**Ideation Phase**

**Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management**

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| Date | 15 June 2025 |
| Team ID | LTVIP2025TMID43413 |
| Project Name | Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management |
| Maximum Marks | 4 Marks |

Project Overview

This project aims to develop a mobile-friendly, AI-powered poultry disease diagnosis system using transfer learning. It classifies images into four categories: Salmonella, Newcastle Disease, Coccidiosis, and Healthy. This system improves early detection, reduces economic losses, and enhances poultry health management.

Purpose

To enable farmers and poultry handlers to identify diseases using only fecal images via a simple mobile interface, providing real-time, affordable, and accurate disease classification.

Problem Statement

Farmers often lack access to timely veterinary services and lab testing. This delay in diagnosis leads to disease spread and financial losses. There is a need for a rapid, low-cost diagnostic tool.

Empathy Map Canvas

Says: "I need a faster way to identify what's wrong with my poultry." Thinks: "Lab tests take too long and cost too much." Feels: Frustrated, anxious about livelihood.

Does: Uses mobile phone for basic tasks; lacks veterinary knowledge.

Brainstorming

Ideas evaluated:

* Image-based disease recognition
* Symptom-based chatbot
* Smart wearable for chickens (rejected due to impracticality)

Finalized idea: Mobile app using transfer learning to classify fecal images.

