Check image analysis: whether we can detect the exact location of the object?? [fixed]

Provide api CODE for qilei **[partial]**

Fix bugs**[onging]**

Additional API request of information(emotion, angle ….)**[fixed]**

Answers:

NO, we cannot, Here is my survey results.

1) Computer Vision's API function **(No such function/list of returning precise location)**

- Tag images based on content.
- Categorize images.
- Identify the type and quality of images.
- Detect human faces and return their coordinates.
- Recognize domain-specific content.
- Generate descriptions of the content.
- Use optical character recognition to identify text found in images.
- Distinguish color schemes.
- Flag adult content.
- Crop photos to be used as thumbnails.

2) Image Captioning results(check Generate descriptions of the content.)

Returned Json Also doesn't have such information! Just a direct description, if there is location information(for example, in, on, under, I think it is the server side's implementation, maybe using corpus to infer from normal combination of phrases, that's transparent to us!)

To verify this, I also go the check the API they provide for us to use. If there is, then it should have such information. Check 3)

`Returned Json`

`"description":`

```
{
   "captions":
[
{
"type": "phrase",
“text”: “a black and white photo of a large city”,
        “confidence”: 0.607638706850331}]
"captions":
[
{
"type": "phrase",
“text”: “a photo of a large city”,
         “confidence”: 0.577256764264197
   }
]
"captions":
[
{
"type": "phrase",
“text”: “a black and white photo of a city”,
        “confidence”: 0.538493271791207
}
]
“description”:
[
"tags":
{
    "outdoor", "city", "building", "photo", "large",

}
]
 }
```


3) API for using for image analysis in the demo(they give some location information description)

https://westus.dev.cognitive.microsoft.com/docs/services/56f91f2d778daf23d8ec6739/operations/56f91f2e778daf14a499e1fe

Describe Image

This operation generates a description of an image in human readable language with complete sentences. The description is based o**n a collection of content tags,** which are also returned by the operation. More than one description can be generated for each image. Descriptions are ordered by their confidence score. All descriptions are in English.

Two input methods are supported -- (1) Uploading an image or (2) specifying an image URL.

A successful response will be returned in JSON. If the request failed, the response will contain an error code and a message to help understand what went wrong.

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To fetch extra information, we should add these new bold red color string as below:(this is red from the Android demo, they have combined class and defintion for each seperate string)

https://westus.api.cognitive.microsoft.com/face/v1.0/detect?returnFaceId=true&**returnFaceLandmarks=true&returnFaceAttributes=age,gender,smile,glasses**

Add these features, then they will return the keyword like smile, position of eye, mouth, gender and glasses…

One example of the return json string is as follows:(use my local image)

[{"faceId":"cfc8003b-30be-4ab9-b814-f70b3b4a80ee","**faceRectangle":{"top":7,"left":8,"width":113,"height":113}**,"faceLandmarks":{"pupilLeft":{"x":37.8,"y":36.8},"pupilRight":{"x":86.6,"y":37.1},"noseTip":{"x":69.6,"y":68.2},"mouthLeft":{"x":41.0,"y":90.2},"mouthRight":{"x":86.5,"y":89.0},"eyebrowLeftOuter":{"x":21.1,"y":32.8},"eyebrowLeftInner":{"x":53.6,"y":29.0},"eyeLeftOuter":{"x":30.2,"y":39.1},"eyeLeftTop":{"x":38.0,"y":34.6},"eyeLeftBottom":{"x":38.6,"y":41.1},"eyeLeftInner":{"x":46.1,"y":39.2},"eyebrowRightInner":{"x":77.7,"y":29.1},"eyebrowRightOuter":{"x":105.8,"y":35.8},"eyeRightInner":{"x":78.7,"y":39.0},"eyeRightTop":{"x":86.9,"y":34.2},"eyeRightBottom":{"x":87.0,"y":41.3},"eyeRightOuter":{"x":95.3,"y":39.2},"noseRootLeft":{"x":57.8,"y":41.1},"noseRootRight":{"x":71.8,"y":40.4},"noseLeftAlarTop":{"x":55.9,"y":58.8},"noseRightAlarTop":{"x":75.6,"y":56.9},"noseLeftAlarOutTip":{"x":52.5,"y":69.0},"noseRightAlarOutTip":{"x":80.6,"y":66.8},"upperLipTop":{"x":67.2,"y":83.6},"upperLipBottom":{"x":67.0,"y":88.0},"underLipTop":{"x":66.6,"y":97.1},"underLipBottom":{"x":65.8,"y":102.4}},"faceAttributes"**:{"smile":1.0,"gender":"male","age":30.1,"glasses":"NoGlasses"}}]**