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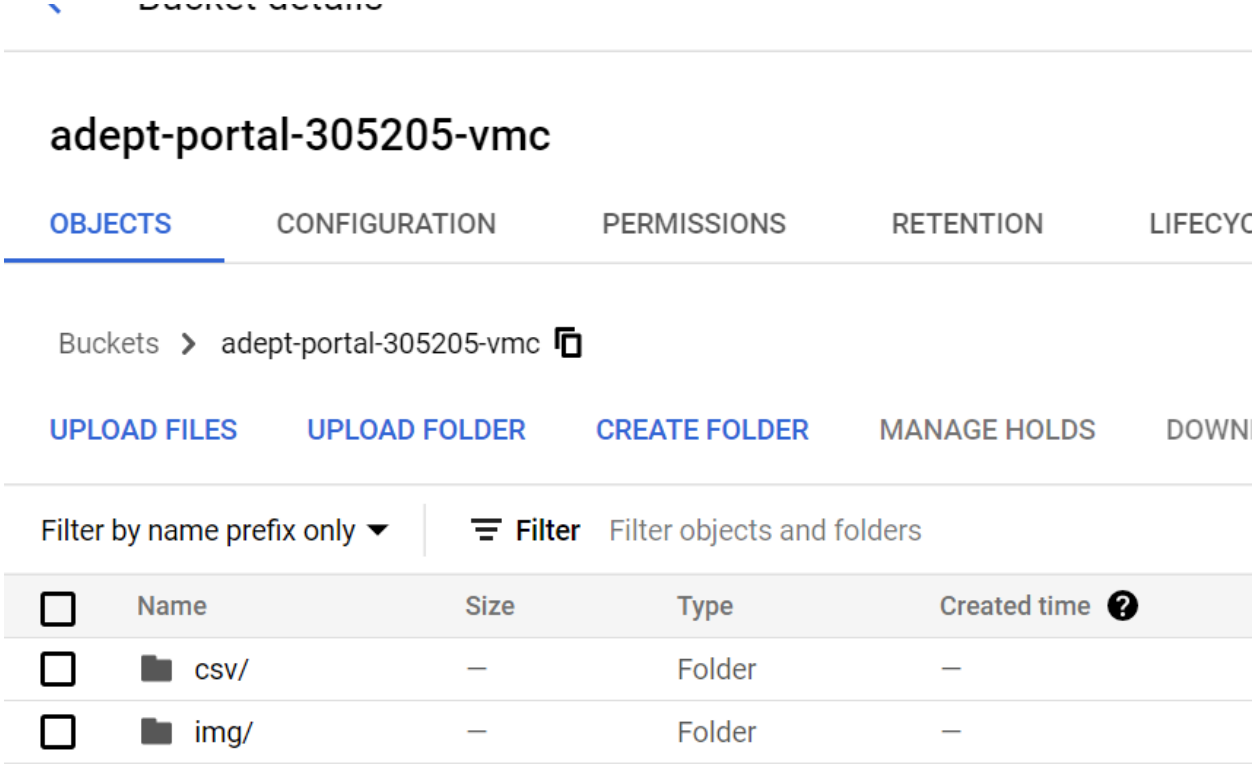
CMPE-258

