ITIS-6177-AWS Rekognition–Text Detection

- Amazon Rekognition text detection can detect text in images. It can then convert the detected text into machine-readable text.
- DetectText API detects text in .jpeg or .png format images.
- Rekognition is designed to detect words in English. Words in other languages that use these characters may also be detected, but diacritics and other characters are not detected. For example, in French, "un" may be detected, but "garçon" may not be detected or may be detected incorrectly.
- The API created detects text from an image and returns the output in two ways, one JSON format and only text if needed. We need to upload an image as an input.

API Endpoints:

1. /detectText

   Call to **upload image** API using **POST** method which uploads the image and returns the text of the image as an output.

   Request Format:

   Input can be .jpeg, jpg or png

   Method: POST

   Params:

   Image

Curl:

```
curl -X 'POST' \
  'http://159.65.250.189:8081/detectText' \
  -H 'accept: application/json' \
  -H 'Content-Type: multipart/form-data' \
  -F 'image=@Notification@2x.png;type=image/png'
```

Error Codes:

1. **200**: Response from AWS rekognition(text data)
2. **400**: Bad request (Empty File)
3. **500**: Server error (e.g Incorrect host name or only images allowed error)

2. /getOnlyText

   Call to **upload image** API using **POST** method which uploads the image and returns only the text of the image as an output.

Request Format:

Input can be .jpeg, jpg or png

Curl:

```
curl -X 'POST' \
  'http://159.65.250.189:8081/getOnlyText' \
  -H 'accept: text/plain' \
  -H 'Content-Type: multipart/form-data' \
  -F 'image=@Notification@2x.png;type=image/png'
```

Method: POST

Params:

Image

Error Codes:

1. **200**: Response from AWS rekognition(text data)
2. **400**: Bad request (Empty File)
3. **500**: Server error (e.g Incorrect host name or only images allowed error)

Working:

It calls **Detect API**, which gives text output for the image uploaded by the user.

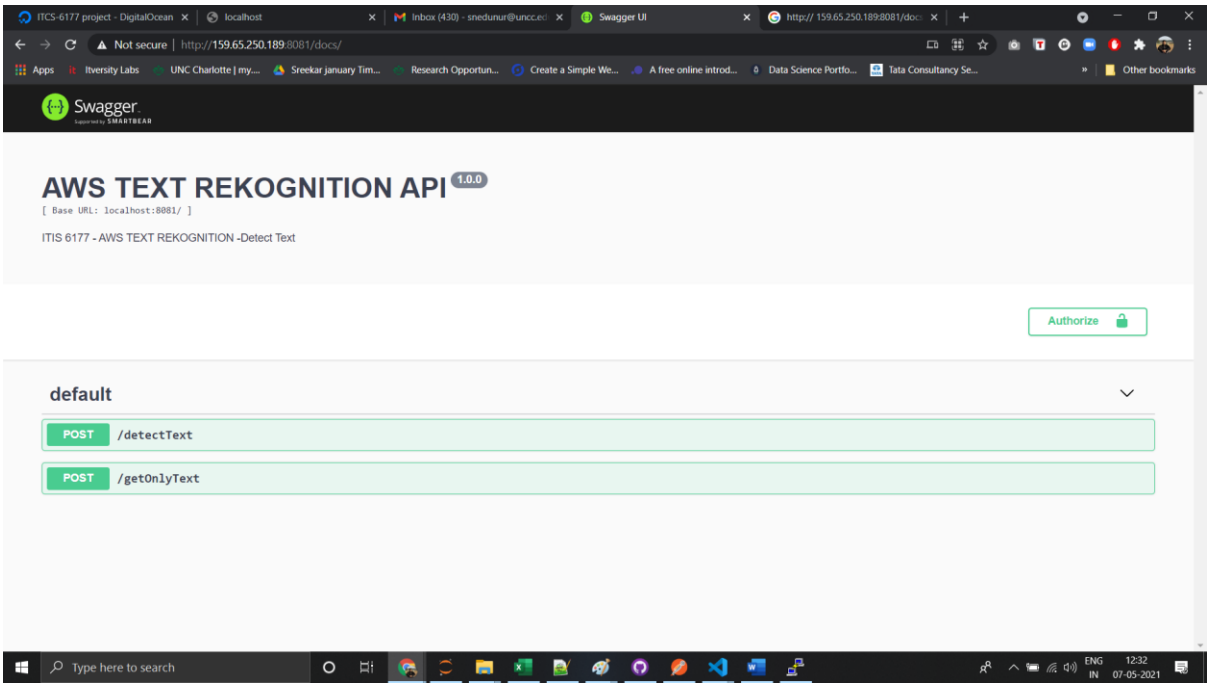
Make sure that the image is in jpg or jpeg or png only else it will throw an error.

