**Data Collection and Preprocessing Phase**

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| Date | 20 June 2025 |
| Team ID | SWTID1749826875 |
| Project Title | Dog Breed Identification using Transfer Learning |
| Maximum Marks | 6 Marks |

**Preprocessing**

The images will be preprocessed by resizing, normalizing, converting color space and batch normalizing. These steps will enhance data quality, promote model generalization, and improve convergence during neural network training, ensuring robust and efficient performance across various computer vision tasks.

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| **Section** | **Description** |
| Data Overview | The dataset contains 10,222 images categorized into 120 classes. For training purposes, only 20 of these classes were selected, comprising a total of 1,683 images. |
| Resizing | The images were resized to 224 × 224 pixels to ensure uniformity. |
| Normalization | Pixel values were normalized to a target range of 0 to 1. |
| Color Space Conversion | The images are taken BGR format |
| Batch Normalization | A batch size of 32 was used during model training. |
| **Data Preprocessing Code Screenshots** |  |
| Loading Data |  |
| Resizing |  |
| Normalization |  |
| Batch Normalization |  |