**Power BI Classwork Project Requirements**

# **Requirements**

## Part 1: Data Acquisition and Transformation

1. **Data Sources:**
   * Find or create your dataset file in Excel, CSV, or other suitable formats.
2. **Dataset Design:**
   * Contain two tables.
   * Contain at least five columns.
   * Have numeric columns.
   * Have an **Empty** Recodes [or add them manually].
   * Have a **Date** column.
3. **Data Integrity and Quality:**

* Ensure that relationships between tables are properly defined and maintained.

1. **Data Transformation Using Query Editor:**
   * Transform data using Power BI Query Editor, including actions such as:
     + Join tables by merging queries.
     + Remove Empty Records.
     + Remove null values (if they exist).
     + Remove None values (if they exist).
     + Change the Data Type of any column with a Decimal value to be an Integer or, if your dataset doesn’t have any decimal columns, then change the type of any text column (UPPER, LOWER…).
     + Divide the “Date” column into three columns then rename the columns to “Year”,” month”, and “Day”.
     + Add a new column with a meaningful name, which merges two columns.
2. **Visualization and Page Creation:**
   * **Create a Report consisting of two pages with the following charts:**
     + Bar Chart between any two reasonable fields [on the first page].
     + Area Chart between any two relevant fields [on the first page].
     + Line Chart between any two reasonable fields [on the second page].
     + Include any of these visualizations (Card, Multi-row card, Gauge chart, or KPI) [on the second page].
   * **Report Enhancement:**
     + Add a meaningful title for your report pages.
     + Rename your report pages to meaningful names.
     + Create a new data group to combine multiple values into one and use this data group in a Pie Chart on the first page.
     + Apply a Visual-level filter on the Bar chart to exclude certain value(s) using advanced Filtering.
     + Apply a Report-level filter on any field using Basic Filtering.
     + Apply a slicer on the second page.

## Part 2: DAX and Reporting Features

1. **DAX:**
   * Create calculated column and measure using DAX and use them in any Chart.
   * Split columns and replace values using DAX.
   * Create a quick measure giving a reasonable result and use it in any new Chart.
2. **Advanced Reporting Features:**

* Create a Dynamic Report using Power BI Parameters (Query Parameters).
* Implement a UI Design for your report.

1. **Data Export:**
   * Export visual data from the Line chart to your machine.
2. **Finalization:**

* Save the final report on your machine.

**Thank you for your efforts, and if you have any questions or need assistance, please feel free to reach out.**