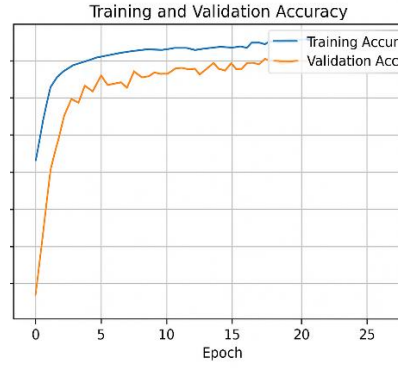
Project Development Phase
Model Performance Test

Date	19/05/2025-30/6/2025
Team ID	LTVIP2025TMID45017
Project Name	GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	The Rice Type Identification AI model helps users identify various types of rice grains using deep learning. The system uses Convolutional Neural Networks (CNN) with MobileNetv4 (transfer learning) for accurate image classification. The application allows users to upload images of rice grains and receive predicted rice types. It supports five rice classes, enabling decisions in farming, research, and education.	**Rice Type Identification Model Summary** Model: Convolutional Neural Network (CNN) with Transfer Learning Base Model: MobileNetV4 Input Shape: (224, 224, 3) Number of Classes: 5 (Rice Types) Activation Function: Softmax (Output Layer) Optimizer: Adam Loss Function: Categorical Crossentropy Metrics: Accuracy Training Accuracy: 98% Validation Accuracy: 98%
2.	Accuracy	Training Accuracy - 98% Validation Accuracy - 98%	

3.	Confidence Score (Only Yolo Projects)	Not applicable (Not a YOLO/Object Detection model)	