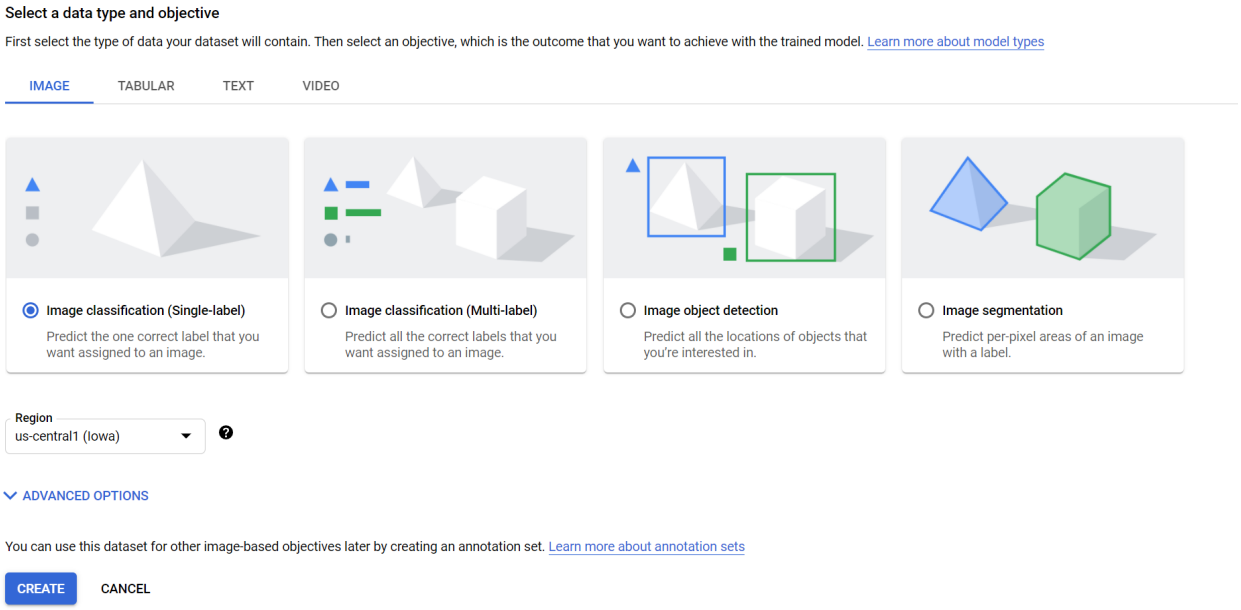
HW 2 Part1

Image Classification AutoML

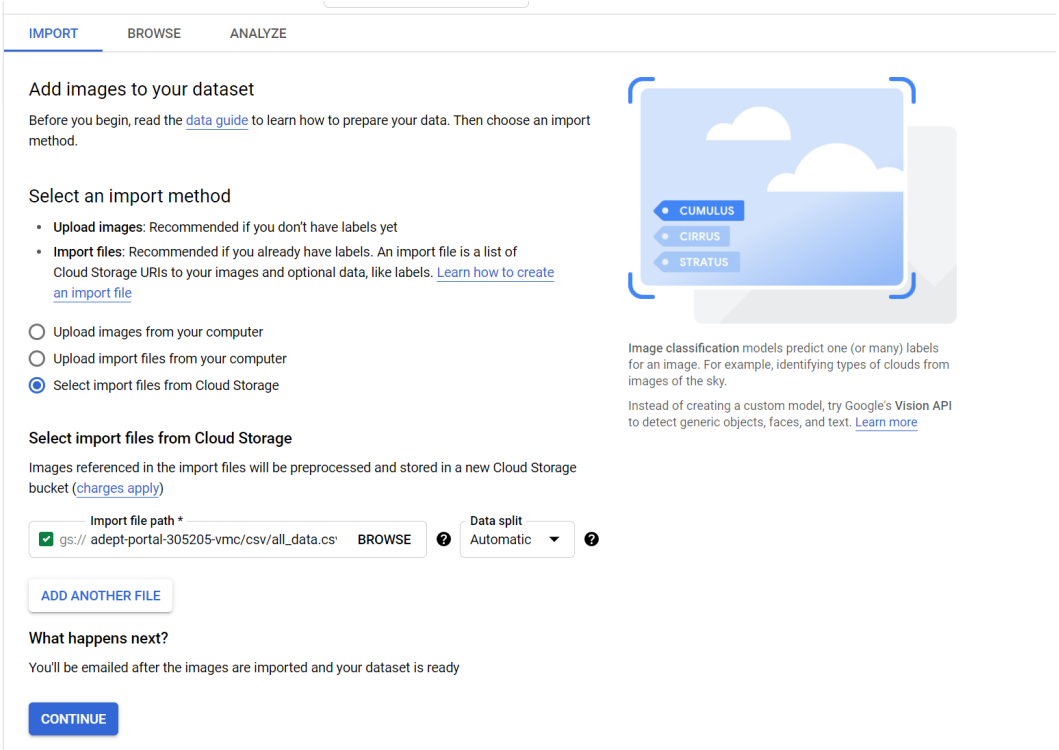
Creating an image classification model that will tell you what flower a picture is. The data is in a csv and you upload a csv which contains filename and image url. All the images are stored in google storage



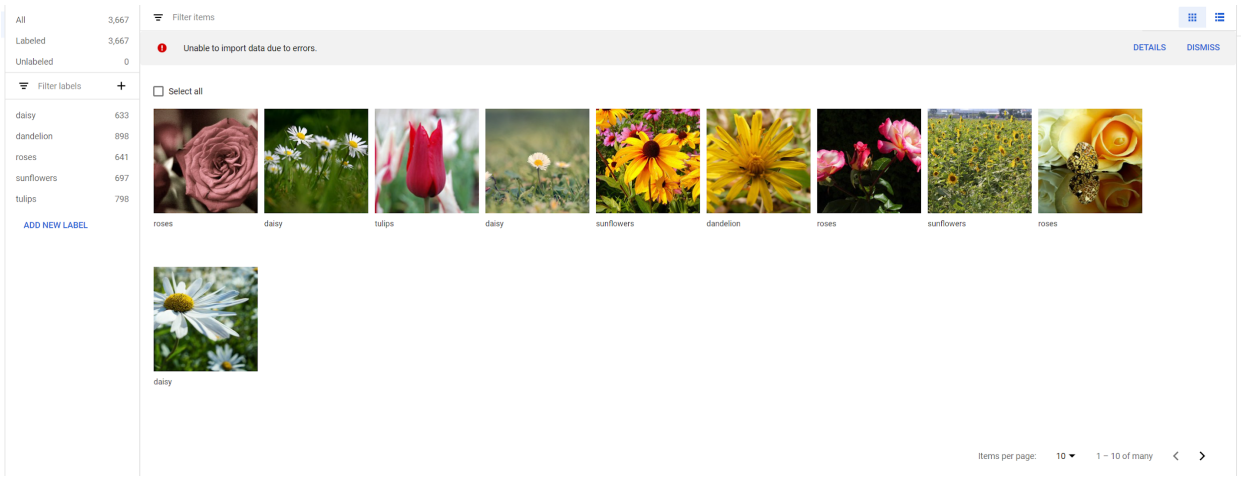
Google storage bucket after uploading the csv and images



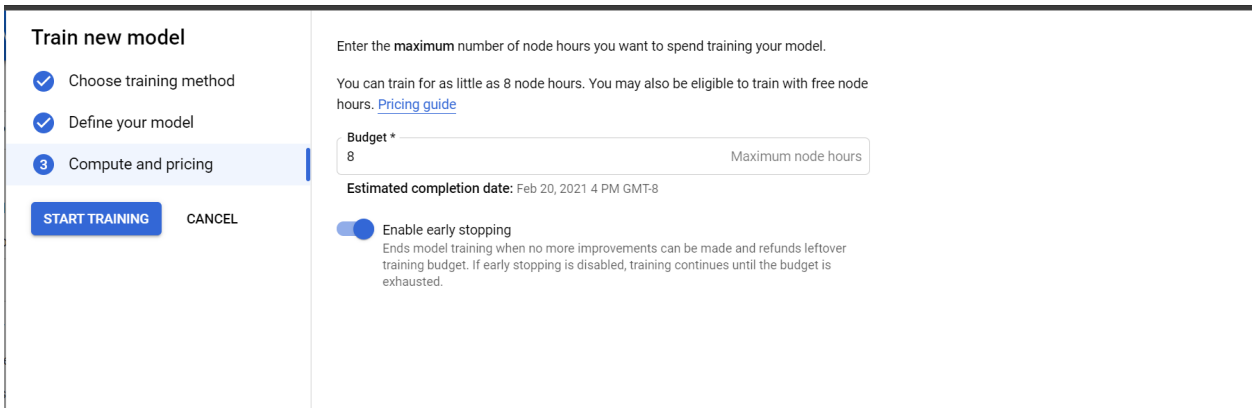
Create the model and we are doing a image classification with single label. We have 5 different labels for our flowers which are sunflower, rose, daisy, dandelions, and tulips.



