

## Project Initialization and Planning Phase

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| Date          | 20 January 2026  |
| Student Name  | Vivek Ashok Mali   |
| 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 No. | I am (Customer)                       | I'm trying to                              | But                                       | Because                                       | Which makes me feel                             |
|--------|---------------------------------------|--|---|---|---|
| PS- 1  | A consumer who wants to buy mushrooms | Purchase mushrooms safely                  | I am scared of wild mushrooms             | 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       | Mushrooms are perishable and hard to identify | Stressed about quality and customer trust       |
| PS- 3  | A restaurant owner                    | Use high-quality mushrooms in dishes       | I struggle to find reliable sources       | Some mushrooms may be harmful                 | 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 environmentalist                   | 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              |

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| <b>PS- 8</b>  | A pharmaceutical researcher      | Discover medicinal mushrooms                     | Identification is slow and manual              | Misidentification risks research accuracy   | Limited in drug discovery and progress             |
| <b>PS- 9</b>  | 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    |
| <b>PS- 10</b> | An NGO field worker              | Educate rural communities about mushrooms        | There's no easy tool for live identification   | Language and tech access barriers exist     | Helpless in reaching and empowering locals         |
| <b>PS- 11</b> | 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  |
| <b>PS- 12</b> | 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      |
| <b>PS- 13</b> | 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     |
| <b>PS- 14</b> | A health-conscious 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 |