PODSTAWY PROGRAMOWANIA W PYTHON

Dzień 14

AGENDA
DAY 14

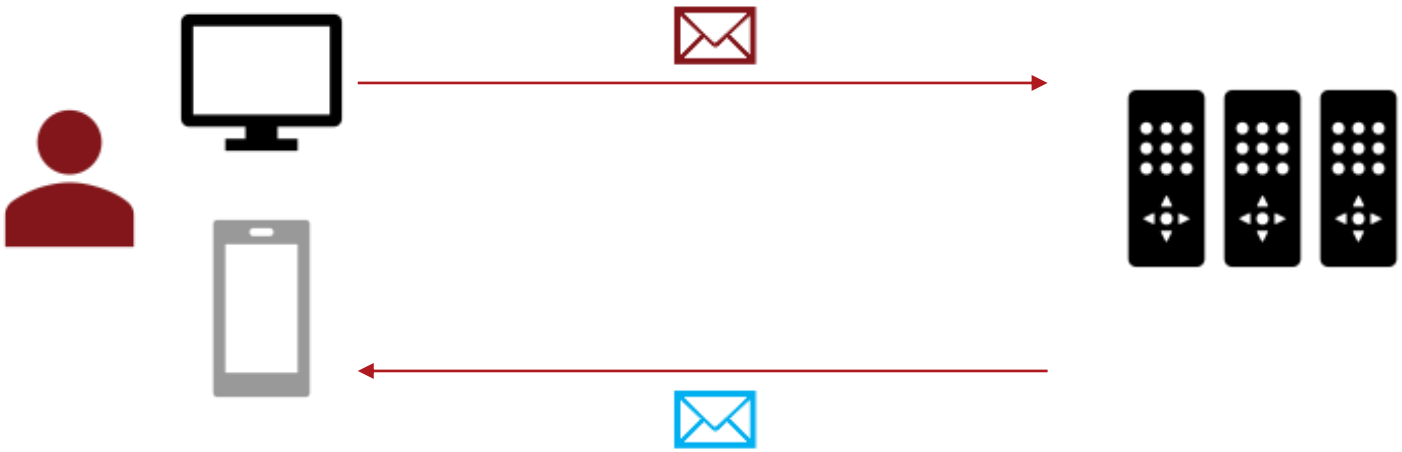
- egzamin
- json
- API
- Microsoft Cognitive Services API

API

Application Program Interface

API

żądanie (get, post, put, delete)
+ metadane (json, xml)
+ obiekty (np. pliki)



odpowiedź
(meta + obiekty)

http://www.restapitutorial.com/

JSON

JavaScript Object Notation


```
{
  "name": "people_",
  "score": 0.83984375,
  "detail": {
    "celebrities": [
      {
        "name": "Satya Nadella",
        "faceRectangle": {
          "left": 597,
          "top": 162,
          "width": 248,
          "height": 248
        },
        "confidence": 0.999028444
      }
```

Konsumowanie API

```
import requests
import json

requests.get()
requests.post()
requests.put()
requests.delete()
```

verbs

```
json.loads()        json.load()
json.dumps()        json.dump()
```

Microsoft Cognitive Services API

Przetwarzanie obrazów.

MSCS

https://azure.microsoft.com/en-us/services/cognitive-services/

Use AI to solve business problems

Vision

Image-processing algorithms to smartly identify, caption and moderate your pictures.

Speech

Convert spoken audio into text, use voice for verification, or add speaker recognition to your app.

Knowledge

Map complex information and data in order to solve tasks such as intelligent recommendations and semantic search.

Search

Add Bing Search APIs to your apps and harness the ability to comb billions of webpages, images, videos, and news with a single API call.

Language

Allow your apps to process natural language with pre-built scripts, evaluate sentiment and learn how to recognize what users want.

Computer Vision API

https://azure.microsoft.com/en-us/services/cognitive-services/computer-vision/

- Analizowanie obrazów:
  - odnajdywanie twarzy
  - emocje
  - celebryci
  - opis zdjęcia
  - tagi
  - kategorie
  - rasizm
  - adult content
  - odczytywanie tekstów - OCR

CV API

Dokumentacja:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/home

Quick start Python:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/quickstarts/python

Dokumentacja API:
https://westus.dev.cognitive.microsoft.com/docs/services/56f91f2d778daf23d8ec6739/operations/56f91f2e778daf14a499e1fa

API settings

Analyze image API adres:
https://westeurope.api.cognitive.microsoft.com/vision/v1.0/analyze

OCR API adres:
https://westeurope.api.cognitive.microsoft.com/vision/v1.0/ocr


ścieżka czy url
przygotuj Request (header, content) w zależności czy plik czy url
wyślij Request
zapisz dane jako json
zapisz źródłowe zdjęcie
zaznacz twarze
napisz wiek i płeć
napisz opis
zapisz opisane zdjęcie

Thanks!!

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