Steps to solve Face Detection problem using Detectron2

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2. Loading and pre-processing the data

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3. Creating annotations as per Detectron2

Analytics Vidhya

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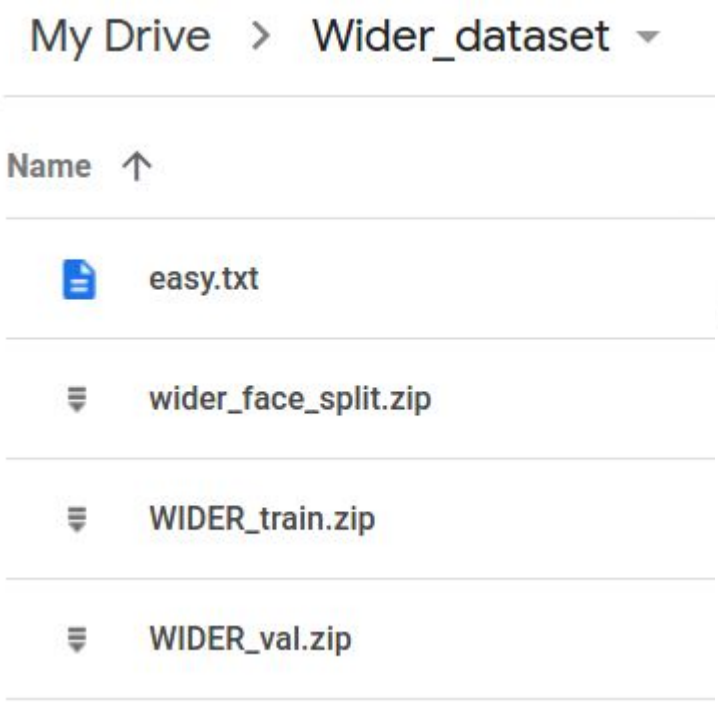
6. Evaluating model performance

Overview of the dataset



Analytics Vidhya

Thank You

Analytics
Vidhya

```
DONE (t=0.05s).
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.546
 Average Precision  (AP) @[ IoU=0.50      | area=   all | maxDets=100 ] = 0.904
 Average Precision  (AP) @[ IoU=0.75      | area=   all | maxDets=100 ] = 0.609
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.235
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.359
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.596
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=  1 ] = 0.578
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets= 10 ] = 0.614
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.618
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.350
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.461
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.661
[06/27 13:31:48 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
|   AP   |  AP50  |  AP75  |  APs   |  APm   |  APl   |
|:------:|:------:|:------:|:------:|:------:|:------:|
| 54.566 | 90.375 | 60.896 | 23.498 | 35.871 | 59.598 |
OrderedDict([('bbox',
              {'AP': 54.565724953154685,
               'AP50': 90.3748845417151,
               'AP75': 60.89609215287629,
               'APl': 59.597931908128686,
               'APm': 35.871304516155625,
               'APs': 23.498349834983497})])
```

```
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.579
 Average Precision  (AP) @[ IoU=0.50      | area=   all | maxDets=100 ] = 0.935
 Average Precision  (AP) @[ IoU=0.75      | area=   all | maxDets=100 ] = 0.677
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.314
 Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.429
 Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.618
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=  1 ] = 0.626
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets= 10 ] = 0.638
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=100 ] = 0.645
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.450
 Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.532
 Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.676
[06/29 16:06:00 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
|   AP   |  AP50  |  AP75  |  APs   |  APm   |  APl   |
|:------:|:------:|:------:|:------:|:------:|:------:|
| 57.918 | 93.535 | 67.730 | 31.361 | 42.879 | 61.776 |
OrderedDict([('bbox',
              {'AP': 57.9176361150345,
               'AP50': 93.53503482131251,
               'AP75': 67.73043569223753,
               'APl': 61.77609829868324,
               'APm': 42.87898185017925,
               'APs': 31.361386138613863})])
```