

Work Report

2 july

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Today I have completed the training of pp yolo

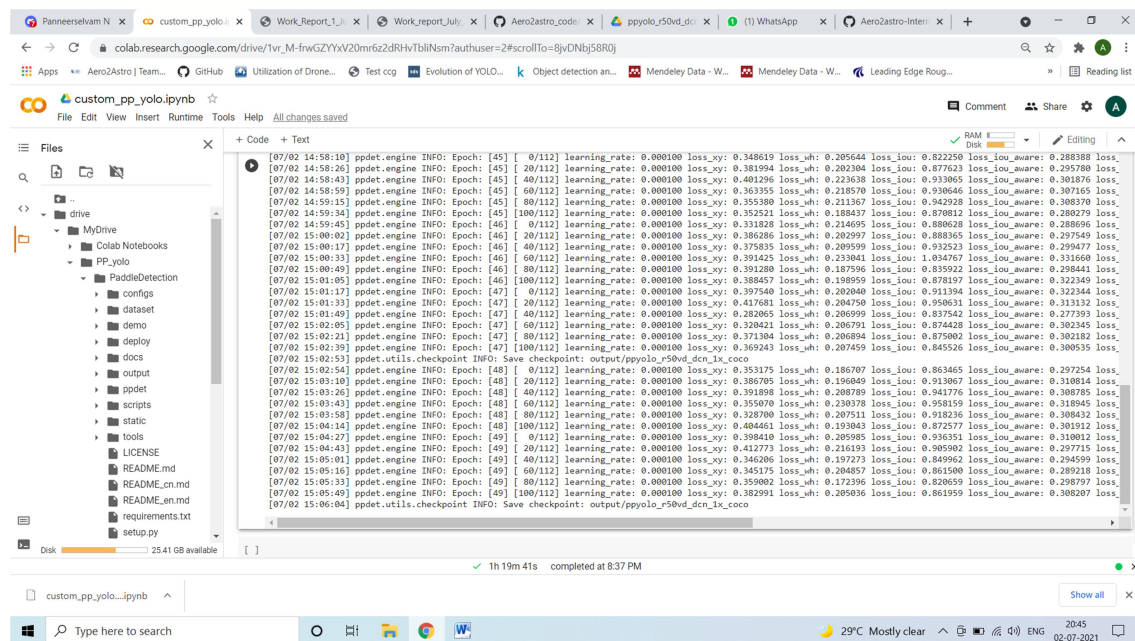
I have taken `ppyolo_r50vd_dcn_1x_coco.yml` file and changed according to the model.

Initially I have faced lot of issues but resolved them.

Notes:

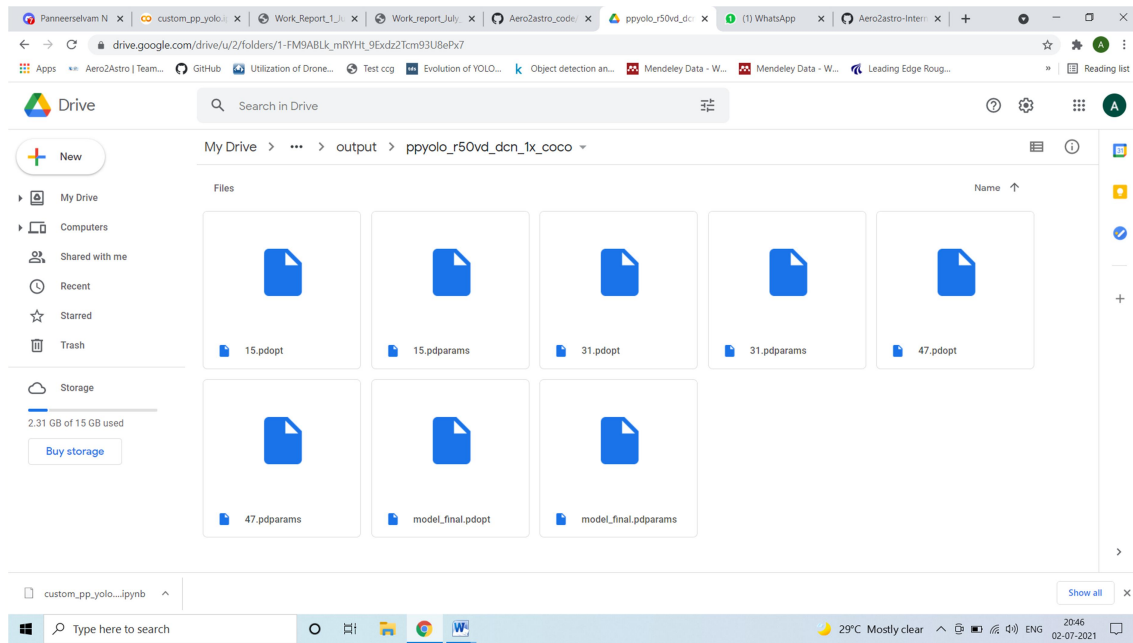
1. Batch size of 24 was set at default but it was giving error of gpu can't be allocate then after I changed the batch size to 8 then its works fine.

