

01. Custom Dataset

Code

```
import os
import pandas as pd
import glob
from torch.utils.data.dataset import Dataset

class MyCustomDataset(Dataset):
    def __init__(self, path):
        self.all_data_path = glob.glob(os.path.join(path, '*.csv'))
        # ['./2022.12/12.13_d50_image\\bbox_data.csv']
        csv_path = self.all_data_path[0]
        # ./2022.12/12.13_d50_image\\bbox_data.csv
        df = pd.read_csv(csv_path)
        # print(df)
        # exit()
        self.file_name = df.iloc[:, 1].values # ['banana_0.jpg'
        'banana_1.jpg' ...]
        self.x_list = df.iloc[:, 2].values # [ 18.89  74.51 ...]
        self.y_list = df.iloc[:, 3].values # [ 16.8   24.87 ...]
        self.w_list = df.iloc[:, 4].values # [236.2  612.25 ...]
        self.h_list = df.iloc[:, 5].values # [135.87 793.09 ...]

    def __getitem__(self, index):
        image_name = self.file_name[index]
        x = self.x_list[index]
        y = self.y_list[index]
        w = self.w_list[index]
        h = self.h_list[index]
        return image_name, x, y, w, h

    def __len__(self):
        return len(self.all_data_path)

data = MyCustomDataset("./2022.12/12.13_d50_image/")
for item in data:
    print(item)
```

Result

- Dataframe

	Unnamed: 0	file_name	x1	y1	w	h
0	0	banana_0.jpg	18.89	16.80	236.20	135.87
1	1	banana_1.jpg	74.51	24.87	612.25	793.09
2	2	banana_10.jpg	332.03	43.30	484.38	364.23
3	3	banana_11.jpg	406.93	79.68	720.47	651.85
4	4	banana_12.jpg	17.49	5.02	242.03	159.92
5	5	banana_13.jpg	191.13	32.82	519.18	587.62
6	6	banana_2.jpg	49.00	5.77	147.70	172.73
7	7	banana_3.jpg	60.12	94.56	759.88	477.73
8	8	banana_4.jpg	37.78	39.00	234.84	201.11
9	9	banana_6.jpg	131.02	31.54	430.51	342.89
10	10	banana_7.jpg	173.29	61.58	321.65	291.43
11	11	banana_8.jpg	50.03	196.95	484.35	365.25
12	12	banana_9.jpg	305.64	275.85	701.16	301.55

- Return tuple (file_name, x, y, w, h)

```
('banana_0.jpg', 18.89, 16.8, 236.2, 135.87)
('banana_1.jpg', 74.51, 24.87, 612.25, 793.09)
('banana_10.jpg', 332.03, 43.3, 484.38, 364.23)
('banana_11.jpg', 406.93, 79.68, 720.47, 651.85)
('banana_12.jpg', 17.49, 5.02, 242.03, 159.92)
('banana_13.jpg', 191.13, 32.82, 519.18, 587.62)
('banana_3.jpg', 60.12, 94.56, 759.88, 477.73)
('banana_4.jpg', 37.78, 39.0, 234.84, 201.11)
('banana_6.jpg', 131.02, 31.54, 430.51, 342.89)
('banana_7.jpg', 173.29, 61.58, 321.65, 291.43)
('banana_8.jpg', 50.03, 196.95, 484.35, 365.25)
('banana_9.jpg', 305.64, 275.85, 701.16, 301.55)
```