

Google API 로고 감지

1. request용 json 파일 생성

```
logo_detection.json  ✕
스키마: <선택된 스키마가 없음>
1  {
2    "requests": [
3      {
4        "image": {
5          "content": "/9j/4AAQSkZJRgABAQEBAEAAAD/4gxYSUNDX1B5ST0ZJTEUAAQEAxITG1ubwIQAAABtnRyUkdCIFhZWiAHZgACAAkABgAxAAB
6        },
7        "features": [
8          {
9            "maxResults": 10,
10           "type": "LOGO_DETECTION"
11         }
12       ]
13     }
14   ]
15 }
```

입력 이미지



2. 실행 및 실행결과

선택 Windows PowerShell

```
PS C:\Users\memen> $cred = gcloud auth application-default print-access-token
PS C:\Users\memen> $headers = @{"Authorization" = "Bearer $cred"}
PS C:\Users\memen> Invoke-WebRequest `
>> -Method POST `
>> -Headers $headers `
>> -ContentType: "application/json; charset=utf-8" `
>> -InFile ./google_request/logo_detection.json `
>> -Uri "https://vision.googleapis.com/v1/images:annotate" | Select-Object -Expand Content
{
  "responses": [
    {
      "logoAnnotations": [
        {
          "mid": "/m/045c7b",
          "description": "Google",
          "score": 0.94017065,
          "boundingPoly": {
            "vertices": [
              {
                "x": 446,
                "y": 270
              },
              {
                "x": 807,
                "y": 270
              },
              {
                "x": 807,
                "y": 421
              },
              {
                "x": 446,
                "y": 421
              }
            ]
          }
        }
      ]
    }
  ]
}
```

Google API 여러 객체 감지

1. request용 json 파일 생성

```
object_localization.json  + X
스키마: <선택된 스키마가 없음>
1  {
2    "requests": [
3      {
4        "image": {
5          "content": "/9j/4AAQSkZJRgABAQEASABIAAD/4gIcSUNDX1B5T0Z3TEUAAQEAAAImBGNtcwIQAAABtnRyUkdCIFYhZWIAH3AABABkAAwApAD1hY3NmQVBQTAAAAA
6        },
7        "features": [
8          {
9            "maxResults": 10,
10           "type": "OBJECT_LOCALIZATION"
11         }
12       ]
13     }
14   ]
15 }
```

입력 이미지



2. 실행

```
PS C:\Users\memen> $cred = gcloud auth application-default print-access-token
PS C:\Users\memen> $headers = @{ "Authorization" = "Bearer $cred" }
PS C:\Users\memen> Invoke-WebRequest
>> -Method POST
>> -Headers $headers
>> -ContentType: "application/json; charset=utf-8"
>> -InFile ./google_request/object_localization.json
>> -Uri "https://vision.googleapis.com/v1/images:annotate" | Select-Object -Expand Content
```

3. 실행결과

```
{
  "responses": [
    {
      "localizedObjectAnnotations": [
        {
          "mid": "/m/0199g",
          "name": "Bicycle",
          "score": 0.8972358,
          "boundingPoly": {
            "normalizedVertices": [
              {
                "x": 0.08232284,
                "y": 0.6170221
              },
              {
                "x": 0.39065692,
                "y": 0.6170221
              },
              {
                "x": 0.39065692,
                "y": 0.92242104
              },
              {
                "x": 0.08232284,
                "y": 0.92242104
              }
            ]
          }
        },
        {
          "mid": "/m/0h9mv",
          "name": "Tire",
          "score": 0.8843513,
          "boundingPoly": {
            "normalizedVertices": [
              {
                "x": 0.079826124,
                "y": 0.7197509
              },
              {
                "x": 0.21208802,
                "y": 0.7197509
              },
              {
                "x": 0.21208802,
                "y": 0.91879684
              },
              {
                "x": 0.079826124,
                "y": 0.91879684
              }
            ]
          }
        }
      ]
    },
    {
      "mid": "/m/0h9mv",
      "name": "Tire",
      "score": 0.87652695,
      "boundingPoly": {
        "normalizedVertices": [
          {
            "x": 0.29944605,
            "y": 0.73484844
          },
          {
            "x": 0.380811,
            "y": 0.73484844
          },
          {
            "x": 0.380811,
            "y": 0.9195114
          },
          {
            "x": 0.29944605,
            "y": 0.9195114
          }
        ]
      }
    },
    {
      "mid": "/m/0h9mv",
      "name": "Tire",
      "score": 0.5627655,
      "boundingPoly": {
        "normalizedVertices": [
          {
            "x": 0.9415436,
            "y": 0.68047553
          },
          {
            "x": 0.99660295,
            "y": 0.68047553
          },
          {
            "x": 0.99660295,
            "y": 0.8273247
          },
          {
            "x": 0.9415436,
            "y": 0.8273247
          }
        ]
      }
    },
    {
      "mid": "/m/01g317",
      "name": "Person",
      "score": 0.5409186,
      "boundingPoly": {
        "normalizedVertices": [
          {
            "x": 0.73700386,
            "y": 0.3624668
          },
          {
            "x": 0.79345083,
            "y": 0.3624668
          },
          {
            "x": 0.79345083,
            "y": 0.51972765
          },
          {
            "x": 0.73700386,
            "y": 0.51972765
          }
        ]
      }
    }
  ]
}
```

Google API 유해성 콘텐츠
감지

1. request용 json 파일 생성

```
safe_search.json  ➤ ✕
스키마: <선택된 스키마가 없음>

1  {
2    "requests": [
3      {
4        "image": {
5          "content": "/9j/4AAQSkZJRgABAQEAYABgAAD/2wBDAAUDBAQEAWUEBAQFBQUGBwwIBwcHBw8LCwkMEQ8SEhEPERETfhwXExQaFRERGCE
6        },
7        "features": [
8          {
9            "type": "SAFE_SEARCH_DETECTION"
10         }
11       ]
12     }
13   ]
14 }
```

입력 이미지



2. 실행 및 실행결과

```
PS C:\Users\memen> $env:GOOGLE_APPLICATION_CREDENTIALS="VisionTest-b7032df5ad1f.json"
PS C:\Users\memen> $cred = gcloud auth application-default print-access-token
PS C:\Users\memen> $headers = @{ "Authorization" = "Bearer $cred" }
PS C:\Users\memen> Invoke-WebRequest
>> -Method POST
>> -Headers $headers
>> -ContentType: "application/json; charset=utf-8"
>> -InFile ./google_request/safe_search.json
>> -Uri "https://vision.googleapis.com/v1/images:annotate" | Select-Object -Expand Content
{
  "responses": [
    {
      "safeSearchAnnotation": {
        "adult": "UNLIKELY",
        "spoof": "VERY_UNLIKELY",
        "medical": "UNLIKELY",
        "violence": "VERY_UNLIKELY",
        "racy": "VERY_LIKELY"
      }
    }
  ]
}
```

3. 만약 건전한 이미지를 돌리면?



```
on https://vision.googleapis.com/v1/images:analyze
{
  "responses": [
    {
      "safeSearchAnnotation": {
        "adult": "VERY_UNLIKELY",
        "spoof": "LIKELY",
        "medical": "VERY_UNLIKELY",
        "violence": "VERY_UNLIKELY",
        "racy": "VERY_UNLIKELY"
      }
    }
  ]
}
```