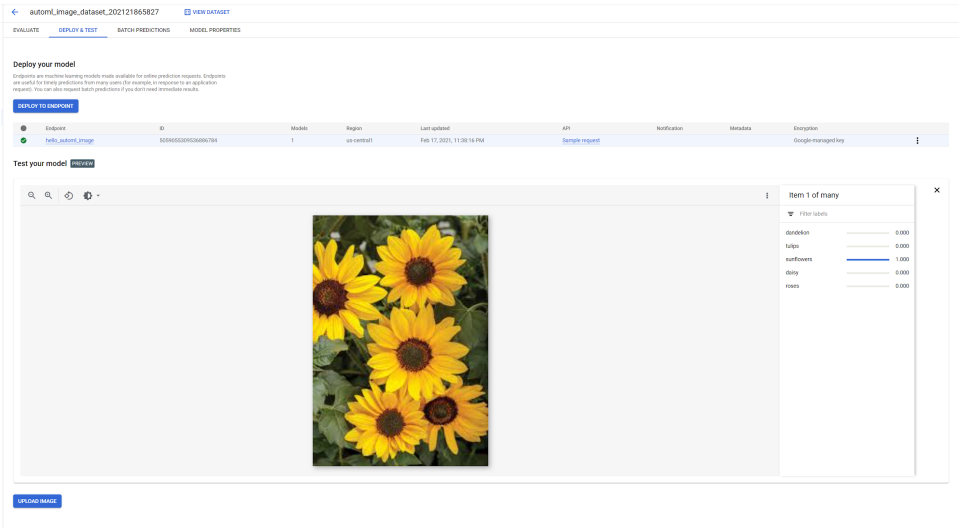
Importing the dataset for our model. We provide the google storage bucket url to pull load the dataset.



After loading the dataset we can see all the images that are there.

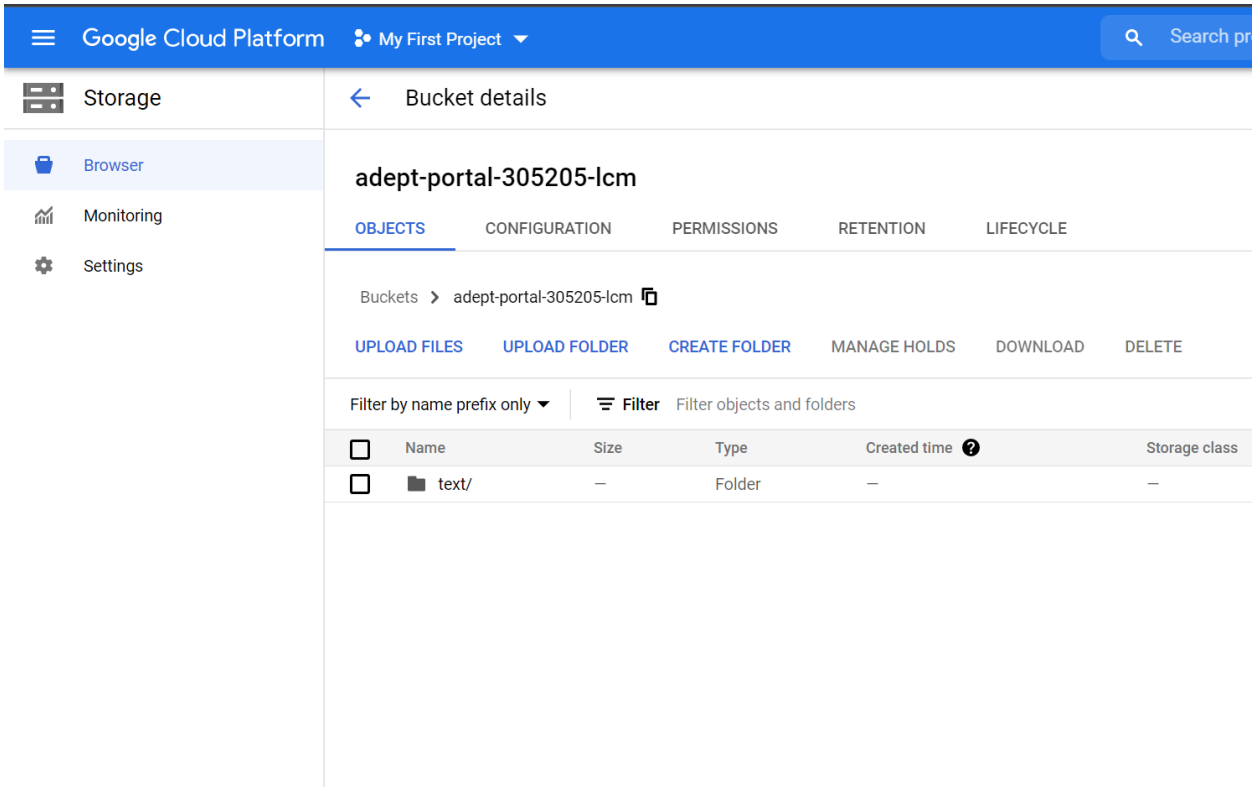


Now we train the model with our dataset. Training took around 1 hour to create the model. Once the model is created I deployed and testing with different pictures.

