

## Project Initialization and Planning Phase

Date	14 Dec 2024
Team ID	740062
Project Name Smart Lender	Plant Seedling Classification With Deep Learning
Maximum Marks	3 Marks

### Define Problem Statements (Customer Problem Statement Template):

Farmers and agricultural researchers often face challenges in accurately identifying and classifying plant seedlings, which can lead to inefficiencies in crop management and reduced agricultural productivity. There is a critical need for an automated system that leverages advanced technologies to classify seedlings with precision. Such a system should incorporate key factors such as image recognition, species differentiation, and growth stage identification. By utilizing deep learning techniques to analyze these factors, the solution aims to provide actionable insights for farmers, agronomists, and policymakers. These insights will enable better decision-making, improved crop management, and enhanced agricultural sustainability.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A farmer or researcher	Classify plant seedlings accurately	Existing methods are time-consuming and error-prone	Manual identification is inefficient and less reliable	Frustrated with the lack of accurate tools
PS-2	An agricultural expert	Improve seedling classification processes	There's no automated solution for identification	It hinders efficient crop management and decision-making	Concerned about productivity and crop health