**Project Development Phase**

**Model Performance Test**

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| Date | 29 June 2025 |
| Team ID | LTVIP2025TMID44727 |
| Project Name | CleanTech: Transforming Waste Management with Transfer Learning |
| Maximum Marks |  |

**Model Performance Testing:**

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

| **S.No.** | **Parameter** | **Screenshot / Values** |
| --- | --- | --- |
| 1 | Data Rendered | Dataset includes images from 3 classes: Biodegradable, Recyclable, Trash. Each class contains approximately 100 images for training and validation. |
| 2 | Data Preprocessing | - Rescaled pixel values using ImageDataGenerator(rescale=1./255) - Image resizing to (224 × 224) - Categorical encoding for class labels |
| 3 | Utilization of Data Filters | Applied image augmentation using Keras (flip, zoom, rotate) to improve generalization during training. |
| 4 | DAX Queries Used | Not applicable for model training, but used Power BI DAX queries to analyze prediction results and class-wise counts for visualization purposes. |
| 5 | Dashboard Design | Number of Visualizations / Graphs: 4 Includes: • Class distribution pie chart • Prediction outcome bar graph • Accuracy over epochs • Confusion matrix |
| 6 | Report Design | Number of Visualizations / Graphs: 2 • Summary table of class performance • Line chart comparing training vs. validation accuracy |