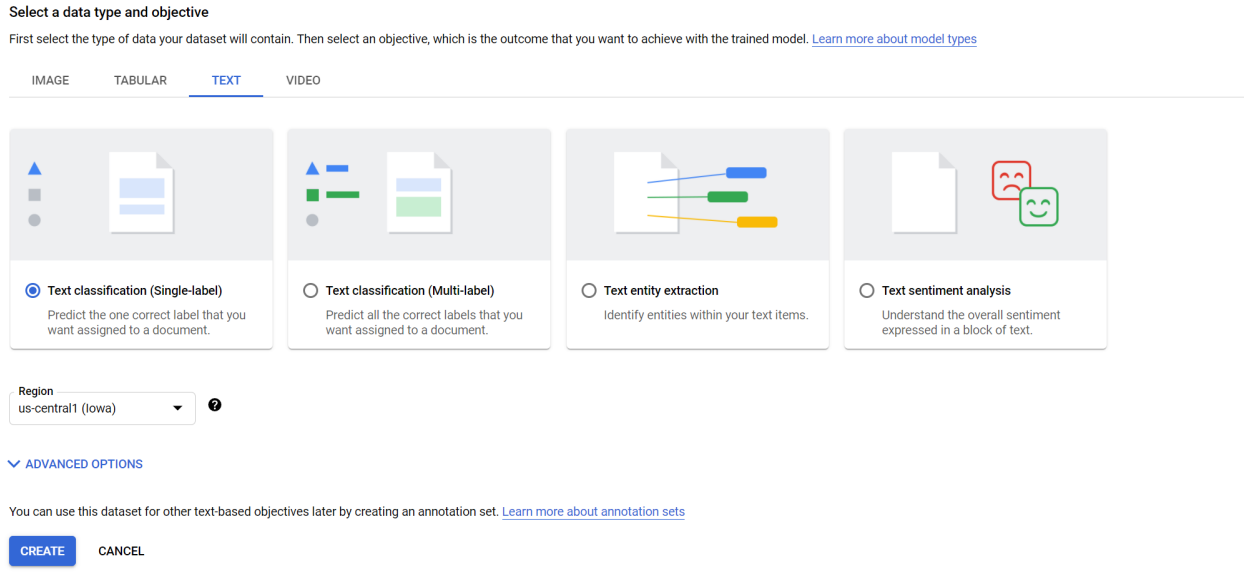


I uploaded a picture of a sunflower and the model was able to classify it correctly.

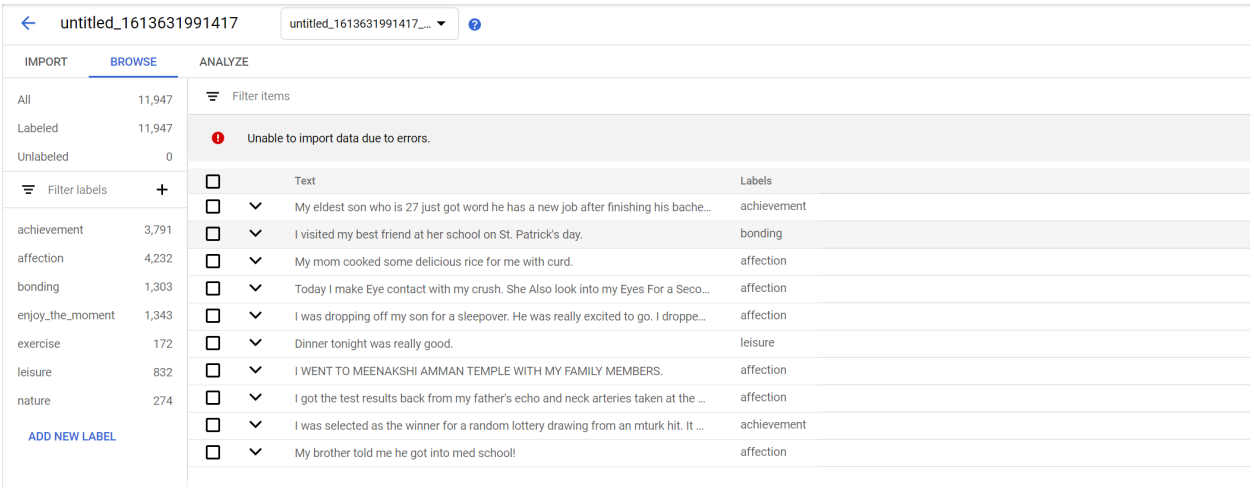
Text Data AutoML



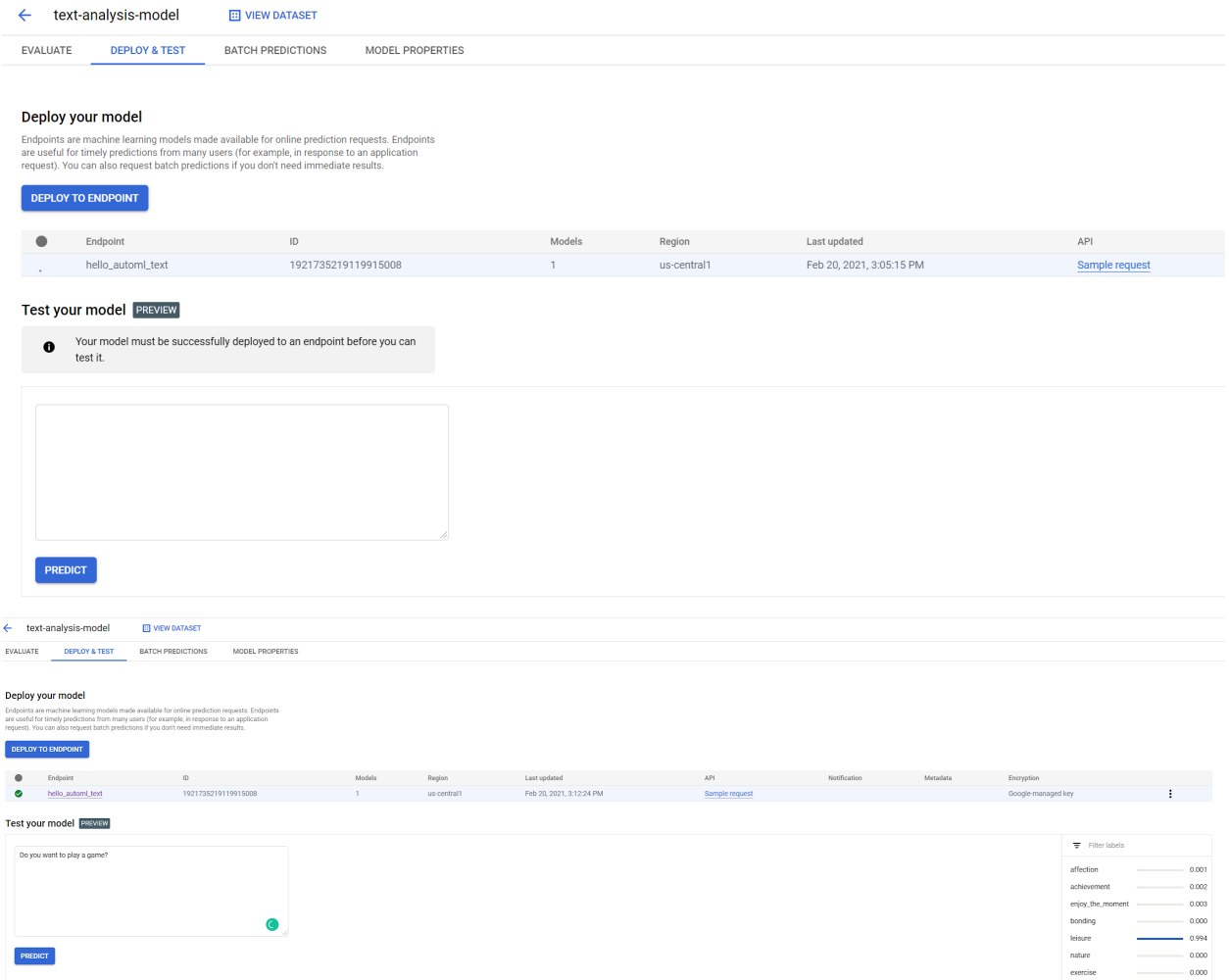
Uploading our text data to google storage bucket.



