**Data Collection and Preprocessing Phase**

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| --- | --- |
| Date | 21-06-2025 |
| Team ID | SWTID1749893823 |
| Project Title | AI-Powered Nutrition Analyzer For Fitness Enthusiasts |
| Maximum Marks | 2 Marks |

**Data Collection Plan & Raw Data Sources Identification Template**

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making endeavor.

**Data Collection Plan Template**

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| --- | --- |
| **Section** | **Description** |
| Project Overview | The AI-powered Nutrition Analyzer helps fitness enthusiasts track nutritional intake accurately by identifying food items from images using transfer learning. It predicts nutritional content using a food database and supports real-time image-based meal logging. This enables personalized meal planning and calorie tracking to meet fitness goals. |
| Data Collection Plan | From Skill Wallet Guided project |
| Raw Data Sources Identified | The raw data sources for this project is created from the data given in the guided project in Skill Wallet (nutrition\_data.csv) |

**Raw Data Sources Template**

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| --- | --- | --- | --- | --- | --- |
| Source Name | Description | Location/URL | Format | Size | Access Permissions |
| TEST\_SET | Contains labeled images similar to the training set but unseen during training. Used to evaluate the model's accuracy and generalization on new data. | https://drive.google.com/drive/folders/1TpJpaKzYjyXIQpsEo9yDfPLrhJ4y45gr?usp=sharing | ZIP file | 4.23GB | With link |
| TRAIN\_SET | Contains labeled images of fruits (apples, banana, etc.) organized into folders, used to train the AI model. Helps the model learn to classify different fruit types through supervised learning. | https://drive.google.com/file/d/1aR6AwH5KtwMchyfG3PK8cth5dIPMkdu7/view?usp=sharing | ZIP file | 4.23GB | With link |
| nutrition\_data | This file contains nutritional information (like calories, protein, fat, carbs, etc.) for each fruit category. After classifying a fruit image, the model uses this data to display accurate nutritional values to the user. | https://drive.google.com/file/d/1v55iQNdpPshZ-\_wUA5jbtKnCvnhbBwb1/view?usp=drivesdk | CSV | 160 Bytes | Private to the session |