Project Design Phase

**Problem – Solution Fit Template**

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| Date | 20 July 2025 |
| Team ID | LTVIP2025TMID41443 |
| Project Name | Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management |
| Maximum Marks | 2 Marks |

**Problem – Solution Fit :**

**Problems**

* Difficulty in early detection of poultry diseases
* Lack of affordable and accessible veterinary support in rural areas
* High poultry mortality due to delayed diagnosis
* Economic losses from wrong or delayed treatments
* Limited awareness of disease symptoms among farmers

**Solutions**

* AI-powered image-based disease diagnosis system
* Mobile/web application for instant detection using photos
* Transfer learning enables accurate classification with limited data
* Easy-to-use interface designed for farmers
* Provides actionable treatment suggestions and disease awareness

**Problem – Solution Overview:**

Poultry farmers, especially in rural areas, face serious challenges due to the lack of early disease detection tools and affordable veterinary access. Delayed diagnosis leads to high mortality rates, economic losses, and misuse of treatments due to guesswork. Many farmers are unaware of the symptoms of common diseases like Coccidiosis, Salmonella, and Newcastle Disease, which leads to further spread and damage.

To solve this, our project introduces an AI-powered mobile and web application that uses transfer learning for accurate image-based disease classification. Farmers can simply capture a photo of a chicken and receive instant diagnosis and recommended actions. The app is built to work offline, is user-friendly, and empowers farmers with awareness, speed, and accessibility — reducing losses and improving poultry health management.

