

Object Detection of Fruits using YOLOv8n  
CS4287 Neural Computing  
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# Overview

# The Data Set

## Dataset Selection

The dataset we used is a ‘Fruit Detection Dataset’ (Lakshay Tyagi).   
This dataset consists of 8,479 images of 6 different fruits. Each of the images consist of one or more images of these fruits. The goal is to accurately detect fruits these fruits in an image. These fruits are split into 6 classes as follows.

A group of different fruits

AI-generated content may be incorrect.

The 8,749 images were split as follows

* Apple: 1,520 images
* Banana: 1,139 images
* Grape: 1,416 images
* Orange: 1,769 images
* Pineapple: 554 images
* Watermelon: 710 images

## Preprocessing

Since the dataset is very large we removed corrupted and mislabeled files as the performance decrease would be minimal.