Selecting our AutoML model which is text classification with a single label.

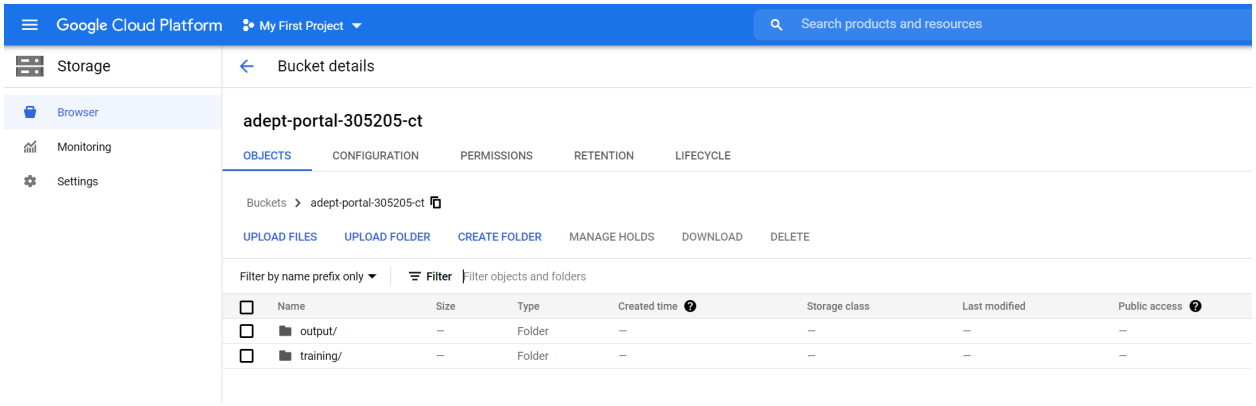


Uploading the data for model training. Our data has the following labels: achievement, affection, bonding, enjoy_the_moment, exercise, leisure, and nature. Once we train our model we can deploy and test it out by provide a random sentence.

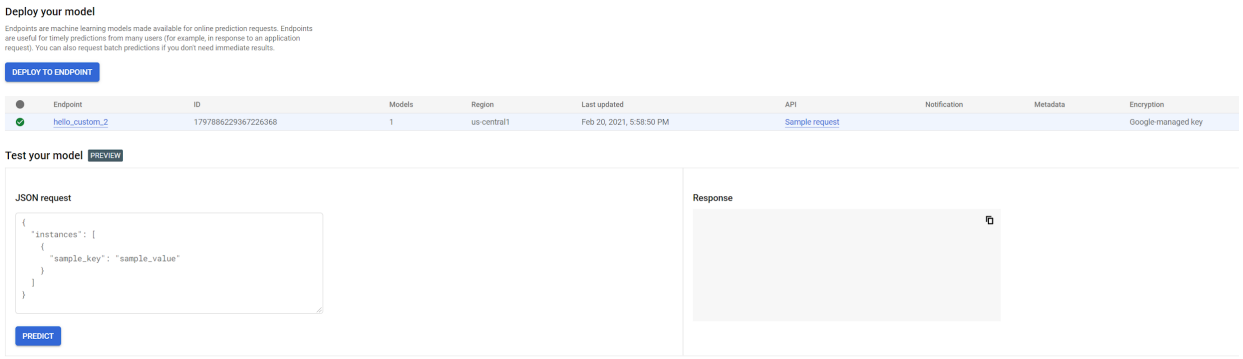


We use the following sentence as our test “Do you want to play a game” and our prediction is “leisure”. This is the correct label so our model is working.

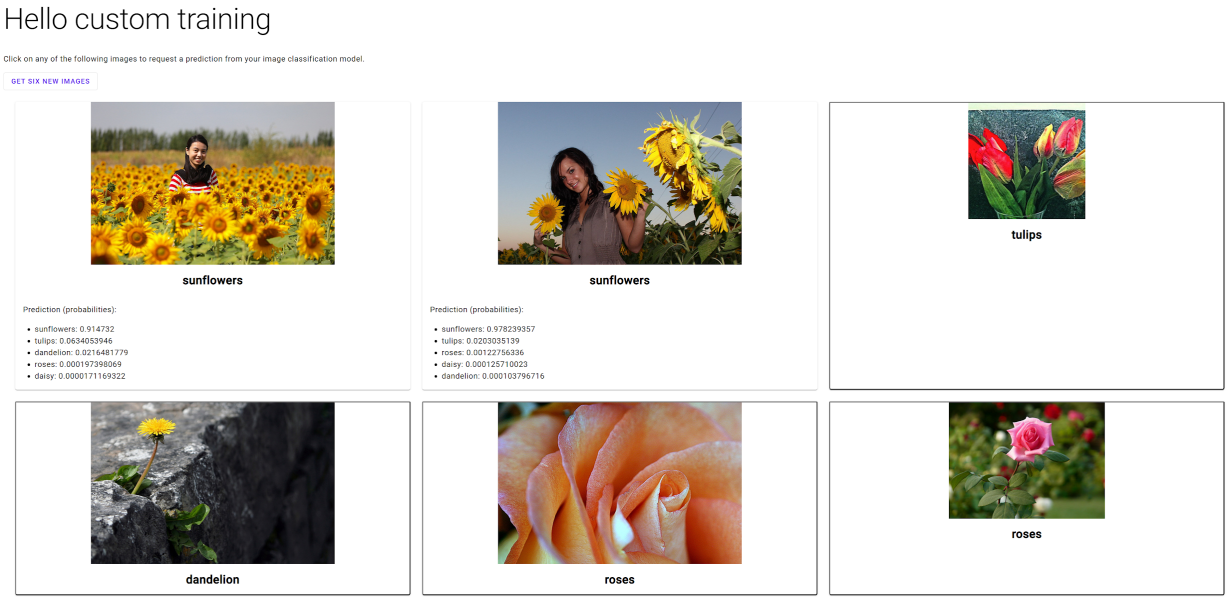
Custom Data AutoML



Loading the custom data into google storage bucket and the custom model.

