RETINANET INSTALLATION IN RED HAT VM

Objective	A guide for installation and operation of RetinaNet in Red Hat VM
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Introduction

This is step-by-setp installation and execution of a RetinaNet code to identify objects in pictures. Before using this document you must have installed TensorFlow (check the file TENSORFLOW_Install.odt)

1. Download RetinaNet code

Download the files from https://github.com/fizyr/keras-retinanet

2. Launch VS Code

In Anaconda-Navigator launch VS Code from the tensorflow_env (check the document TensorFlow_install for details).

3. Execute the install command

With VS Code open the folder where RetinaNet is located. Then in the terminal prompt execute the command:

pip install . --user

4. Install CoCo Dataset protocols

If you want to use COCO dataset (http://cocodataset.org/#home) type this command:

```
pip install --user git+https://github.com/cocodataset/cocoapi.git#subdirectory=PythonAPI
```

5. Download CoCo Dataset

We are going to to create a program to run and test TensorFlow with RetinaNet, to proceed we will use a pretrained dataset name CoCo therefore we will download Coco from the site: https://github.com/fizyr/keras-retinanet/releases

Download the binary pretrained file (resnet50_coco_best_v2.1.0.h5) and save it to the same folder where we will put our testing code.

6. Download the Python Code

Next step is to get the Python code from the site:
https://github.com/Cadesh/TensorFlow/tree/master/RetinaNetTest

Do not forget to also download the Pictures (from 1 to 5) for the test. Save everything in the same folder with the COCO dataset. Now open the Jupyter Qt Console, direct to the code folder and run the code with the command: ***run retinanet_test.py***

Example of output: