We have trained our model on custom dataset. We have combined our custom data set with coco data set. Ms coco data set has 80 objects, It features a large-scale object detection, segmentation, and captioning. coming to custom data set we have added 15 objects apart from 80 coco dataset objects.

* Few examples of coco data set are person, dog, umbrella, hand bag, suitcase, chair, bed, etc...)
* Objects that we added additionally are switchboard, pillow, locker, keys, open door, closed door, window, direction board, postbox, pole, shop, manhole, tree, upstairs, downstairs
* We Added 400+ Images to Training set, and 80+ images to Validation set

Now we got all the images, to train the model, we need to annotate the images

To annotate the images there are so many online tools available, we have gone through so many online tools and we found makesense.ai is flexible for us it also provides yolo format

For training yolo model we need to have following file structure

In the root folder i.e dataset folder

We have two folders images and labels folder

In the images folder again we have three folder

Train folder validation folder text folder

In the lables folder we have two folders train folder and validation folder

In root folder i.e is dataset folder

We have three different text files

Train.txt,val.txt,test.txt

IN the train.txt file, we will be having the path of the all the images that are in the train folder in images folder

In the validation.txt we will be having the path of the all the images that are in the validation folder in the images folder

In the test.txt we will be having the path of the all the images that are in the test folder in the images folder

For training the model reads train.txt file and then it takes every image path and it also automatically takes the path of the label. In this way the model is trained

Label lmg, label me