**Project Development Phase**

**Model Performance Test**

|  |  |
| --- | --- |
| Date | 10 February 2025 |
| Team ID | PNT2022TMID45617 |
| 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 ~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 options) for improved generalization during training. |
| 4 | DAX Queries Used | Not applicable for model training, but used Power BI DAX to analyze prediction results and class-wise counts for visualization. |
| 5 | Dashboard Design | No. of Visualizations / Graphs – 4 Includes: • Class distribution pie chart • Prediction outcome bar graph • Accuracy over epochs • Confusion matrix |
| 6 | Report Design | No. of Visualizations / Graphs – 2 • Summary table of class performance • Line chart comparing training vs validation accuracy |