Data Collection and Preprocessing Phase

| Date | 20 March 2025 |
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| Team ID | LTVIP2025TMID26724 |
| Project Title | Cosmetic Insights: Navigating Cosmetics Trends and Consumer Insights with Tableau |
| Maximum Marks | 3 Marks |

Data Quality Report Template:

| Data Source | Data Quality Issue | Severity | Resolution Plan |
|-----------------------|--|----------|--|
| Cosmetics datasets | Inconsistent Data Types | Moderate | Price: Should ideally be numeric (e.g., float or integer). While it appears to be numeric, it's worth confirming that there are no non-numeric characters present. Rank: Should be numeric (float or decimal) to represent rating values. Verify that all values are within a reasonable range (e.g., 1-5 or 0-5). Combination, Dry, Normal, Oily, Sensitive: These are likely intended to be boolean (True/False or 1/0). The data appears consistent with 1/0, but it should be explicitly verified. |
| Cosmetics datasets | Missing Values and Incomplete Data | Low | Ingredients: The "Ingredients" column is truncated in many entries (e.g., "Algae (Sea", "Galactomy", "Water, Dic"). This makes it difficult to fully understand the product's composition. Brand Names: Some brand names are abbreviated (e.g., "DRUNK EL" instead of "Drunk Elephant"). Consistency is needed. |
| Cosmetics datasets | Data Inconsistency and Typos | High | Inconsistent Capitalization: Brand and product names show inconsistent capitalization (e.g., "LA MER" vs. "la mer" or "Truth Seru" vs. "Truth Serum"). |
| Cosmetics datasets | Data Cleaning | High | Standardize Brand and Product Names: Ensure consistent capitalization and full names. Correct Typos: Fix errors like "Bt" and ensure consistent spelling. Complete Ingredient Lists: If possible, obtain the full ingredient lists for each product. Remove Special Characters: Replace or remove special characters as needed. |

| Cosmetics datasets | Data Validation | High | Verify Rank Values: Ensure all ranks are within the expected range. Confirm Data Types: Explicitly define the data types for each column (numeric, boolean, string). |
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