with (Provide links for your DB), or create your own database. **Study carefully the schema of the source database you choose.**

You have to design a star schema for database you choose. Define the dimensions, dimension levels, fact table, and measures you will include in your star schema. **Minimum number of dimensions is 3 and minimum number of measures is 2.**

Phase Deliverables:

- a. Cover Page contains the following (DB Source Name, Group names and **IDs** , Email for leader)
- b. Source ERD (interested tables)
- c. Motivation for creating your star schema.
For example: we are creating the Product sales star schema (for Adventureworks) to analyze the sales profit statistics for each product and its categories and subcategories in specific intervals of time.
- d. Star Schema Model (Dimensional model).
- e. Schema Description (Dimensions, and Measures)

Phase 2: Implementation of the star schema

Building Data Warehouse transform data from your source database to the star schema you developed using SQL.

Phase Deliverables:

- a. Saved Queries of the transformation process (Queries and their Full Details: each dimension, dimension attribute and measure specify its source in the source database and its equation of transformation if exists) – Print the Queries and their details in a document file.

All Queries must have at least one of these (union, except, join, aggregate functions...)

- b. The Data Warehouse Schema Filled with Data.(Star Schema Filled with Data)