2. I have run the model on 50 epochs



```
[07/02 14:58:10] ppdet.engine INFO: Epoch: [45] [ 0/112] learning_rate: 0.000100 loss_xy: 0.348619 loss_uh: 0.205644 loss_lou: 0.822250 loss_aware: 0.288388 loss
[07/02 14:58:26] ppdet.engine INFO: Epoch: [45] [20/112] learning_rate: 0.000100 loss_xy: 0.381994 loss_uh: 0.202304 loss_lou: 0.877623 loss_aware: 0.295780 loss
[07/02 14:58:43] ppdet.engine INFO: Epoch: [45] [40/112] learning_rate: 0.000100 loss_xy: 0.401296 loss_uh: 0.223638 loss_lou: 0.933065 loss_aware: 0.301876 loss
[07/02 14:58:59] ppdet.engine INFO: Epoch: [45] [60/112] learning_rate: 0.000100 loss_xy: 0.363555 loss_uh: 0.218570 loss_lou: 0.930646 loss_aware: 0.307165 loss
[07/02 14:59:15] ppdet.engine INFO: Epoch: [45] [80/112] learning_rate: 0.000100 loss_xy: 0.355300 loss_uh: 0.211367 loss_lou: 0.942928 loss_aware: 0.308370 loss
[07/02 14:59:34] ppdet.engine INFO: Epoch: [45] [100/112] learning_rate: 0.000100 loss_xy: 0.352521 loss_uh: 0.188437 loss_lou: 0.870812 loss_aware: 0.280279 loss
[07/02 14:59:45] ppdet.engine INFO: Epoch: [46] [ 0/112] learning_rate: 0.000100 loss_xy: 0.331828 loss_uh: 0.214695 loss_lou: 0.880628 loss_aware: 0.288696 loss
[07/02 15:00:02] ppdet.engine INFO: Epoch: [46] [20/112] learning_rate: 0.000100 loss_xy: 0.386286 loss_uh: 0.202997 loss_lou: 0.888365 loss_aware: 0.297540 loss
[07/02 15:00:17] ppdet.engine INFO: Epoch: [46] [40/112] learning_rate: 0.000100 loss_xy: 0.375835 loss_uh: 0.209599 loss_lou: 0.932523 loss_aware: 0.299477 loss
[07/02 15:00:33] ppdet.engine INFO: Epoch: [46] [60/112] learning_rate: 0.000100 loss_xy: 0.391425 loss_uh: 0.233841 loss_lou: 1.034767 loss_aware: 0.331669 loss
[07/02 15:00:49] ppdet.engine INFO: Epoch: [46] [80/112] learning_rate: 0.000100 loss_xy: 0.391280 loss_uh: 0.187596 loss_lou: 0.835922 loss_aware: 0.298441 loss
[07/02 15:01:05] ppdet.engine INFO: Epoch: [46] [100/112] learning_rate: 0.000100 loss_xy: 0.388457 loss_uh: 0.198959 loss_lou: 0.878197 loss_aware: 0.322349 loss
[07/02 15:01:17] ppdet.engine INFO: Epoch: [47] [ 0/112] learning_rate: 0.000100 loss_xy: 0.397540 loss_uh: 0.202040 loss_lou: 0.911394 loss_aware: 0.322344 loss
[07/02 15:01:33] ppdet.engine INFO: Epoch: [47] [20/112] learning_rate: 0.000100 loss_xy: 0.417681 loss_uh: 0.204750 loss_lou: 0.950631 loss_aware: 0.313132 loss
[07/02 15:01:49] ppdet.engine INFO: Epoch: [47] [40/112] learning_rate: 0.000100 loss_xy: 0.282065 loss_uh: 0.206999 loss_lou: 0.837542 loss_aware: 0.277393 loss
