

Project Initialization and Planning Phase

Date	18 March 2026
Project Name	GreenClassify: Deep learning-based approach for vegetable image classification

Define Problem Statements (Customer Problem Statement Template):

Problem Statement 1: Vegetable Processing Facility Manager

Section	Description
I am	A manager of a large vegetable processing facility.
I'm trying to	Efficiently sort and categorize incoming shipments of mixed vegetables to maintain a smooth and timely production process.
But	Manual sorting is slow, prone to human error, inconsistent in quality assessment, and leads to production bottlenecks and delays.
Because	Current methods are labor-intensive, lack standardization, and struggle to handle high volumes, resulting in significant inefficiencies and increased costs.
Which makes me feel	Frustrated, stressed, and concerned about meeting production deadlines and maintaining product quality.

Problem Statement 2: Agricultural Distributor

Section	Description
I am	A distributor of fresh produce to grocery stores and restaurants.
I'm trying to	Maintain consistent quality standards and ensure the freshness of the vegetables I supply to my customers.
But	Evaluating the quality and freshness of large volumes of vegetables received from various farms is time-consuming and difficult using current manual methods.
Because	Inconsistent quality leads to customer complaints, returns, and potential food waste.
Which makes me feel	Anxious about meeting customer expectations and concerned about the financial impact of product loss.

Problem Statement 3: Retail Grocery Store Manager

Section	Description
I am	A manager of a grocery store's produce section.
I'm trying to	Accurately manage inventory levels, minimize waste, and ensure that customers always find fresh vegetables on the shelves.
But	Manually tracking inventory is prone to errors, leading to stockouts, overstocking, and increased food waste.
Because	Stockouts result in lost sales opportunities, while overstocking leads to spoilage and financial losses.
Which makes me feel	Overwhelmed by the complexity of inventory management and concerned about minimizing losses.