



Project Initialization and Planning Phase

Date	21 April 2025
Name	Utkarsh Dhananjay Kulkarni
Project Name	Uncovering The Hidden Treasures Of The Mushroom Kingdom: A Classification Analysis
Maximum Marks	3 Marks

Problem Statements (Uncovering The Hidden Treasures Of The Mushroom Kingdom: A Classification Analysis):

PS	I am (Customer)	I'm trying to	But	Because	Which makes me
No. PS- 1	A consumer who wants to buy mushrooms	Purchase mushrooms safely		I don't know which ones are poisonous	Unsure and unsafe about what I consume
PS- 2	A shopkeeper	Sell safe, fresh mushrooms	I'm concerned about customer health		Stressed about quality and customer trust
PS- 3	A restaurant owner	Use high-quality mushrooms in dishes	I struggle to find reliable sources		Worried about safety and my business reputation
PS- 4	A biology student or forager	Learn and identify mushroom species	I find it hard to tell species apart	They look very similar	Confused, frustrated, and hesitant
PS- 5	A tech researcher	Build an AI mushroom classification system	I lack a robust image dataset	Mushrooms vary by species and environment	Limited and technically challenged
PS- 6	An environmental ist	Promote sustainable mushroom harvesting	It's hard to track species impact	Lack of identification tools in the wild	Worried about overharvesting and ecology

PS- 7	A parent	Teach my kids about safe foraging	I'm scared they might pick poisonous ones	I can't reliably teach what's safe	Anxious and unconfident as a guide
PS- 8	A pharmaceutic al researcher	Discover medicinal mushrooms	Identification is slow and manual	Misidentification risks research accuracy	Limited in drug discovery and progress
PS- 9	An AI/ML student	Train a deep learning model on mushrooms	There are too many similar- looking samples	Labeling is expensive and hard	Overwhelmed and unsure of training data quality
PS- 10	An NGO field worker	Educate rural communities about mushrooms	There's no easy tool for live identification	Language and tech access barriers exist	•
PS- 11	A grocery buyer for supermarkets	Source large quantities of safe mushrooms	I can't verify all sources accurately	Suppliers may mix types or store improperly	Concerned about liability and customer complaints
PS- 12	A food delivery aggregator	Support mushroom- based dish partners	Restaurants may use unsafe ingredients	They lack easy ID tools	Worried about brand image and customer safety
PS- 13	A forest ranger	Monitor mushroom types in protected areas	I can't classify them efficiently in the field	Many are undocumented or rare	Frustrated by lack of real-time identification
PS- 14	A healthconscious individual	Track the health benefits of different mushrooms	I can't identify what's in the store or dish	There's no easy app for instant scanning	Disappointed and disconnected from my health goals