## Code Hierarchy - RetinaNet

- Hyperparameters
- Resnet-50 Model
- Retinanet Model (Resnet50 as Backbone)
  - o Feature Pyramid Network
  - Subnet Models(Regression & classification)
  - Retinanet Model
- Retinanet Box (Inference Model for Object Detection )
  - Generate Anchors
  - o Regression & Clip Boxes
  - o Filter Detection
  - o Retinanet\_Box Model
- Loss Function
  - Focal Loss
  - Smooth L1 Loss
- Import libraries for Pascal VOC2007 Dataset
- Training Model
- Object Detection
  - o Predication based on Retinanet Box
  - o Object Detection Demo

**Blue Colour -> Own Implementation** 

Black colour -> Import from open source code

Dataset: - Pascal VOC 2007