Data used for evaluation:

Existing detectors on MS COCO data set are used to generate detections on train2017 (118k images) for training, val2017 (5k images) for model validation, and test-dev2017 (20k images) for evaluation. Annotations for the corresponding images were 2017 Train/Val annotations [241MB]. The above data sets can be downloaded from

- https://cocodataset.org/#download

Links for the dataset from google drive

- https://drive.google.com/drive/folders/1UdNZn4lqk_wkDLz1JniekihwP3qIsGTL?usp=sharing

Steps to execute the program:

1. To download the Tensorflow detector model
   a. git clone --depth 1 https://github.com/tensorflow/models
   b. If error is encountered while insertion of string_int_label_map_pb proto module, place the
      a. file string_int_label_map_pb2.py from the link below in the folder model/research/object_detection/protos/ https://github.com/datitran/object_detector_app/blob/master/object_detection/protos/strin g_int_label_map_pb2.py
   c. Kindly make sure that source file main_prog.py, detection_model.py are in the same directory as models downloaded.

2. Installation of prerequisite python models

   a. pip install -r model/official/requirements.txt

3. Executing the program

   a. main_prog.py <train images folder> <training images annotations> <test images folder> <test images annotations > or
   b. main_prog.py <train images folder> <training images annotations>

4. Training, validation samples are present in the following link

   https://drive.google.com/drive/folders/1UdNZn4lqk_wkDLz1JniekihwP3qIsGTL?usp=sharing

   Folder 5k – 5000 random samples from COCO dataset
   Folder 10K – 10000 random samples from COCO dataset
   Folder 15K – 15000 random samples from COCO dataset
   Folder val2017 – Validation samples from COCO dataset
   instances_train2017.json – Annotation for the training dataset
   instances_val2017.json – Annotation for the validation dataset