

ClothEye

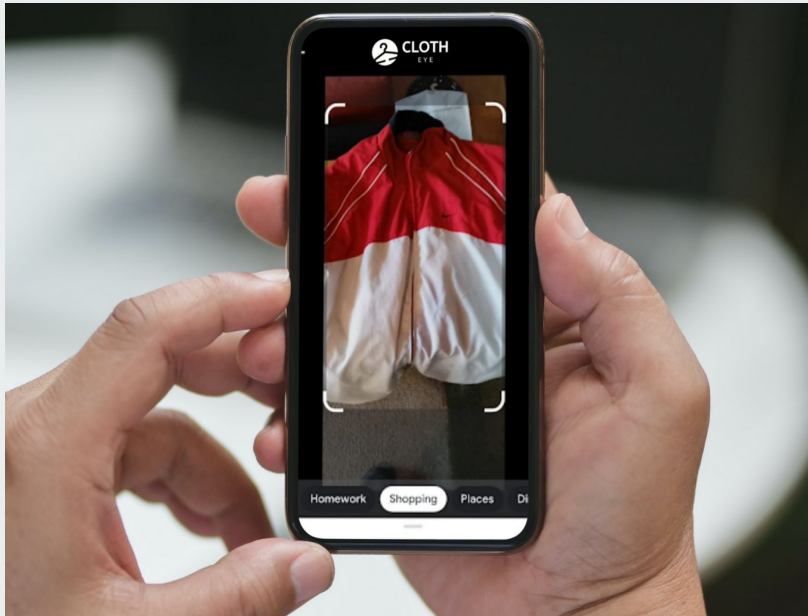
Clothing Scanner

App development Case study
G1102 - IM



S1: Select app space

Clothing Scanner



Game

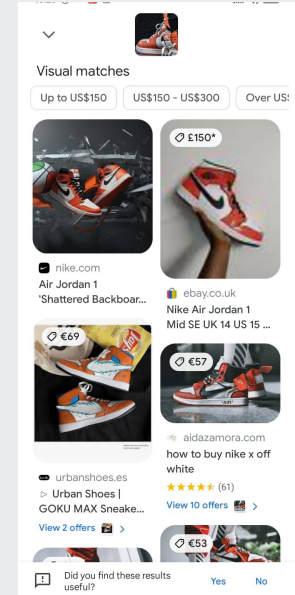
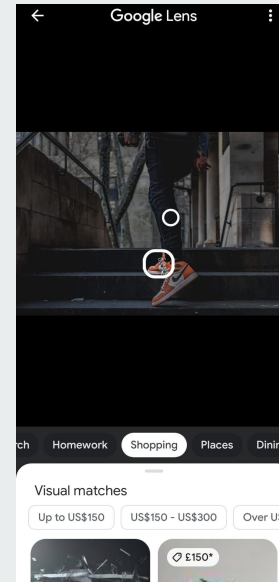


S2: Clothing Scanner



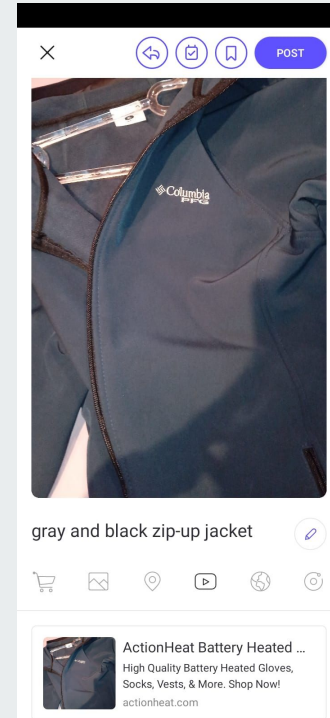
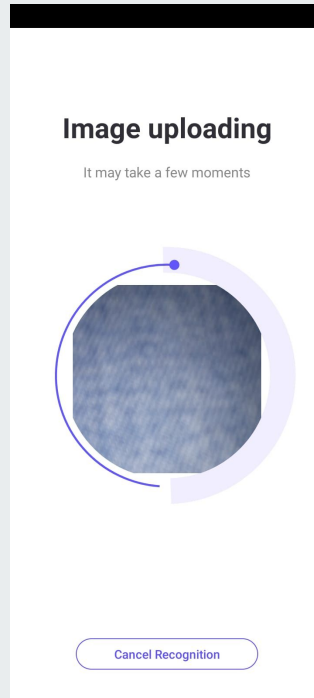
Google Lens

