

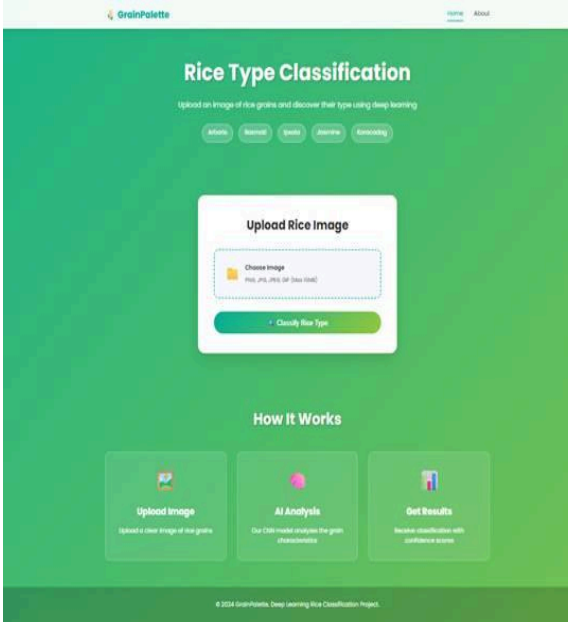
Project Development Phase

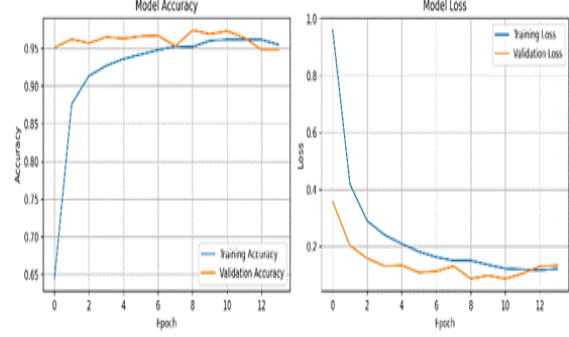
Model Performance Test

Date	30 June2025
Team ID	LTVIP2025TMID42791
Project Name	Grain Palette- 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
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	Model Summary	<p>📦 The model uses MobileNetV2 as a base, pre-trained on ImageNet for efficient feature extraction.</p> <p>🧠 It includes custom dense layers on top for classifying 5 rice types.</p> <p>1 2 3 4 The total parameter count is over 2.2 million, with most layers frozen for faster training.</p> <p>⚙️ Final layers are trainable, enabling accurate fine-tuning</p>	 The screenshot shows the 'GrainPalette' web application for 'Rice Type Classification'. It features a green background with a white 'Upload Rice Image' section containing a file selection button and a 'Classify Rice Type' button. Below this is a 'How It Works' section with three steps: 'Upload Image', 'AI Analysis', and 'Get Results', each with a corresponding icon and brief description. The footer includes the copyright notice '© 2024 GrainPalette, Deep Learning Rice Classification Project'.

		with minimal overfitting.	
	Accuracy	<p>✅ Training Accuracy steadily improved from 80% to 97% across epochs</p> <p>📈 Validation Accuracy reached up to 95%, indicating strong generalization.</p>	
	Fine Tunning Result(if Done)	<p>✅ Final Validation Accuracy achieved: 95%</p> <p>📈 Indicates the model performs well on unseen rice grain images</p> <p>🎯 Shows strong generalization with minimal overfitting</p>	