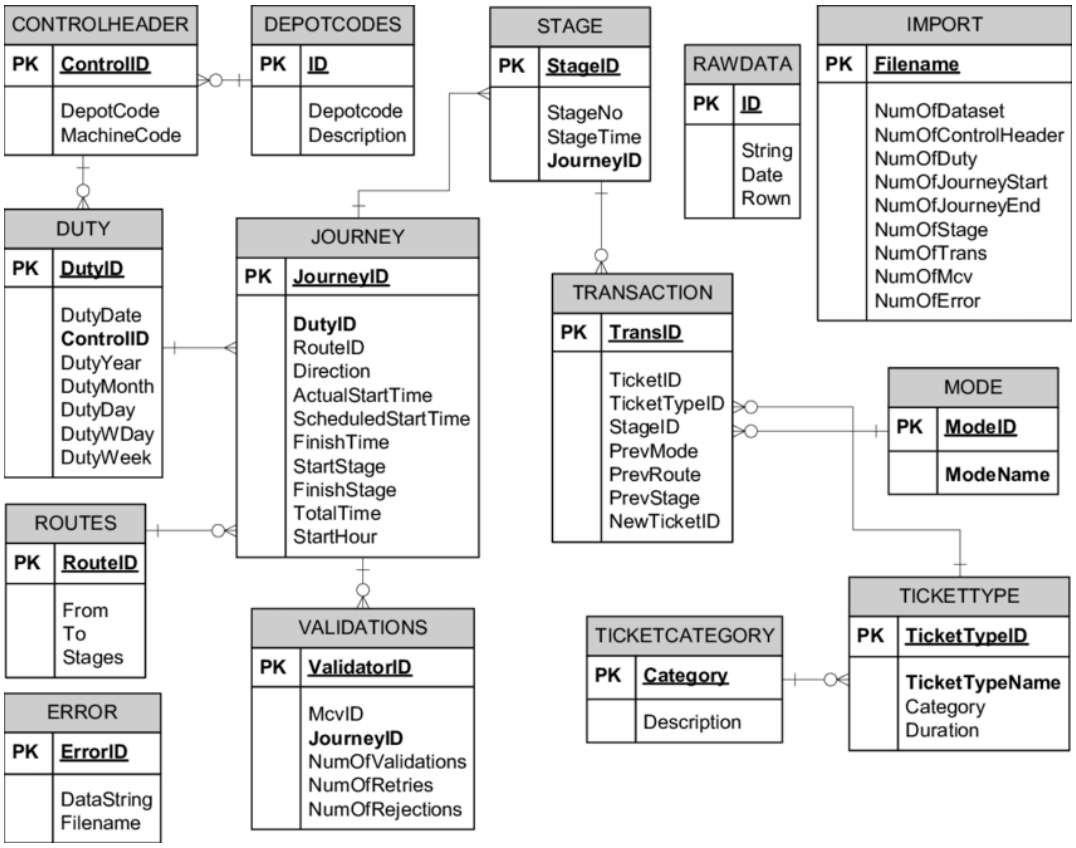
Data Warehousing

Practical Task # 03 **DWH Star and Snow Flake Schema**

Task 3A

1. For a given ERD of public transport network (i) Choose a data warehouse schema out of star schema and snowflake schema and given the reason of your choice. (ii) Convert an ERD into a chosen schema.



2. Suppose that a data warehouse for Big University consists of the four dimensions student, course, semester, and instructor, and two measures count

and avg grade. At the lowest conceptual level (e.g., for a given student, course, semester, and instructor combination), the avg grade measure stores the actual course grade of the student. At higher conceptual levels, avg grade stores the average grade for the given combination.

Draw a snowflake schema diagram for the data warehouse.

3. Design a data warehouse (i.e. create a multidimensional model such as a star schema) for Primera Division (football league). We would like to analyze games, the number of spectators watching games, the number of tickets sold for spectators, and revenue got from the sale of tickets. Games are organized at different locations. For each location we would like to keep track of its name, address, capacity, and some additional features like ‘closed’ or ‘open’. For each game we would like to store information about teams playing game, result of the game, etc. Spectators may be students, adults, or seniors, with each category having its own charge rate.