- Very general: Translate, Text, Search, Homework, Shopping...
- Expensive products (Price from original reseller)



CamFind

- Slow uploading
- Not a lot of results
- Object detection oriented



Billionhands

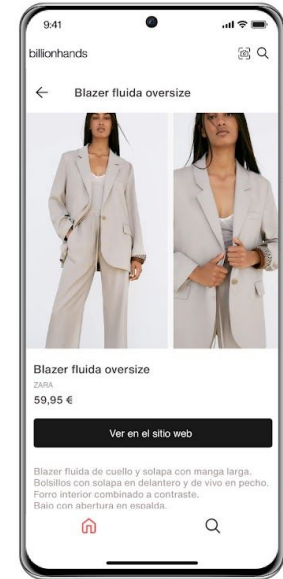
-Influencer oriented

-No live recognition within the app

¿Quieres conseguir
los looks de las influencers?

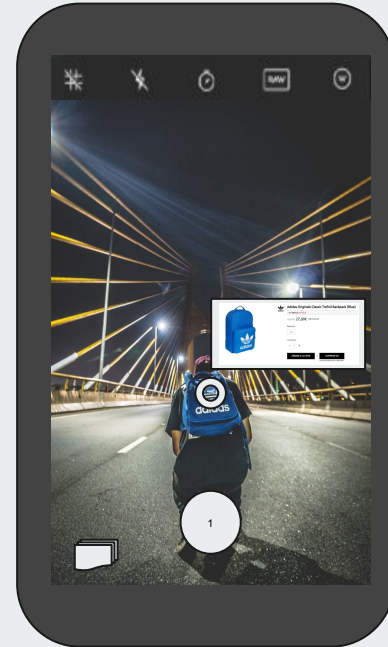


...y compra la prenda
que más te guste.



S3: Design, functionality, UI

- Load image from gallery
- Basic camera parameters
- Trigger to freeze image ¹



Functionality Approaches

1- Local Image Recognition



2- Server Image Recognition



Sockets,
HTTP...



3- Server + Cloud Image Recognition



Sockets,
HTTP...

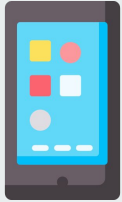


API Calls,
Buckets



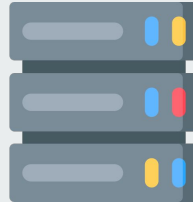
Remote Image Recognition using Cloud APIs

Client



Android application developed using Android Studio. Takes pictures with camera and send data to our server using HTTPS.

Enterprise Server



Linux server running script which receives images and analyzes them both locally and remotely using TensorFlow and Google Vision API. Once the labels are obtained we call cloud API again to search for corresponding products.

Cloud APIs



Cloud APIs return labels which are used to identify clothing and products that match the description given.

Google Cloud Vision API

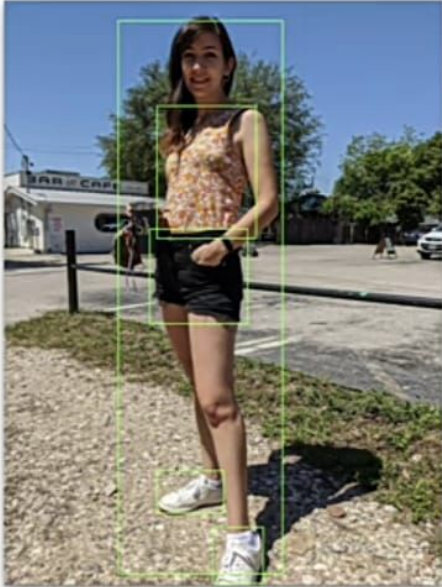
-Label detection

-Product Search

[Try it! | Cloud Vision API](#)

