Date: 31 January 2025
Team ID: LTVIP2026TMIDS55972
Project Name: Dog Breed Identification Using Transfer Learning
Maximum Marks: 4

Technology Stack (Architecture and Stack)

1. System Architecture
The project follows a 3-Tier Architecture.

Presentation Layer (Frontend)
- User Interface for image upload and result display
- Built using HTML, CSS, JavaScript
- Allows users to upload dog images and view predictions

Application Layer (Backend)
- Handles image processing and prediction logic
- Developed using Python
- Uses deep learning framework like TensorFlow / Keras
- Integrates transfer learning models (e.g., ResNet / MobileNet)

Data Layer
- Dog image dataset storage
- Trained model storage (.h5 file)
- Stores prediction results if needed

2. Technology Stack
Frontend: HTML, CSS, JavaScript
Backend: Python
Framework: Flask
Deep Learning: TensorFlow / Keras
Model Type: Transfer Learning (Pre-trained CNN)
Dataset: Dog Breed Image Dataset
Deployment: Localhost / Cloud

3. Tools Used
- Jupyter Notebook
- VS Code
- Git & GitHub
- Google Colab (for training)