Project Design Phase
Proposed Solution Template

Date	30 June 2025
Team ID	LTVIP2025TMID46945
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	2 Marks

Proposed Solution Template:

The proposed solution is a mobile-based AI application that uses transfer learning to detect poultry diseases from images, even offline. It aims to provide rural farmers with an affordable, quick, and accessible diagnostic tool to reduce livestock loss and improve farm productivity.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Poultry farmers in rural areas struggle to identify and diagnose diseases early due to lack of access to affordable, real-time veterinary services, resulting in high bird mortality and economic loss.
2.	Idea / Solution description	A mobile-based AI application that uses transfer learning to classify poultry diseases from images. The app works offline and provides instant results, helping farmers detect diseases quickly and accurately.
3.	Novelty / Uniqueness	Combines deep learning with offline functionality in a mobile app tailored for low-resource users. It is cost-effective, supports local languages, and requires minimal technical skills.
4.	Social Impact / Customer Satisfaction	Reduces poultry mortality, supports rural livelihoods, improves food security, and empowers farmers with technology to manage livestock health independently.
5.	Business Model (Revenue Model)	Freemium model with basic disease detection free; advanced analytics, cloud sync, and veterinary support available through subscription or pay-per-use. Possible partnerships with agri-tech firms and NGOs.
6.	Scalability of the Solution	Easily scalable to different regions and poultry types by retraining models with local data. Can also be extended to other livestock diseases or integrated with existing agri platforms.