**Project Development Phase**

**Model Performance Test**

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| Date | 28 June 2025 |
| Team ID | LTVIP2025TMID40163 |
| Project Name | grainpalette - a deep learning odyssey in rice type classification through transfer learning |
| Maximum Marks | 10 Marks |

**Model Performance Testing:**

### 📊 Model Performance Summary – GrainPalette

| **S.No.** | **Parameter** | **Values** | **Screenshot** |
| --- | --- | --- | --- |
| 1 | **Model Summary** | Transfer Learning using **MobileNetV2**  Input Size: 224×224  Pre-trained on ImageNet  Base layers frozen  Custom Dense Layers added  Optimizer: Adam  Loss: Categorical Crossentropy |  |
| 2 | **Accuracy** | **Training Accuracy** – 97.3%  **Validation Accuracy** – 95.2% |  |
| 3 | **Fine Tuning Result** | After unfreezing top MobileNet layers and re-training:  **Validation Accuracy** – 96.1% |  |