Back‹‹Market

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Back Market

French startup Back Market has raised a new **$120 million** funding round from Goldman Sachs, Aglaé Ventures and Eurazeo Growth.
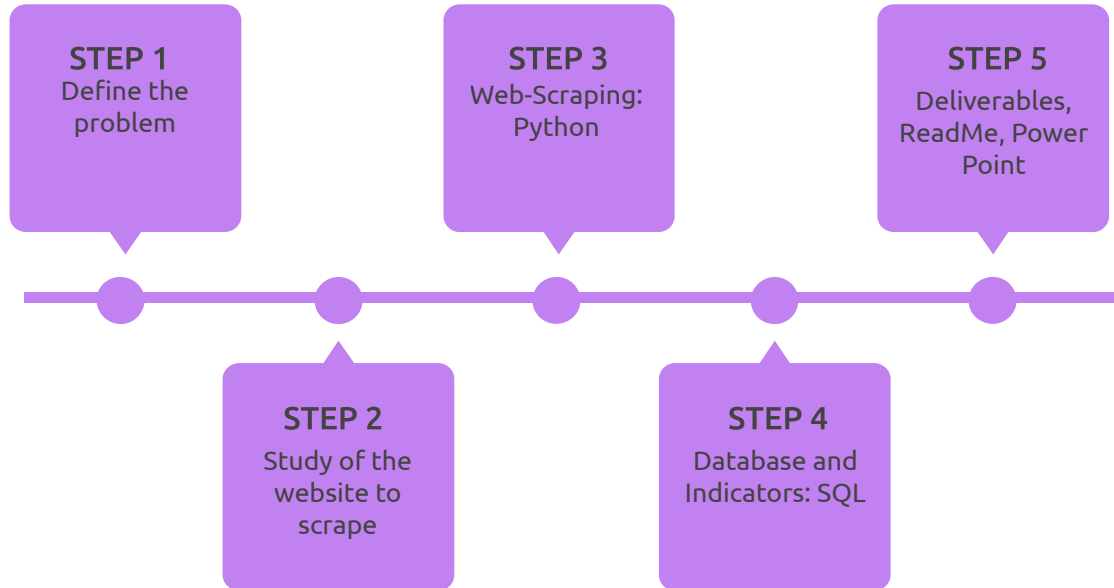
Back Market

The company operates a **marketplace for refurbished** smartphones and electronics devices.

It is currently live in the U.S., France, Spain, Germany, Italy, Belgium, the U.K. and Austria.

Project Workflow

STEP 1
Define the problem

STEP 2
Study of the website to scrape

STEP 3
Web-Scraping: Python

STEP 4
Database and Indicators: SQL

STEP 5
Deliverables, ReadMe, Power Point

Project Workflow: Trello Dashboard

1. Define the problem:

Analysis of the
refurbished computers
offered on
Back Market Platform
(in terms of price, quality,
 etc.)

Notre meilleure offre de Ordinateur - Produits reconditionnés :

-28%

MacBook Air 13" (Mi-
2017) - Core i5 1,8 GHz ...

€ **787,00 €** 1099,00 €

28% discount

Garantie : 12 mois ⓘ

Apparence : État correct ⓘ

-1350 g de gâchis électronique

Voir +

2. Study of the Website to scrape:

3. Web-Scraping: Python

BACK MARKET: ORDINATEUR RECONDITIONNE
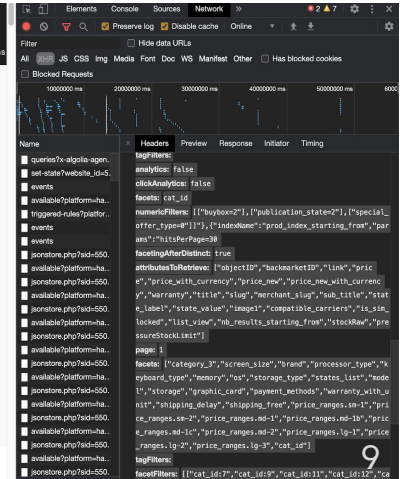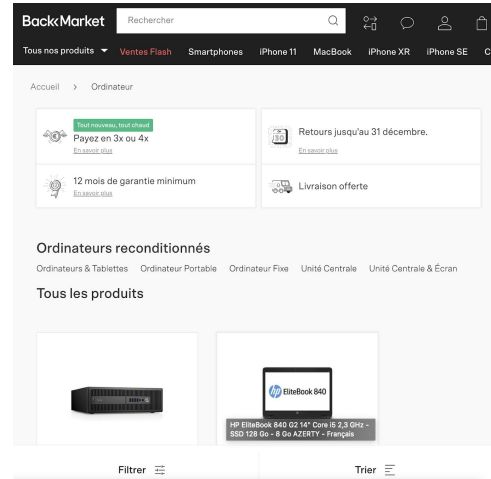
Web Scraping & DataFrame

```python
import requests as r
import pandas as pd
import json
import time
```

4. DB and Indicators: SQL

Contents

Web-Scraping: Python

- Website is an **API** based

- Page source: **Json** file

- Python Requests **post() Method**

- Elements: Url, Headers, Data

- Dataframe: 273x 20 columns

- GitHub: ipynb

Filter   ☐ Hide data URLs   All   XHR   JS   CSS   Img   Med

☐ Has blocked cookies   ☐ Blocked Requests

50000 ms   100000 ms   150000 ms   200000 ms   250000 ms   300000 ms

Name   ×   Headers   Preview   Response   Initiator

queries?x-algolia-agent=...
set-state?website_id=5503
events
available?platform=ha&la...
triggered-rules?platform...
events
events
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...
available?platform=ha&la...
jsonstore.php?sid=5503...