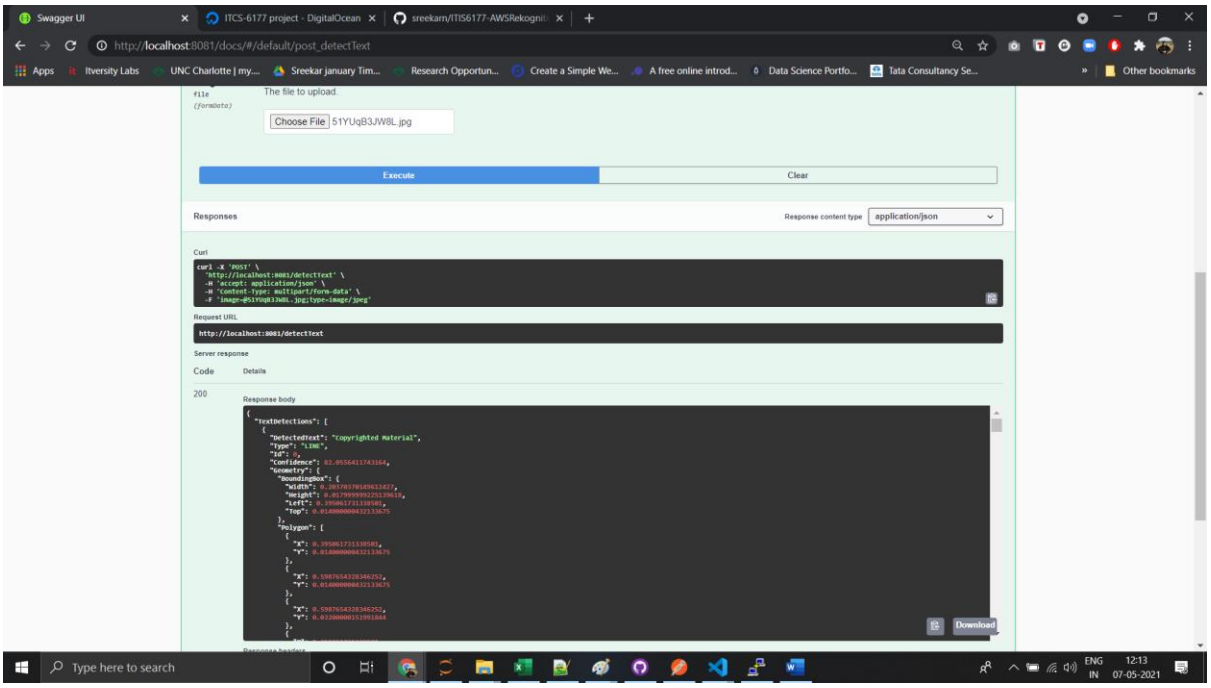
If user does not upload any image, swagger will not allow to execute. The image uploaded is saved in images folder so that it can access. Image is initially converted to Bytes and passed on to the detectText vendor API which would produce the output and upon us hitting the end point would display the output on our screen.

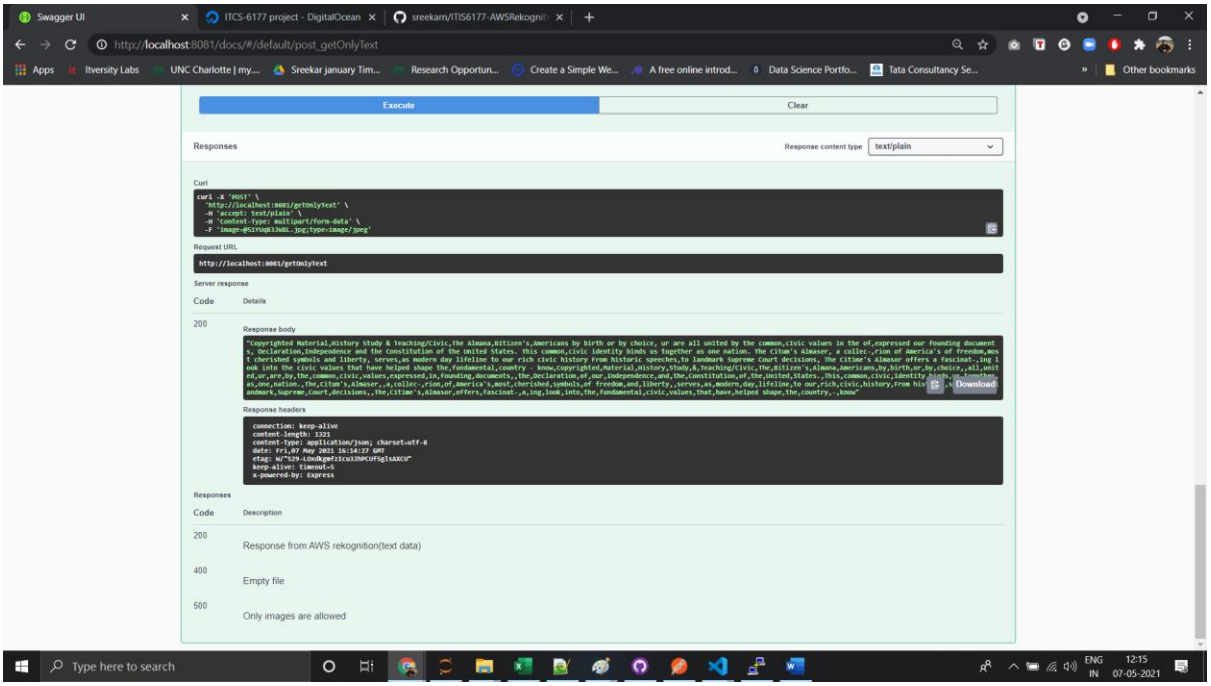
Steps to make it work:

