



## **Project Initialization and Planning Phase**

| Date          | 15 April 2025             |  |
|---------------|---------------------------|--|
| Name          | Sainath Prakash Nimbalkar |  |
| Project Name  | NailCare AI               |  |
| Maximum Marks | 3 Marks                   |  |

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

| PS<br>No. | I am (Customer)                        | I'm trying to                                | But                                     | Because   | Which makes me feel                      |
|-----------|--|--|---|---|--|
| PS-1      | A general user                         | Detect nail<br>diseases early                | I don't know<br>what's normal<br>or not | Nail changes can<br>be subtle and<br>confusing      | Anxious and unsure                       |
| PS- 2     | A dermatologist                        | Save time in diagnosis                       | I receive unclear<br>or poor images     | Patients often send<br>low-quality photos           | Frustrated and limited                   |
| PS- 3     | A healthcare startup                   | Provide<br>affordable nail<br>disease care   | It's hard to<br>scale expert<br>review  | Specialists are expensive and not widely available  | Concerned<br>about reach<br>and cost     |
| PS- 4     | A medical student                      | Learn to recognize nail diseases             | The examples in textbooks are limited   | Real-world<br>cases vary<br>significantly           | Confused and lacking confidence          |
| PS- 5     | A tech<br>researcher                   | Build a smart<br>nail disease<br>detector    | I lack labeled image datasets           | Medical image<br>datasets are rare<br>and sensitive | Technically<br>challenged and<br>limited |
| PS- 6     | A wellness<br>influencer or<br>blogger | Educate<br>followers<br>about nail<br>health | I'm not<br>medically<br>trained         | Nail issues can be early signs of deeper problems   | Cautious and worried about misinformatio |





| PS- 7  | A parent                             | Teach my<br>kids about<br>nail hygiene                 | I'm unsure<br>how to explain<br>symptoms           | Early signs of nail<br>disease can be hard<br>to notice | Anxious and unconfident as a guide                      |
|--------|--------------------------------------|--|--|---|---|
| PS- 8  | A<br>pharmaceutic<br>al researcher   | Discover<br>nail-related<br>disease<br>indicators      | It's hard to<br>collect accurate<br>samples        | Misidentification<br>risks research<br>accuracy         | Limited in research accuracy and drug innovation        |
| PS- 9  | An AI/ML<br>student                  | Train a deep learning model to detect nail diseases    | There are too<br>many similar-<br>looking samples  | Labeling is expensive and hard                          | Overwhelmed and unsure of training data quality         |
| PS- 10 | A rural health<br>worker             | Educate<br>rural<br>communitie<br>s about<br>mushrooms | There's no easy<br>tool for live<br>identification | Language and tech access barriers exist                 | Helpless in reaching and empowering locals              |
| PS- 11 | A beauty<br>product<br>company       | Source large quantities of safe mushrooms              | Create nail-<br>friendly health<br>products        | I can't<br>differentiate<br>disease from<br>damage      | Nail conditions<br>may look like<br>cosmetic issues     |
| PS- 12 | A health<br>insurance<br>provider    | Support<br>mushroom<br>- based<br>dish<br>partners     | Reduce claims<br>through early<br>detection        | Nail symptoms are often ignored                         | People overlook<br>signs until the<br>condition worsens |
| PS- 13 | A mobile app<br>developer            | Build a real-time<br>nail scan feature                 | I need labeled<br>images and<br>feedback           | Real-time models<br>need quality<br>training data       | Blocked by tech<br>limitations and<br>data scarcity     |
| PS- 14 | A health-<br>conscious<br>individual | Monitor my<br>nail health over<br>time                 | I don't know<br>what changes<br>to track           | No easy tool shows<br>what's improving<br>or worsening  | Disconnected<br>from my wellness<br>journey             |