[07/02 15:02:05] ppdet.engine INFO: Epoch: [47] [60/112] learning_rate: 0.000100 loss_xy: 0.320421 loss_uh: 0.206791 loss_lou: 0.874428 loss_aware: 0.302345 loss
[07/02 15:02:21] ppdet.engine INFO: Epoch: [47] [80/112] learning_rate: 0.000100 loss_xy: 0.371384 loss_uh: 0.206894 loss_lou: 0.875002 loss_aware: 0.302182 loss
[07/02 15:02:39] ppdet.engine INFO: Epoch: [47] [100/112] learning_rate: 0.000100 loss_xy: 0.362443 loss_uh: 0.207459 loss_lou: 0.845526 loss_aware: 0.300535 loss
[07/02 15:02:53] ppdet.utils.checkpoint INFO: Save checkpoint: output/ppyolo_r50vd_dcn_1x_coco
[07/02 15:02:54] ppdet.engine INFO: Epoch: [48] [ 0/112] learning_rate: 0.000100 loss_xy: 0.353175 loss_uh: 0.186707 loss_lou: 0.863465 loss_aware: 0.297254 loss
[07/02 15:03:10] ppdet.engine INFO: Epoch: [48] [20/112] learning_rate: 0.000100 loss_xy: 0.386705 loss_uh: 0.196049 loss_lou: 0.913067 loss_aware: 0.318814 loss
[07/02 15:03:26] ppdet.engine INFO: Epoch: [48] [40/112] learning_rate: 0.000100 loss_xy: 0.391898 loss_uh: 0.208789 loss_lou: 0.941776 loss_aware: 0.308785 loss
[07/02 15:03:43] ppdet.engine INFO: Epoch: [48] [60/112] learning_rate: 0.000100 loss_xy: 0.355070 loss_uh: 0.230378 loss_lou: 0.958159 loss_aware: 0.318945 loss
[07/02 15:03:58] ppdet.engine INFO: Epoch: [48] [80/112] learning_rate: 0.000100 loss_xy: 0.322870 loss_uh: 0.207511 loss_lou: 0.910236 loss_aware: 0.308432 loss
[07/02 15:04:14] ppdet.engine INFO: Epoch: [48] [100/112] learning_rate: 0.000100 loss_xy: 0.404461 loss_uh: 0.193843 loss_lou: 0.872577 loss_aware: 0.303912 loss
[07/02 15:04:27] ppdet.engine INFO: Epoch: [49] [ 0/112] learning_rate: 0.000100 loss_xy: 0.398410 loss_uh: 0.205985 loss_lou: 0.936351 loss_aware: 0.310912 loss
[07/02 15:04:43] ppdet.engine INFO: Epoch: [49] [20/112] learning_rate: 0.000100 loss_xy: 0.412773 loss_uh: 0.216193 loss_lou: 0.905902 loss_aware: 0.297715 loss
[07/02 15:05:01] ppdet.engine INFO: Epoch: [49] [40/112] learning_rate: 0.000100 loss_xy: 0.346206 loss_uh: 0.197273 loss_lou: 0.848962 loss_aware: 0.254591 loss
[07/02 15:05:16] ppdet.engine INFO: Epoch: [49] [60/112] learning_rate: 0.000100 loss_xy: 0.345175 loss_uh: 0.204857 loss_lou: 0.861500 loss_aware: 0.289218 loss
[07/02 15:05:33] ppdet.engine INFO: Epoch: [49] [80/112] learning_rate: 0.000100 loss_xy: 0.359802 loss_uh: 0.172396 loss_lou: 0.820659 loss_aware: 0.298797 loss
[07/02 15:05:49] ppdet.engine INFO: Epoch: [49] [100/112] learning_rate: 0.000100 loss_xy: 0.382991 loss_uh: 0.205036 loss_lou: 0.861959 loss_aware: 0.308287 loss
[07/02 15:06:04] ppdet.utils.checkpoint INFO: Save checkpoint: output/ppyolo_r50vd_dcn_1x_coco
```