1) **Go to http://159.65.250.189:8081/docs/**
2) **Click on /detectText POST to test detectText API, and click on Try it out, which would enable you to choose the file you want to get the text from, please note that that it only accepts images in the format of jpg, jpeg and png and press execute to get the output.**
3) **Click on /getOnlyText POST to get only text from the JSON detectText API, and click on Try it out, which would enable you to choose the file you want to get the text from, please note that that it only accepts images in the format of jpg, jpeg and png and press execute to get the output.**

Working Screenshots:







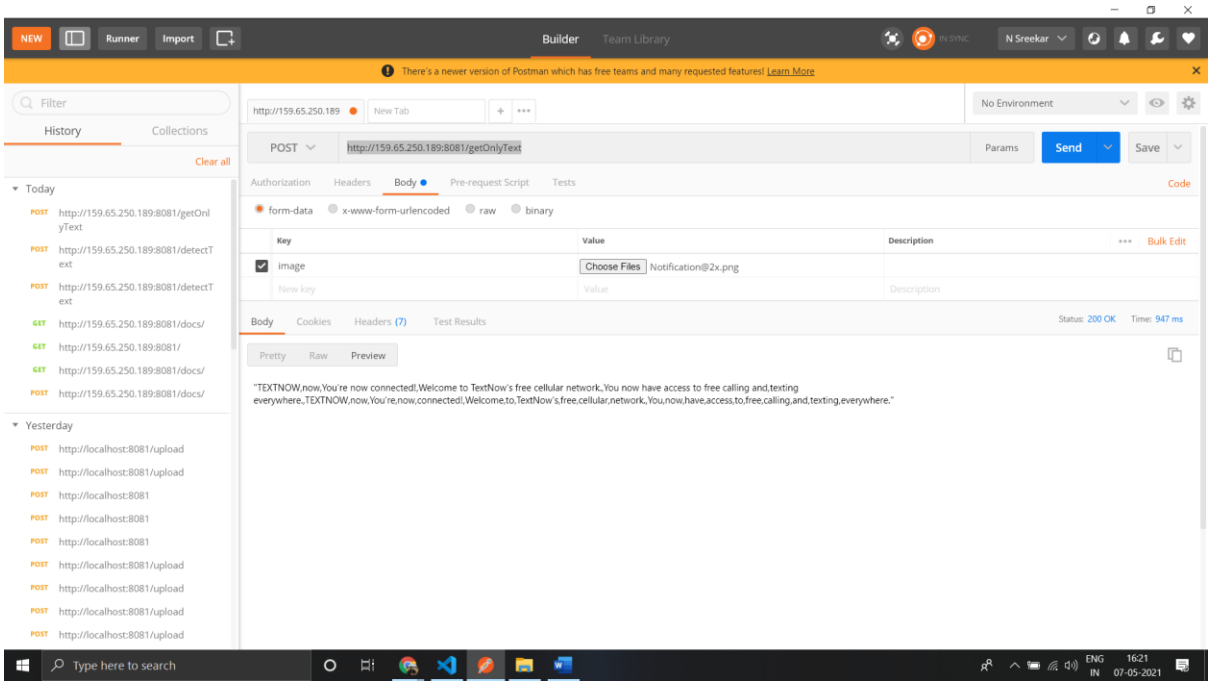
DetectText operation response

The DetectText operation analyses the image and returns an array, TextDetections, where each element represents a line or word detected in the image. For each element, DetectText returns the following information:

