

Project Initialization and Planning Phase

Date	10/11/2024
Team ID	team-739690
Project Name	Tomato Plant Disease Detection from Leaf Images Using Deep Learning
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

Tomato farmers struggle with early and accurate disease detection, leading to crop loss and financial setbacks. Traditional methods are time-consuming and unreliable. This project aims to develop a deep learning tool that uses leaf images to quickly and accurately identify tomato plant diseases, enabling timely intervention and improving crop yield.

Problem	Description
I AM	A tomato farmer with limited knowledge about plant diseases and minimal access to agricultural experts.
I'M TRYING TO	Quickly and accurately diagnose diseases affecting my tomato plants by analyzing leaf symptoms .so I can apply the correct treatment and prevent further spread.
BUT	I struggle to identify diseases due to the similarity in symptoms among various diseases, lack of expert availability
BECAUSE	lack the technical expertise to distinguish between diseases, and affordable and accessible diagnostic tools for are unavailable. .
WHICH MAKES ME FEEL	Frustrated, anxious, and helpless as I watch my crops suffer and my yield decline

Example:

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A tomato farmer	Identify diseases on my tomato	The disease symptoms are often hard to spot	Early detection is crucial to save	Anxious and worried about potential crop loss

		plants early	manually	the crop and minimize losses	
PS-2	An agricultural expert	Use technology to aid farmers in disease diagnosis	Current methods are time-consuming and often unreliable	The lack of accessible and accurate disease prediction tools in the field	Frustrated and concerned about the efficiency of existing solutions