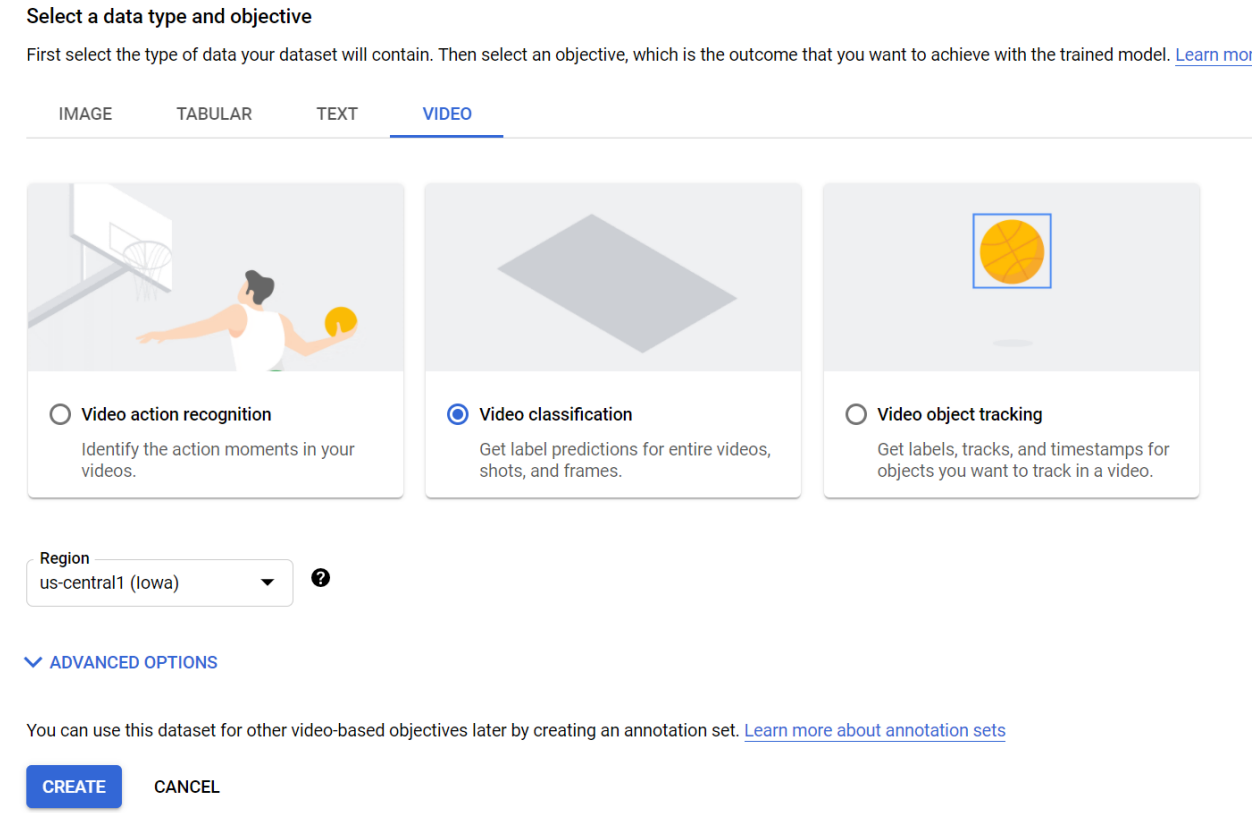


Once the model was loaded in we deployed the and were able to test the model for predictions.

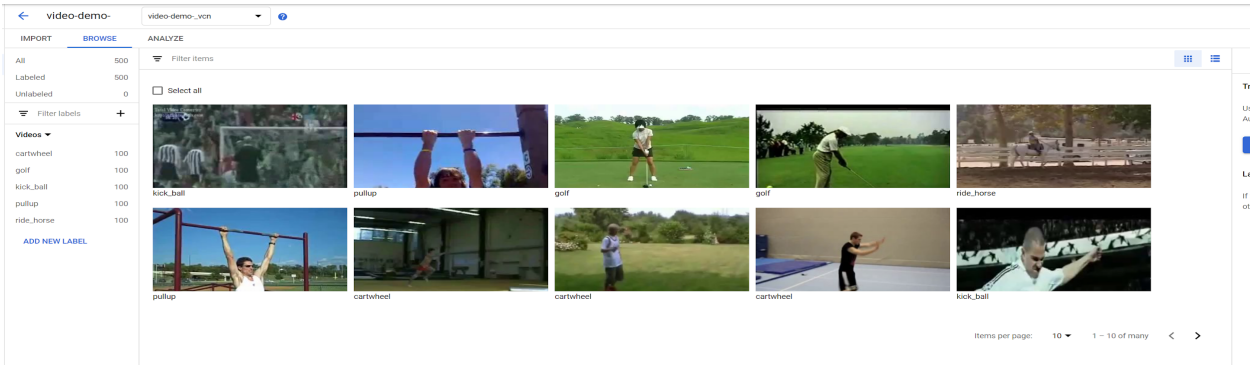


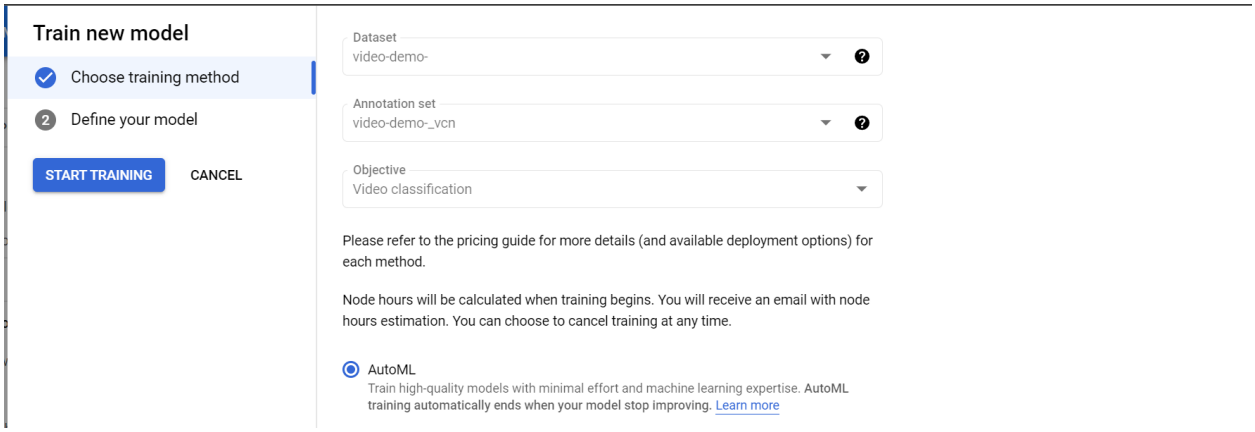
Video Data AutoML

Creating a video classification model that shows what action is taking place in a video. All the data are stored in google storage

