ML Solution Engineering Home Assignment

Part 1 (UI and preparation):

1. Create a demo account on the Dataloop platform - https://console.dataloop.ai/
2. Create a project
3. Create a dataset
4. Upload up to 10 images of your choice into the dataset (you can use Google Images or any free data source you may find)
5. Create a basic Recipe for this dataset. Make sure to use Labels and Attributes relevant to the data presented.
6. Annotate the images with tools of your choice. Try and use at least 2 types of annotation tools.

You may refer to the Dataloop documentation for technical tips and guidance.

In addition to the steps listed above, select any other feature you'd like and add it to the flow.

Part 2 (SDK):

1. Install dataloop SDK
2. Create a script that simulates prediction flow to upload predicted annotation to the Dataloop platform:
    a. Create a new dataset (if existing already, get it)
    b. Add three labels to the dataset recipe (“1”, “2”, “3”, “top”, and ”bottom”)
    c. upload directory with three images (1.jpg, 2.jpg, 3.jpg)
    d. Add a UTM metadata to an item user metadata - collection time {“collected”:<the current time in UTM timestamp>}
    e. Upload the annotations from “ML Solution Engineering Home Assignment.json” file to the platform pay attention to:
        - Label name
        - Annotation type
        - Annotation information (X, Y , points)
        - Add the confidence as annotation model_info

3. Create a query that selects only image items that have been labeled as “top” and print the item name and item id of each item
4. Create a query that retrieves all point annotations from the dataset and prints the item name and item id of each item, and for each item, print for each annotation the annotation id, annotation label, and position of the point (x,y)
5. Upload your scripts to a git repository and share the git and the **project URL** with me.