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# 1- Data collection

## 1.1- Organising folders

We made a google drive with a folder that is named "raw images" it's for the images we collected without any modifications (ie. name changing and annotating).

We also made a script that changes the images names from 1 to no. of images which really helped with organising with teammate who works on what.

## 1.2- Process

We took pictures with our phones in different places with different lights to generalise the model so it could detect coins in semi-dark ,half lite and fully lite environments. //We tried to focus on the quality of the images rather than the quantity alone so we implicitly categorised the images into three categories really hard to detect, hard to detect and easy to detect

## 2- Annotation

### 2.1- Organising folders

In the drive we made three folders for annotation :

1- "images" for annotated images

2- "labels"

3- "Data"

The "Data" folder is where the model gets it's data from. In The "Data" folder there are two more folders "train" and "val" and each have a folder named "images" and "labels" which is a bit confusing because there are already folders with those names but it's easier this way because when teammates finish annotating there designated pile of images they put it in the "images" and "labels" folder so any mishaps could be caught before getting finalised.

## 2.2- Process

We used makesense AI for annotating the images which caused some problems (more on that in the Challenge part).

## 3- Model training

### 3.1- Model's code

We wanted to use Python for the training but it didn't work for some reason so for time purposes we settled on CLI comand We set the task to be detect (which is not needed because yolov8 has auto detection for the intended task) , the mode to be train and gave the .yaml path to the model. We used arguments like epoch and imgsz. We read the yolo args documentation but all of them felt really optional so we didn't feel the need to add them.

