

To successfully pass this project, you must complete all the tasks and questions assigned to you. The project involves designing and implementing a Data Warehouse/Data Mart as a proof of concept and developing Business Intelligence (BI) reports based on it. Below are the detailed tasks and requirements:

### 1. Data Warehouse Development and BI Reports

- **Objective:** Develop a proof-of-concept data warehouse/mart using a dimensional model to obtain business intelligence from existing data sources.
- **Tasks:**
  - Select and justify the subject area(s) for the data warehouse.
  - Identify key stakeholders.
  - Formalize the business vision for the data warehouse development.
  - Explain the insights a company may gain from the data, reflected in SSRS reports and Microsoft Power BI visuals.

### 2. Dimensional Model/Star Schema Development

- **Objective:** Develop a dimensional model or star schema for the data warehouse.
- **Tasks:**
  - Design a star schema to capture the necessary data for analysis.

### 3. Data Warehouse Implementation (Using SQL Server and SSIS)

- **Objective:** Implement the data warehouse by creating dimension and fact tables.
- **Tasks:**
  - Use SQL Server to create the necessary tables.
  - Utilize SSIS as an ETL tool to populate the data warehouse from operational databases or sources.

### 4. BI Report Development

- **Objective:** Develop four reports using SQL Server Reporting Services (SSRS).
- **Tasks:**
  - Demonstrate business intelligence insights through SSRS reports.

### 5. Microsoft Power BI Dashboard Development

- **Objective:** Develop a BI dashboard with four different multidimensional visualizations.
- **Tasks:**
  - Present data analysis/analytics using features such as colors, calculated fields, filters, and trend lines.

### 6. Overall Conclusion and Bibliography

- **Objective:** Summarize your findings and document references.
- **Tasks:**
  - Provide a comprehensive conclusion.
  - Include a bibliography of sources used.

### 7. Appendices

- **Objective:** Include all relevant code.
- **Tasks:**
  - Document all code used in the project in the appendices.

By completing these tasks, you will demonstrate your ability to design, implement, and utilize a data warehouse for business intelligence purposes. Ensure that your report and documentation are thorough and clearly present your findings and methodologies.