Try the API

Faces Objects Labels Text Properties Safe Search



fashion_pic.jpg

Top	93%
Shorts	91%
Person	89%
Shoe	87%
Shoe	85%

Show JSON ▾

RESET NEW FILE

Vision API Pricing



Feature	Price per 1000 units		
	First 1000 units/month	Units 1001 - 5,000,000 / month	Units 5,000,001 and higher / month
Label Detection	Free	\$1.50	\$1.00
Logo Detection	Free	\$1.50	\$0.60
Image Properties	Free	\$1.50	\$0.60
Crop Hints	Free	Free with Image Properties, or \$1.50	Free with Image Properties, or \$0.60

Label Detection

Request label detection on an image:

- **base64-encoded-image**: The base64 representation (ASCII string) of your binary image data. This string should look similar to the following string:

- `/9j/4QAYRXhpZgAA...9tAVx/zDQD1Gxn//2Q=`

Visit the [base64 encode](#) topic for more information.

HTTP method and URL:

```
POST https://vision.googleapis.com/v1/images:annotate
```

Request JSON body:

```
{
  "requests": [
    {
      "image": {
        "content": "base64-encoded-image"
      },
      "features": [
        {
          "maxResults": 5,
          "type": "LABEL_DETECTION"
        }
      ]
    }
  ]
}
```

JSON Response:

```
"responses": [
  {
    "labelAnnotations": [
      {
        "mid": "/m/01c8br",
        "description": "Street",
        "score": 0.87294734,
        "topicality": 0.87294734
      },
      {
        "mid": "/m/06pg22",
        "description": "Snapshot",
        "score": 0.8523099,
        "topicality": 0.8523099
      },
      {
        "mid": "/m/0dx1j",
        "description": "Town",
        "score": 0.8481104,
        "topicality": 0.8481104
      }
    ]
  }
]
```

Product Search

- **Create** product set (Using API and scrappers)
- Make **request** with local image
- Get response with **matching products** on your set

Request using local image:

```
{
  "requests": [
    {
      "image": {
        "content": "base64-encoded-image"
      },
      "features": [
        {
          "type": "PRODUCT_SEARCH",
          "maxResults": 5
        }
      ],
      "imageContext": {
        "productSearchParams": {
          "productSet":
            "projects/project-id/locations/location-id/productSets/product-set-id",
          ...
        }
      }
    }
  ]
}
```

Response:

The response JSON includes the two following result types:

- **productSearchResults** - Contains a list of matching products for the entire image. In the sample response the matching products are: product_id65, product_id35, product_id34, product_id62, product_id32.
- **productGroupedResults** - Contains bounding box coordinates and matching items for each product identified in the image. In the following response there is only one product identified, followed by matching products in the sample product set: product_id65, product_id35, product_id34, product_id93, product_id62.

Product Search API Pricing



Tier: images/month	List price		
Number of images	0-1000	1001-5,000,000	5,000,001-20,000,000
Prediction per 1000 images	free	\$4.50	\$1.80
Storage per 1000 images	free	\$0.10	\$0.10