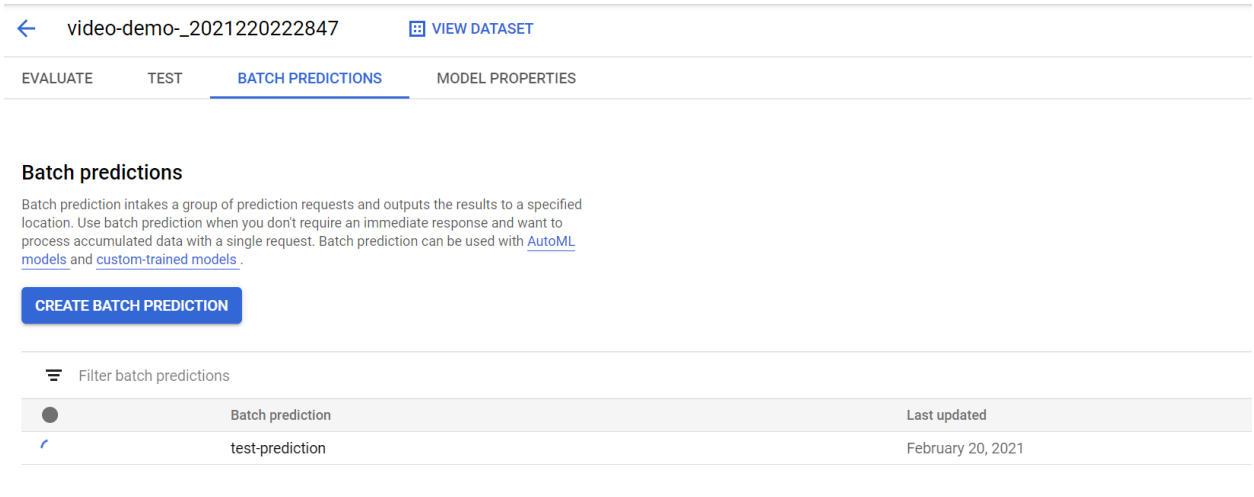


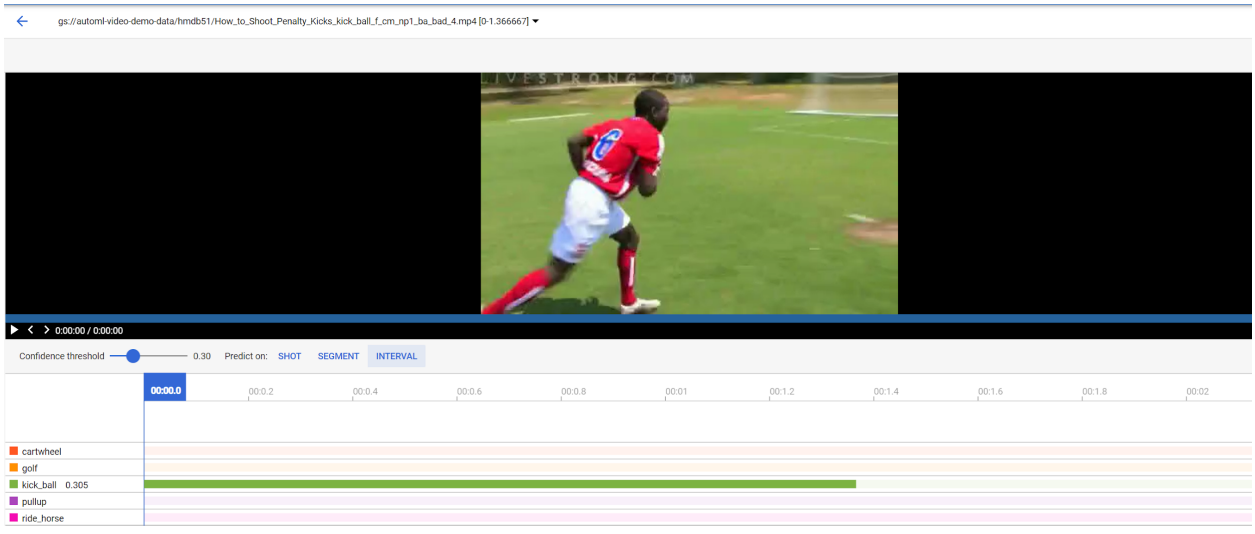
After loading the data, we can see the data in the picture below.