▼ General

   Request URL: https://9x8zudunn9-dsn.algo
   Algolia%20for%20JavaScript%20(4.8.0)%3B%
   2)&x-algolia-api-key=38f3a5eacb0bd01a763
   DUNN9

   Request Method: POST

   Status Code: 🟢 200 OK

   Remote Address: 37.187.154.124:443

   Referrer Policy: strict-origin-when-cross-o

▶ **Response Headers (14)**

▶ **Request Headers (15)**

▶ **Query String Parameters (3)**

▶ **Form Data (35)**

Contents

3. Highlights: SQL

1- SQL: Create a **new DB**: Back Market

2- From Python: **Export the DF to SQL**, table Computer

3- **Data Analysis** with temporary tables and calculation functions

4- **Indicators** of the dataset: Brand, Price, Aesthetic Condition, Processor Speed

(MySQL 8.0.22) standard/back_market/computer

back_market ⇅							
Select Database	Structure	Content	Relations	Triggers	Table Info	Query	

TABLES	backmarketid	price	stockraw	pressurestocklimit	warranty	state_value	state_label	title	price_new	o
▦ computer	339245	199	31	20	12	4	Stallone	Dell Latitude 5175 11" Core m5 1,1 GHz - SSD 128 Go - 4 Go	992	
	294844	399	4	20	12	4	Stallone	Hp EliteBook 820 G1 12" Core i5 1,6 GHz - SSD 128 Go - 8 Go AZERTY...	1350	9
	287074	900	9	20	12	1	Très bon état	MacBook Air 13" (Mi-2017) - Core i7 2,2 GHz - SSD 256 Go - 8 Go AZE...	1469	1
	1833	675	5	20	12	4	Stallone	MacBook Pro 13" Retina (Mi-2014) - Core i5 2,6 GHz - SSD 128 Go - 8...	1750	1
	27780	893	5	20	12	4	Stallone	Dell Latitude E7470 14" Core i5 2,4 GHz - SSD 256 Go - 16 Go AZERT...	1400	1
	2604	409	6	20	12	4	Stallone	MacBook Air 11" (Mi-2012) - Core i5 1,7 GHz - SSD 64 Go - 4 Go AZ...	950	1
	19084	1199	5	20	12	3	État correct	MacBook Pro 15" Retina (Mi-2015) - Core i7 2,2 GHz - SSD 512 Go - 16...	2489	8
	261257	173	185	20	12	3	État correct	Lenovo M58P SFF 22" Core 2 Duo 3 GHz - HDD 160 Go - 2 Go AZERTY	289	9
	329969	700	1	20	12	3	État correct	Dell Latitude 3550 15" Core i3 1,7 GHz - HDD 500 Go - 4 Go AZERTY...	1200	1

Brand

- **Computers in Stock**: 6296.
  33% of the computers in stock are branded HP vs Dell 29%, Lenovo 19%, Apple 15%

- *Variety*: 107 Distinct Articles by Apple vs 46 Dell and HP (ex. Macbook Air 13, Macbook Pro 13, iMac 27" etc.)

Price

- **Max price** : no surprises the most expensive product is sold by Apple for 2783 euros ('imac-27-5k-debut-2019')

- **Min price**: the cheapest is sold by HP ('hp-prodesk-400-g1-pentium')

- **Discount** is calculated on the price of the article new. Lenovo has the article with the higher discount >85% ('dell-optiplex-790')

- The average discount on the website on computers is 46% (not bad at all)

- At first glance: Fujitsu articles are the most discounted ones (>75%). Checking deeper, we found out that Fujitsu has only 1 article (with 20 computers in stock).

- It looks positive that in most of the cases the original price is different from the discounted price.

Aesthetic Condition

Back Market provides 5 different classes to rate the aesthetic condition of the articles:

- *Stallone:*

- *État correct*

- *Bon état*

- *Très bon état*

- *Comme neuf*

Aesthetic Condition

1. Considering **only** the **average price** and **aesthetic classes** (not taking into account all the other features as model, processor speed, storage etc.)

2. The **avg prices** among brands are (except for Apple which is always more expensive than the other brands):

❖ *Stallone*: avg price>400€
❖ *État correct*: 400 € <avg.price< 550€
❖ *Bon état*: 200€ <avg price<700€
❖ *Tres bon etat*: 300€ <avg price<700€
❖ *Comme Neuf*: 400 <avg price<550

It can be surprising that a computer rated "Comme Neuf" is less expensive than a "Stallone". This is due to the fact that other factors can influence the prices.

Processor Speed

A computer's processor clock speed determines how quickly the central processing unit (CPU) can retrieve and interpret instructions. It is measured in GHz.

On Back Market the range of speed goes from 1.1 to 3.6 GHz.

The article with the higher processor speed is a Mac Mini (Octobre 2018) Core i3 3,6 GHz - SSD 128 Go - 8Go

The articles with the higher processor speed are branded Apple 3.6 GHz vs 3,4 GHz Dell and HP

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Thanks!

Does anyone have any questions?