Clothing Websites APIs, Scrappers

```
var axios = require("axios").default;

var options = {
  method: 'GET',
  url: 'https://asos2.p.rapidapi.com/v2/auto-complete',
  params: {
    q: 'bikini top',
    store: 'US',
    country: 'US',
    currency: 'USD',
    sizeSchema: 'US',
    lang: 'en-US'
  },
  headers: {'X-RapidAPI-Host': 'asos2.p.rapidapi.com', 'X-RapidAPI-Key': 'SIGN-UP-FOR-KEY'}
};

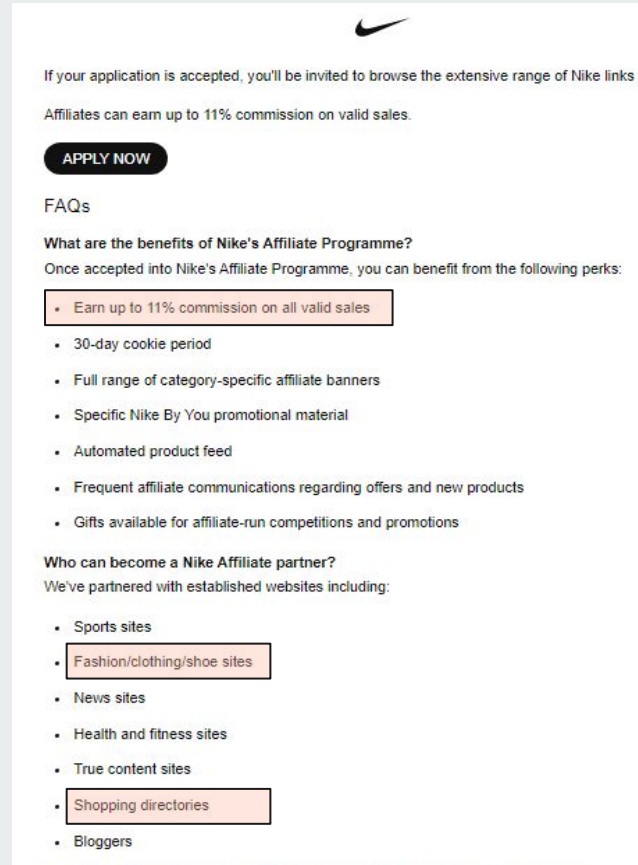
axios.request(options).then(function (response) {
  console.log(response.data);
}).catch(function (error) {
  console.error(error);
});
```

Business model

Brokerage/Market-makers

Infomediary: Interés en marcas de una zona

Advertising: Posicionamiento



The screenshot shows the Nike Affiliate Program page. At the top right is the Nike logo. Below it, the text reads: "If your application is accepted, you'll be invited to browse the extensive range of Nike links". Further down, it states: "Affiliates can earn up to 11% commission on valid sales." Below this is a black button with white text that says "APPLY NOW".

FAQs

What are the benefits of Nike's Affiliate Programme?
Once accepted into Nike's Affiliate Programme, you can benefit from the following perks:

- Earn up to 11% commission on all valid sales
- 30-day cookie period
- Full range of category-specific affiliate banners
- Specific Nike By You promotional material
- Automated product feed
- Frequent affiliate communications regarding offers and new products
- Gifts available for affiliate-run competitions and promotions

Who can become a Nike Affiliate partner?
We've partnered with established websites including:

- Sports sites
- Fashion/clothing/shoe sites
- News sites
- Health and fitness sites
- True content sites
- Shopping directories
- Bloggers

Business model - II

Data used:

90€/month on clothing (avg)

20€/sale (avg)

3% Conversion rate on E Commerce

5-10% Commission for affiliate conversion

Expenses(300€/month - 50k scans):

1,5€/1K units Vision API Pricing

200€/month Cloud Server Hosting

searchvolume.io

Keyword ▼	Avg. monthly searches ▼
clothing	18,100
shoes	165,000
top	40,500
trousers	12,100

$7M * 90€/month * 0,05(Commission Rate) = 31M€$ (Upper bound)

$50K * 0,03 (Conversion Rate) * 20€/sale*0,1(Commission) = 3000K€$

smartinsights.com

Conversion Rate By Region

	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Change since 2020 Q2	Change since 2021 Q1
GB	4.0%	4.4%	4.5%	4.6%	4.4%	10%	-4%
US	3.1%	2.9%	3.1%	2.7%	2.8%	-10%	5%