

Power BI Project

Dynamic Business Intelligence Report

Objective:

Design and develop an interactive, insightful business intelligence dashboard in Power BI, focusing on a specific domain of your choice. This project allows students to select their own dataset, giving them the freedom to explore a topic of personal or professional interest.

Project Requirements

1. Problem Statement

Define the business problem or analytical goal the dashboard will address.

Examples:

- Analyze sales performance across regions.
- Track customer acquisition trends over time.
- Monitor financial metrics like profit, revenue, or cost.

2. Data Preparation

- Choose a dataset relevant to your domain. Possible sources: Kaggle, public databases, or self-collected data.
- Perform data cleaning and transformation.

3. Data Model

- Build a robust data model including relationships between tables.
- Use appropriate schemas (e.g., star, snowflake).

4. Visualization Requirements

Create a report with two or more pages:

- At least 6 different types of different visualizations (e.g., bar chart, line graph, map, KPIs, donuts, gauge).
- Use tooltips.

5. DAX Formulas

Use at least 5 DAX calculations, including measures and calculated columns.

Examples:

- Total Sales, Average Sales, Year-over-Year Growth.
- Conditional metrics (e.g., profitability above a certain threshold).

6. Interactivity and User Experience

- Ensure the dashboard is interactive and user-friendly.
- Provide a navigation system or buttons if necessary for complex dashboards.
- Use bookmarks.

Deliverables:

Power BI Dashboard (.pbix file)