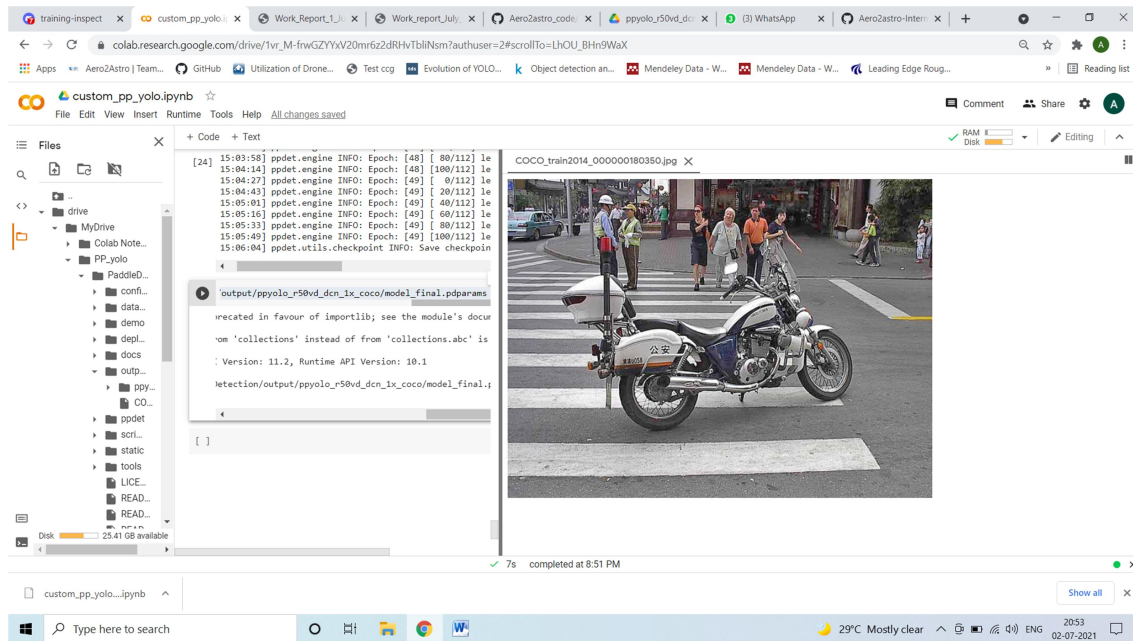
After 15 epoches the model weigths start getting stored.



Now when I tried to test the model

```
!python tools/infer.py -c configs/ppyolo/ppyolo_r50vd_dcn_1x_coco.yml -  
o use_gpu=true weights=/content/drive/MyDrive/PP_yolo/PaddleDetection/o  
utput/ppyolo_r50vd_dcn_1x_coco/model_final.pdparams --  
infer_img=/content/drive/MyDrive/PP_yolo/data/test/test_images/COCO_tra  
in2014_000000180350.jpg
```

I have run this command. The output image got saved in output folder but it doesnot get any bounding box



So need to figure out why this thing happens.

Github Link - [https://github.com/anshulutk123/Aero2astro-Internship/blob/main/codes/custom_pp_yolo%20\(1\).ipynb](https://github.com/anshulutk123/Aero2astro-Internship/blob/main/codes/custom_pp_yolo%20(1).ipynb)