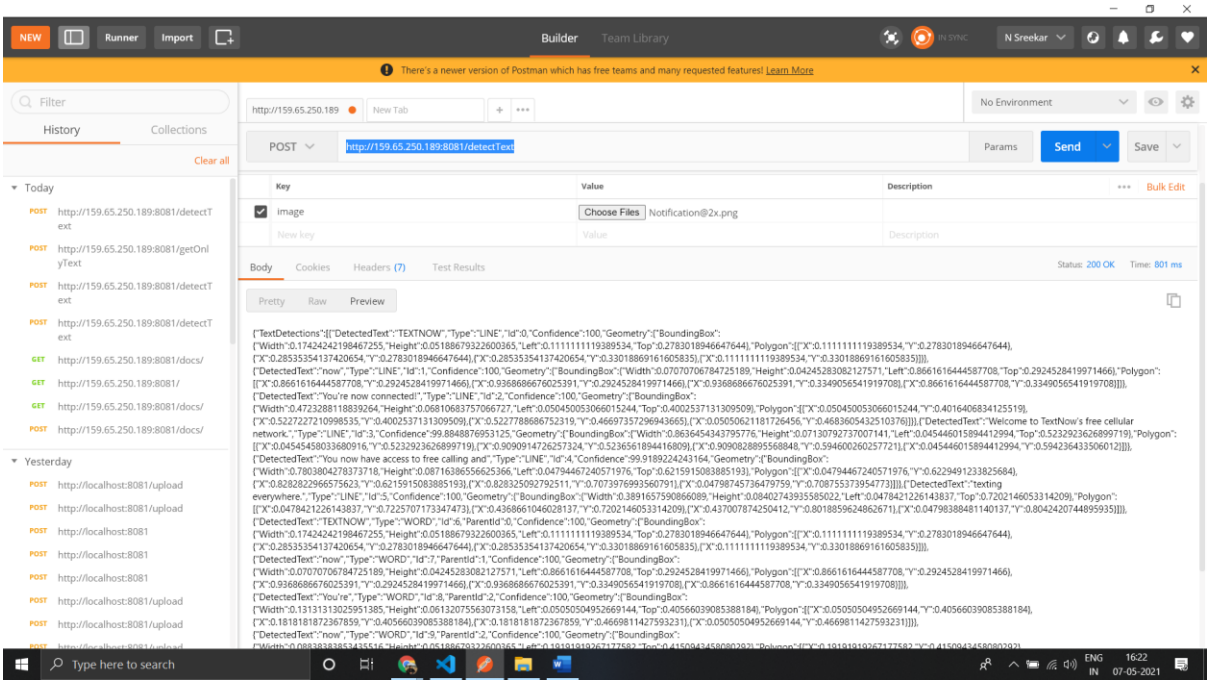
- The detected text (DetectedText)
- The relationships between words and lines (Id and ParentId)
- The location of text on the image (Geometry)
- The confidence Amazon Rekognition has in the accuracy of the detected text and bounding box (Confidence)
- The type of the detected text (Type)

Steps to execute in Postman:

1) Open Postman app.
2) Select type as POST
3) Give the address as
    a. http://159.65.250.189:8081/getOnlyText
    b. Go to body and select form-data=>input key as “image” and value as the file whose output you need.
    c. Hit send to see the output in preview.



4) Give the address as
    a. http://159.65.250.189:8081/detectText
    b. Go to body and select form-data=>input key as “image” and value as the file whose output you need.
    c. Hit send to see the output in preview


NEW
Runner
Import
Builder
Team Library
N Sreekar
There's a newer version of Postman which has free teams and many requested features! Learn More
Filter
History
Collections
Clear all
Today
http://159.65.250.189:8081/detectText
http://159.65.250.189:8081/getOnlyText
http://159.65.250.189:8081/detectText
http://159.65.250.189:8081/detectText
http://159.65.250.189:8081/docs/
http://159.65.250.189:8081/
http://159.65.250.189:8081/docs/
http://159.65.250.189:8081/docs/
Yesterday
http://localhost:8081/upload
http://localhost:8081/upload
http://localhost:8081
http://localhost:8081
http://localhost:8081
http://localhost:8081/upload
http://localhost:8081/upload
http://159.65.250.189:8081
New Tab
No Environment
POST
http://159.65.250.189:8081/detectText
Params
Send
Save
Key
Value
Description
Bulk Edit
image
Choose Files
Notification@2x.png
New key
Value
Description
Body
Cookies
Headers (7)
Test Results
Status: 200 OK
Time: 801 ms
Pretty
Raw
Preview
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Type here to search
ENG
IN
16:22
07-05-2021