Project Design Phase
Problem - Solution Fit Template

Date	27 June 2025
Team ID	LTVIP2025TMID40716
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	2 Marks

Problem

Poultry farmers often struggle to diagnose bird diseases like Salmonella, Coccidiosis, or Newcastle Disease early. This leads to high mortality, economic loss, and delayed treatment—especially in rural areas with limited vet access.

2. Target Group / Customers:

- Rural poultry farmers
- Commercial poultry farm operators
- Veterinary students and institutions

3. Existing Alternatives:

- Manual inspection by local vet (if available)
- Self-diagnosis using books or internet
- Government animal health workers

4. Problems With Existing Alternatives:

- Lack of real-time diagnosis
- Inaccuracy or misdiagnosis
- Limited accessibility
- Delay in action -+ disease spreads

5. Solution:

A mobile app powered by a transfer learning-based model to classify diseases from symptoms/environment data into:
-+ Salmonella, Newcastle Disease, Coccidiosis, or Healthy Gives
diagnosis + treatment suggestions instantly.

Purpose:

1. Early Detection: Prevent disease outbreaks and reduce bird mortality
2. Empower Farmers: Provide self-help diagnosis tool
3. Quick Action: Enable immediate treatment without waiting for a vet
4. Educational Tool: Train students in Al-based diagnosis

Problem and SoIutions: