

## Data Collection and Preprocessing Phase

Date	15 March 2024
Team ID	SWUID20250172189
Project Title	Power BI Inflation Analysis
Maximum Marks	3 Marks

### Data Quality Report Template

The Data Quality Report Template will summarize data quality issues from the selected source, including severity levels and resolution plans. It will aid in systematically identifying and rectifying data discrepancies.

Data Source	Data Quality Issue	Severity	Resolution Plan
Dataset is from Kaggle	<p>The Inflation dataset had several issues that needed to be addressed before analysis.</p> <p>Firstly, the data was in a wide format, with each year from 1980 to 2024 as a separate column,</p> <p>There were also missing or null values in some years for certain countries, which could affect accuracy</p> <p>some columns had incorrect data types, like years or inflation rates being stored as text.</p> <p>Fixing these issues helped make the dataset clean, structured, and ready for proper analysis in Power BI.</p>	Moderate	<p>resolve the issues in the Inflation dataset, several technical steps were applied using Power Query in Power BI. First, the data was transformed from a wide to a long format by unpivoting the year columns</p> <p>Missing or null inflation values were filtered out to ensure data accuracy.</p> <p>Data types were corrected to ensure Year was a whole number and Inflation Rate was a decimal.</p> <p>duplicate records were eliminated to maintain data integrity</p> <p>These transformations prepared the dataset for accurate analysis and visualization in Power BI.</p>

Dataset is from Kaggle	<p>Wide format with years as separate columns</p> <p>Missing values for some countries/years</p> <p>Inconsistent values in categorical fields</p> <p>Duplicates</p> <p>Some columns might be irrelevant</p>	Moderate	<p>Use Power BI Power Query's <b>Unpivot Columns</b></p> <p>Apply <b>fill techniques</b></p> <p><b>Replace Values, Trim, and Lowercase</b> transformations to standardize text entries.</p> <p>Remove duplicates using <b>Remove Duplicates</b></p> <p>remove or merge redundant columns</p>
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