

Number of Classes

11

Total Images

187

Overview

This project uses a dataset of images divided into different classes.

Each image is preprocessed before training:

Convert the image from BGR to RGB.

Resize the image to 128×128 pixels.

Normalize pixel values to be between 0 and 1.

Data Splitting

Training set: used to train the model.

Validation set: used to check the model performance during training.

Test set: used to evaluate the model after training.

Data Augmentation

To make the model stronger, we apply small random changes only on the training set:

- **Flip the image horizontally sometimes.**
- **Rotate the image by a small random angle (-20° to 20°).**
- **Change the brightness randomly.**