# ASSIGNMENT 4: INTEGRATING ENTERPRISE TECHNOLOGIES, DATA LAKES, AND BIG DATA BUSINESS INTELLIGENCE.

#### Chapter 4: Enterprise Technologies and Big Data Business Intelligence

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#### ASSIGNMENT OVERVIEW:

The objective of this assignment is to explore and understand the practical applications of Enterprise Technologies, Data Lakes, and Big Data Business Intelligence in specific. By focusing on the concepts covered in Chapter 4 and incorporating the idea of Data Lakes, students will apply their knowledge to real-world scenarios within their chosen areas of study.

#### **Apply Concepts of Chapter 4 to Your Chosen Domain:**

Analyze how the discussed Enterprise Technologies, BI concepts, and Data Lakes are relevant to your chosen domain.

Discuss how OLTP systems, OLAP systems, ETL processes, data warehouses, data marts, and Data Lakes could be implemented or utilized within the context of your chosen domain.

# **Case Study Development:**

Develop a hypothetical case study or scenario related to your chosen domain, considering the incorporation of a Data Lake.

Apply the concepts discussed in Chapter 4, emphasizing the role of Data Lakes in storing and processing vast amounts of varied data in your case study.

#### **Integration of Big Data BI:**

Explore the potential integration of Big Data BI into your chosen domain, considering the capabilities of Data Lakes.

Discuss how incorporating Big Data BI, in conjunction with Data Lakes, can enhance decision-making processes, provide deeper insights, and contribute to the strategic goals of the organization operating in your chosen domain.

# **Challenges and Opportunities:**

Identify potential challenges and opportunities associated with implementing Enterprise Technologies, BI, and Data Lakes, especially in the context of your chosen domain.

Discuss how these challenges can be addressed and how opportunities can be leveraged for the benefit of the organization.

# SUBMISSION GUIDELINES:

Prepare a report summarizing your findings for each task.

Include relevant examples, illustrations, or diagrams to support your explanations.

Provide proper citations for any external sources used.

Submit your assignment in a format suitable for academic presentation (e.g., a well-organized document).

# **GRADING CRITERIA:**

Demonstration of understanding of Big Data concepts in the specific domain.

Depth and relevance of examples provided.

Clarity and organization of the report.

Integration of case study and real-world applications.

Thoughtful reflection on the interdisciplinary nature of Big Data analysis.