

How to setup training model for performance evaluation

1. Standard Training/Testing Dataset
 - a. Please follow the standard labeling format like cityscapes: <https://www.cityscapes-dataset.com/> and <https://www.cityscapes-dataset.com/dataset-overview/#class-definitions>.
 - b. Classes we expected in Fine annotations :
 - i. Must have: sea, land, sky
 - ii. Optional: cloud, smoke, direct sun light
 - c. Usually, you only need to change the “load dataset” module in your programming.
 - d. Before your deliver the code, please test your programming with sample data in <https://www.cityscapes-dataset.com/examples/#fine-annotations>
2. The number of classes
 - a. Change the output class and output layer in your model
3. Evaluation metrics
 - a. Must have:
 - i. intersection-over-union metric IoU for class
 - ii. instance-level intersection-over-union metric iloU for class
 - iii. IoU for category
 - iv. iloU for category
 - b. Optional:
 - i. IoU and iloU for each category
4. Programming Environment
 - a. Provide your test environment with “requirements.txt”. An example: <https://github.com/ultralytics/yolov5/blob/master/requirements.txt>
5. Prepare your main training script
 - a. You should have a “train.py” to run your training model directly, and we only to use this script.
6. Prepare your parameter file
 - a. Explain the details about your parameter file, and we may change it before training.