**Data Collection and Preprocessing Phase**

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| Date | 10 July 2024 |
| Team ID | 739966 |
| Project Title | Beansense: Precision Bean Classification For Enhanced Agricultural And Culinary Applications |
| Maximum Marks | 2 Marks |

**Data Collection Plan & Raw Data Sources Identification Report:**

The data collection plan for Precision Bean Classification involves sourcing sensor data from IoT devices and farmer input via mobile apps, ensuring comprehensive coverage for agricultural and culinary applications.

**Data Collection Plan:**

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| --- | --- |
| **Section** | **Description** |
| Project Overview | The project aims to enhance agricultural and culinary applications through precise classification of beans using advanced data analytics methods. |
| Data Collection Plan | Deploy IoT sensors for real-time monitoring of environmental variables crucial for bean growth, integrate farmer feedback via mobile apps, and utilize market and historical data for comprehensive analysis, ensuring precise classification for agricultural and culinary applications. |
| Raw Data Sources  Identified | Sensor data, farmer input, market trends, historical yield records, and weather forecasts |

**Raw Data Sources Report:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source**  **Name** | **Description** | **Location/URL** | **Format** | **Size** | **Access Permissions** |
| Kaggle  Dataset | It includes labeled data of bean varieties with associated agricultural and culinary attributes, enabling machine learning models to classify beans accurately for both farming and culinary applications. | [https://docs.google.com/ document/d/1PDjklcAEolTyjf 78Y-Bky-1c7F8YvKno/edit](https://docs.google.com/%20%20%20document/d/1PDjklcAEolTyjf%2078Y-Bky-1c7F8YvKno/edit) | CSV | 15 kB | Public |
| UCI | It related to Precision feature labeled data on bean characteristics and attributes essential for agricultural and culinary applications, facilitating research and development in bean classification algorithms. | [https://docs.google.com/ document/d/1PDjklcAEolTyjf 78Y-Bky-1c7F8YvKno/edit](https://docs.google.com/%20%20%20document/d/1PDjklcAEolTyjf%2078Y-Bky-1c7F8YvKno/edit) | CSV | 13.6  kB | Public |