AI & Machine Learning Products (https://cloud.google.com/products/machine-learning/)
Cloud Video Intelligence API (https://cloud.google.com/video-intelligence/)
Documentation (https://cloud.google.com/video-intelligence/docs/) Guides

Detecting explicit content in videos

Explicit Content Detection detects adult content in videos. Adult content is content generally inappropriate for those under under 18 years of age and includes, but is not limited to, nudity, sexual activities, and pornography. Such content detected in cartoons or anime is also identified.

The response includes a bucketized likelihood (https://cloud.google.com/video-intelligence/docs/reference/rest/Shared.Types/Likelihood) value, from `VERY_UNLIKELY` to `VERY_LIKELY`.

When Explicit Content Detection evaluates a video, it does so on a per-frame basis and considers *visual content only*. The audio component of the video is not used to evaluate the explicit content level.

Note: Google does not guarantee the accuracy of its Explicit Content Detection predictions.

Here is an example of performing video analysis for Explicit Content Detection features on a file located in Cloud Storage.

REST & CMD LINE	C#	GO	MORE ▾

Send video annotation request

The following shows how to send a POST request to the `videos:annotate` (https://cloud.google.com/video-intelligence/docs/reference/rest/v1/videos/annotate) method. The example uses the access token for a service account set up for the project using the Cloud SDK. For instructions on installing the Cloud SDK, setting up a project with a service account, and obtaining an access token, see the Video Intelligence API Quickstart (https://cloud.google.com/docs/quickstarts).

Before using any of the request data below, make the following replacements:

- ***input-uri***: a Cloud Storage bucket that contains the file you want to annotate, including the file name. Must start with `gs://`.
  For example: `'inputUri': 'gs://cloud-videointelligence-demo/assistant.mp4',`

HTTP method and URL:

```
POST https://videointelligence.googleapis.com/v1/videos:annotate
```

Request JSON body:

```
{
  "inputUri": "input-uri",
  "features": ["EXPLICIT_CONTENT_DETECTION"]
}
```

To send your request, expand one of these options:

⌄ curl (Linux, macOS, or Cloud Shell)

Note: Ensure you have set the **GOOGLE_APPLICATION_CREDENTIALS** (https://cloud.google.com/docs/authentication/production) environment variable to your service account private key file path.

Save the request body in a file called `request.json`, and execute the following command:

```
curl -X POST \
-H "Authorization: Bearer "$(gcloud auth application-default print-access-token) \
-H "Content-Type: application/json; charset=utf-8" \
-d @request.json \
https://videointelligence.googleapis.com/v1/videos:annotate
```

⌄ PowerShell (Windows)

Note: Ensure you have set the **GOOGLE_APPLICATION_CREDENTIALS** (https://cloud.google.com/docs/authentication/production) environment variable to your service account private key file path.

Save the request body in a file called `request.json`, and execute the following command:

```
$cred = gcloud auth application-default print-access-token
$headers = @{ "Authorization" = "Bearer $cred" }

Invoke-WebRequest `
  -Method POST `
  -Headers $headers `
```

```
 -ContentType: "application/json; charset=utf-8" `
 -InFile request.json `
 -Uri "https://videointelligence.googleapis.com/v1/videos:annotate" | Select-Obje
```

You should receive a JSON response similar to the following:

```
{
  "name": "projects/project-number/locations/location-id/operations/operation-id"
}
```

If the response is successful, the Video Intelligence API returns the `name` for your operation. The above shows an example of such a response, where:

- **project-number**: the number of your project
- **location-id**: the Cloud region where annotation should take place. Supported cloud regions are: `us-east1`, `us-west1`, `europe-west1`, `asia-east1`. If no region is specified, a region will be determined based on video file location.
- **operation-id**: the ID of the long running operation created for the request and provided in the response when you started the operation, for example `12345...`

Get annotation results

To retrieve the result of the operation, make a GET (https://cloud.google.com/video-intelligence/docs/reference/rest/v1/projects.locations.operations/get) request, using the operation name returned from the call to videos:annotate (https://cloud.google.com/video-intelligence/docs/reference/rest/v1/videos/annotate), as shown in the following example.

Before using any of the request data below, make the following replacements:

- **operation-number**: the number of the operation as returned by Video Intelligence API. The operation name has the format `projects/project-id/locations/location-id/operations/operation-id`

HTTP method and URL:

```
GET https://videointelligence.googleapis.com/v1/operation-name
```

To send your request, expand one of these options:

⌄ **curl (Linux, macOS, or Cloud Shell)**

Note: Ensure you have set the **GOOGLE_APPLICATION_CREDENTIALS**
(https://cloud.google.com/docs/authentication/production) environment variable to your service
account private key file path.

Execute the following command:

```
curl -X GET \
-H "Authorization: Bearer "$(gcloud auth application-default print-access-token) \
https://videointelligence.googleapis.com/v1/operation-name
```

⌄ PowerShell (Windows)

Note: Ensure you have set the **GOOGLE_APPLICATION_CREDENTIALS**
(https://cloud.google.com/docs/authentication/production) environment variable to your service
account private key file path.

Execute the following command:

```
$cred = gcloud auth application-default print-access-token
$headers = @{ "Authorization" = "Bearer $cred" }

Invoke-WebRequest `
  -Method GET `
  -Headers $headers `
  -Uri "https://videointelligence.googleapis.com/v1/operation-name" | Select-Objec
```

You should receive a JSON response similar to the following:

```
{
  "name": "projects/project-number/locations/location-id/operations/operation-id",
  "metadata": {
    "@type": "type.googleapis.com/google.cloud.videointelligence.v1.AnnotateVideoP
    "annotationProgress": [
     {
      "inputUri": "/demomaker/gbikes_dinosaur.mp4",
      "progressPercent": 100,
      "startTime": "2019-12-26T00:16:35.112404Z",
      "updateTime": "2019-12-26T00:16:55.937889Z"
     }
    ]
  },
```

```
    "done": true,
   "response": {
    "@type": "type.googleapis.com/google.cloud.videointelligence.v1.AnnotateVideoR
    "annotationResults": [
     {
      "inputUri": "/demomaker/gbikes_dinosaur.mp4",
      "explicitAnnotation": {
       "frames": [
        {
         "timeOffset": "0.056149s",
         "pornographyLikelihood": "VERY_UNLIKELY"
        },
        {
         "timeOffset": "1.166841s",
         "pornographyLikelihood": "VERY_UNLIKELY"
        },
            ...
        {
         "timeOffset": "41.678209s",
         "pornographyLikelihood": "VERY_UNLIKELY"
        },
        {
         "timeOffset": "42.596413s",
         "pornographyLikelihood": "VERY_UNLIKELY"
        }
       ]
      }
     }
    ]
   }
  }
```

Shot detection annotations are returned as a `shotAnnotations` list. Note: The **done** field is only returned when its value is **True**. It's not included in responses for which the operation has not completed.