Codes of Collect data for automatic mode

```
# IPython Libraries for display and widgets
import ipywidgets
import traitlets
import ipywidgets.widgets as widgets
from IPython.display import display

# Camera and Motor Interface for JetBot
from jetbot import Robot, Camera, bgr8_to_jpeg

# Basic Python packages for image annotation
from uuid import uuid1
import os
import json
import glob
import datetime
import numpy as np
import cv2
import time

from jupyter_clickable_image_widget import ClickableImageWidget

DATASET_DIR = 'dataset_xy'

# we have this "try/except" statement because these next functions can throw an
error if the directories exist already
try:
    os.makedirs(DATASET_DIR)
except FileExistsError:
    print('Directories not created because they already exist')

camera = Camera()

# create image preview
camera_widget = ClickableImageWidget(width=camera.width, height=camera.height)
snapshot_widget = ipywidgets.Image(width=camera.width, height=camera.height)
traitlets.dlink((camera, 'value'), (camera_widget, 'value'),
transform=bgr8_to_jpeg)

# create widgets
count_widget = ipywidgets.IntText(description='count')
# manually update counts at initialization
```

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count_widget.value = len(glob.glob(os.path.join(DATASET_DIR, '*.jpg')))

def save_snapshot(_, content, msg):
    if content['event'] == 'click':
        data = content['eventData']
        x = data['offsetX']
        y = data['offsetY']

        # save to disk
        #dataset.save_entry(category_widget.value, camera.value, x, y)
        uuid = 'xy_%03d_%03d_%s' % (x, y, uuid1())
        image_path = os.path.join(DATASET_DIR, uuid + '.jpg')
        with open(image_path, 'wb') as f:
            f.write(camera_widget.value)

        # display saved snapshot
        snapshot = camera.value.copy()
        snapshot = cv2.circle(snapshot, (x, y), 8, (0, 255, 0), 3)
        snapshot_widget.value = bgr8_to_jpeg(snapshot)
        count_widget.value = len(glob.glob(os.path.join(DATASET_DIR, '*.jpg')))

camera_widget.on_msg(save_snapshot)

data_collection_widget = ipywidgets.VBox([
    ipywidgets.HBox([camera_widget, snapshot_widget]),
    count_widget
])

display(data_collection_widget)

camera.stop()

    def timestr():
        return str(datetime.datetime.now().strftime('%Y-%m-%d_%H-%M-%S'))

    !zip -r -q road_following_{DATASET_DIR}_{timestr()}.zip {DATASET_DIR}
```