Project Design Phase
Proposed Solution Template

Date	31 January 2025
Team ID	LTVIP2026TMIDS53438
Project Name	Dog breed Prediction Using Transfer Learning
Maximum Marks	4 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Many pet owners and animal shelters face difficulty in accurately identifying dog breeds from images. Manual identification requires expertise and may lead to incorrect classification. Misidentification can affect proper care and training.
2.	Idea / Solution description	Develop an AI-powered web application using Transfer Learning (VGG19) to classify dog breeds from uploaded images. The user uploads an image, the system processes it using a CNN model, and the predicted breed is displayed instantly.
3.	Novelty / Uniqueness	Uses Transfer Learning for higher accuracy with limited data. Integrates Deep Learning with a real-time web application. Provides automated breed prediction through a simple and user-friendly interface.
4.	Social Impact / Customer Satisfaction	Helps pet owners and shelters identify breeds accurately. Improves pet care and awareness. Saves time and reduces dependency on experts. Provides fast and reliable AI-based predictions.
5.	Business Model (Revenue Model)	Freemium model (basic free predictions, premium advanced features), Subscription model for veterinary clinics/shelters, API integration for pet-related platforms.
6.	Scalability of the Solution	Can be scaled by deploying on cloud platforms (AWS, Azure, etc.), adding more breeds, increasing dataset size, and converting into a mobile application for wider accessibility.