

Project Initialization and Planning Phase

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| Date | 20 November 2024 |
| Team ID | 739946 |
| Project Name | Deepfruitveg: Automated Fruit And Vegetable Identification |
| Maximum Marks | 3 Marks |

Define Problem Statements :

The **Deepfruitveg: Automated Fruit and Vegetables Identification** system aims to solve the challenges of manual produce identification, which is time-consuming and error-prone. By using computer vision and machine learning techniques, the system automatically classifies various fruits and vegetables based on visual characteristics, improving accuracy and speed. It addresses issues such as inconsistent lighting, varying image quality, and similar appearances among produce. The solution reduces labor costs, enhances operational efficiency, and streamlines processes like sorting, packaging, and quality control.

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------|----------------------------|---|---|--|--|
| PS-1 | I am a supermarket manager | I'm trying to automate the sorting and packaging of fruits and vegetables | But it takes a long time and is prone to errors | Because manual sorting is slow and prone to mistakes | Which makes me feel frustrated and inefficient |
| PS-2 | I am a farm worker | I'm trying to identify and categorize various fruits and vegetables quickly | But I struggle with identifying similar-looking produce | Because different fruits and vegetables look alike and the process is manual | Which makes me feel overwhelmed and stressed |