

Overview of Project

In this project, we will be building an image labels generator, using Amazon Rekognition. This is going to be a fun one. Once built, it will be able to recognize and label images. For example, if you have a photo of a cat, Amazon Recognition will be able to identify what it is, and label the image as a cat.

Steps to be performed

In the next few lessons, we'll be going through the following steps.

1. Creating an Amazon S3 Bucket
2. Uploading images to the S3 Bucket
3. Installing configuring the AWS Command line interface (CLI)
4. Importing libraries
5. Adding detect_labels function
6. Adding main function
7. Running your python file

Services Used

- Amazon S3: For storing the images in the process of generating labels.
- Amazon Rekognition: To analyse images and generate image labels.

- AWS CLI: Interacting with AWS services through command line interface(CLI).

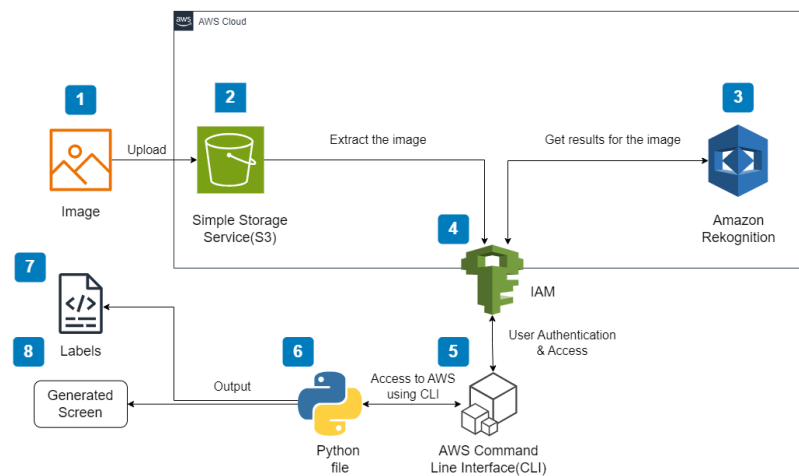
Estimated Time & Cost

- This project is estimated to take about 20-30 minutes
- Cost: Free (When using the AWS Free Tier)

Architectural Diagram

This is the architectural diagram for the project:

IMAGE LABELS GENERATOR USING AWS REKOGNITION

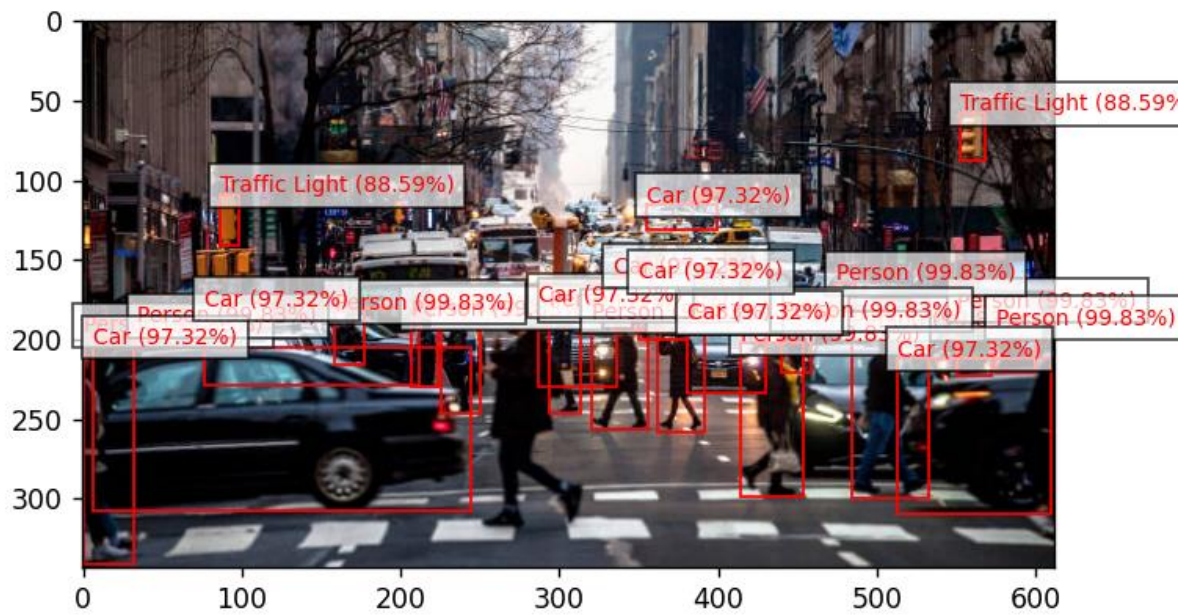


- 1 Upload the image to Amazon S3 bucket.
- 2 The images stored in the S3 bucket will be used to analyse and generate labels.
- 3 Amazon Rekognition will be used to analyse the selected image from the S3 bucket and detecting labels with their confidence levels.
- 4 IAM will be used to provide user authentication and access to the Amazon CLI on your system.
- 5 AWS Command Line Interface will be used for interacting with AWS services.
- 6 Python file will consist of the programming logic for extracting the image from S3 and running detect_labels operation from Rekognition.
- 7 The output will consist of number of specified labels according to the input with their confidence levels.
- 8 A pop-up screen will be generated with the image chosen from S3 bucket with bounding boxes around the detected labels.

Final Result

This is what your project will look like, once built:

Figure 1



x=136.7 y=24.4
[89, 89, 99]