Department of Computer Science and Informatics CSID6853 – Data Warehousing – 2025 Practical Project - Part B

Instructions

- Ensure you have access to a SQL Server 2019 installation and instance.
- Pages should be numbered, with 25mm side borders. Fonts should be 12 point and Times New Roman with 1.5 spacing.
- Please ensure your name and student number appears on the title page of the submission.
- Submission should be via a single Microsoft Word document (projectPartB_studentnumber_InitialsSurname.docx) uploaded to Blackboard.

Business Needs

After reviewing the information package from Part A, **two** fact tables (<u>Manufacturing</u> and <u>Inventory</u>) and **several** dimension tables can be identified. However, the senior manager of production also indicated that he has one more additional need. He would like to be able to view the production plants by Country, Region and Account for each store (see *ExternalAccountData.xls* for the outline of the data).

Dimensional Model [15 marks]

Use the additional business need to expand your model:

- Identify any additional measures or dimensions.
- Hint: Use the ExternalAccountData.xls file.

Design the <u>dimensional model</u> using all the information from Parts A and B:

- The following dimensional entities are worth noting: ProductSubType, ProductType, Product,
 Material, Date, Batch, Plant, Machine, MachineType and Country. These are all separate
 tables.
- The following measure entities are worth noting: Inventory and Manufacturing.
- Draw the dimensional model. You can use any tool for this, and include a screenshot of the dimensional model in this document.
- Show all the attributes and measures in your dimensional model.
- Indicate which attributes are primary and foreign keys and for the relationships show all the multiplicities.