

# 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 that have relevance 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 does the following:
  - a. Create a new dataset (if existing, get it)
  - b. Add three labels to the dataset recipe (class1, class2, and key)
  - c. upload directory with five images (Single upload to all items in the directory)
  - d. Add a UTM metadata to an item user metadata - collection time  
{“collected”:<the current time in UTM timestamp>}
  - e. Add a classification of class1 to the first two of the images you uploaded.
  - f. Add a classification of class2 to the rest of the images you uploaded.
  - g. Add five random key points with the label “key” to one item.
3. Create a query that selects only image items that have been labeled as “class1 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