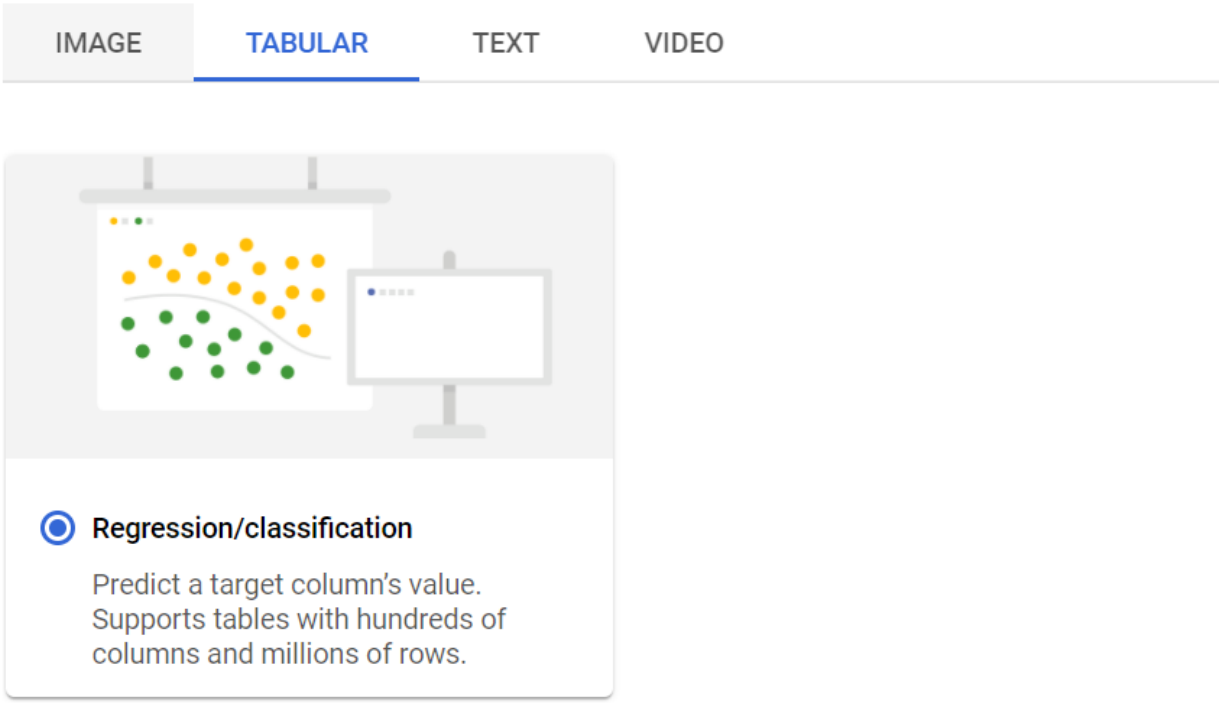
Training the model. Once the model is trained I am deploying the model and I am able to make predictions.



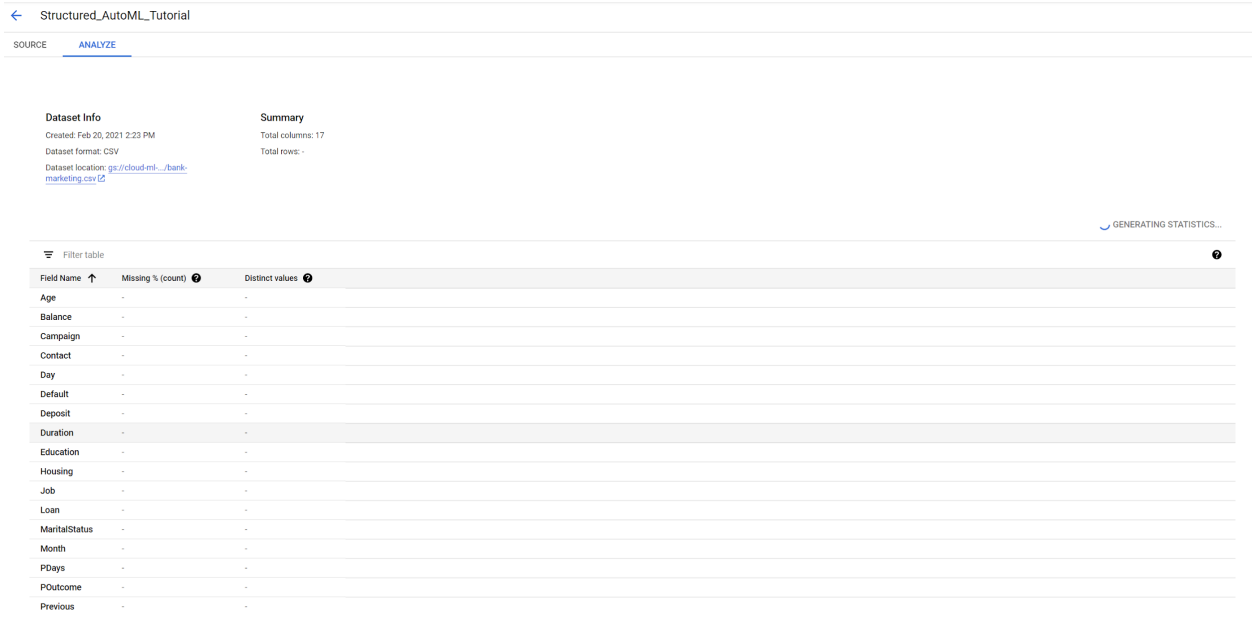


Tabular Data

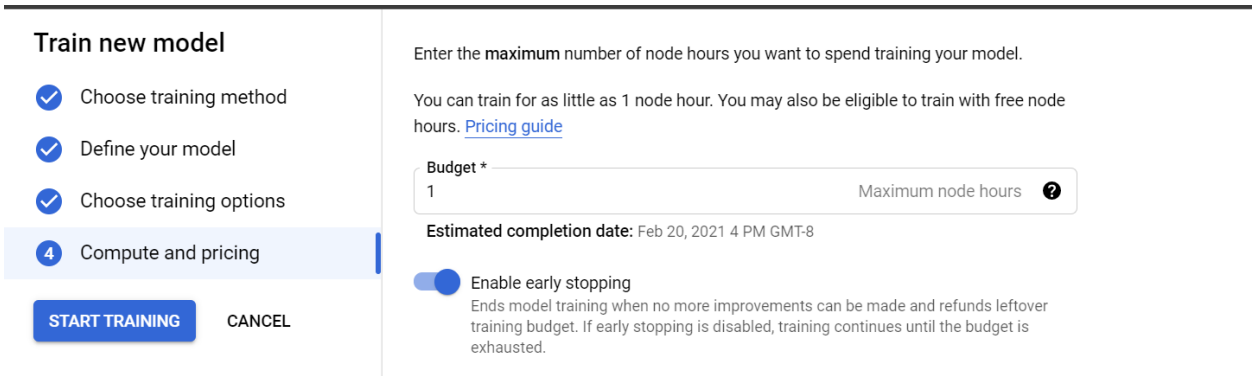
Selecting a tabular model to and choosing the objective to be a regression/classification



Once the data is loaded we can explore it in the ui and start training the model.



Training the model and once the training is done we deploy the model and start to make some predictions.



After deploying the model, we are able to make predictions.