High level description of ssd keras training & testing files

1. **ssd300\_training\_aux\_img\_input\_multi\_resolution.py**

This file is used for training an auxiliary image input model i.e. the model takes an image and an auxiliary mask as input. This mask contains predictions from the other collaborating

Cameras. The regular ssd300 model takes only as image as input, so its architecture had to be modified to accommodate a mask as input as well. Steps in this file are:

1. Create a model instance (This includes all the layers involved in the architecture of SSD 300)
2. Load pre-trained weights in the model (model is kind of a wrapper and weights can be loaded into it). Loads VGG based weights.
3. Create Data generators (these creates batches of data (and their labels) for the model to be trained).

Parse\_XML method ():

Generators read data using parse\_xml method (for VOC dataset). This step includes making a list of filenames, images loaded into memory, labels, image\_ids.

Generate method ():

Then generate method would generate the batches from the dataset.

(c)