Data-Warehouse-Technologien
Exercise sheet 2

Assignment 1: Give a definition for the following terms and differentiate between them: *data warehouse, distributed databases,* and *federated databases.* How are data marts related to them?

Assignment 2: Explain conceptual differences between transactional databases *(OLTP)* and data-warehouses *(OLAP)*. Why are two different systems used?

Assignment 3: Classify the concept of data warehouse in the context of big data!

Assignment 4: State and explain the different requirements of a Data Warehouse. What aspects have all different requirements in common?

Assignment 5: For which of the following use cases is the usage of a data warehouse reasonable?

- The computer science faculty wants to analyze student's learning behavior under digital teaching.
- Mr. Smith wants to sell his goods from his local shop also in a web shop.
- Google wants to analyze their computing centers regarding load, costs, personnel, etc.
- The library wants to monitor student's book borrowing.
- The library wants to continuously improve their stock of books by analyzing sales numbers, tweets, and facebook posts.