CIS 429 – Data Warehouse Planning

Course Description

This course covers the principles, approaches, and critical issues in planning, designing, and deploying data warehouses. Topics include data extraction, data cleansing, data transformation, architecture, and infrastructure. Students will examine recent trends in data warehousing, metadata, and architectural components.

Instructional Materials

Ponniah. P. (2010). *Data warehousing: Fundamentals for IT professionals* (2nd ed.). New Jersey: Wiley

Course Learning Outcomes

1. Explain the significance of a data warehouse and its basic structure.
2. Analyze the evolution, ethical issues, and future trends in data warehousing.
3. Describe the significance, use, and types of meta-data and meta-modeling.
4. Compare and contrast online transaction processing (OLTP) with online analytic processing (OLAP).
5. Describe the relationship between business intelligence, data warehousing, and data mining.
6. Explain how the data warehouse concept relates to enterprise information integration.
7. Use graphic software to Illustrate and apply the use of dimensional modeling to address and solve a proposed business problem.
8. Describe the use of dimensional modeling in an organizational context.
9. Explain the concept of data integration and its use in the creation of data warehouses and data marts.
10. Analyze and apply planning techniques in the use of extraction, transformation, and loading.
11. Compare the features and functions of OLAP models.
12. Develop a data warehousing solution to solve a proposed business problem.
13. Use technology and information resources to research issues in data warehousing.
14. Write clearly and concisely about topics related to data warehouse planning using proper writing mechanics and technical style conventions.