

# BackMarket

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# Back Market

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



# Back Market

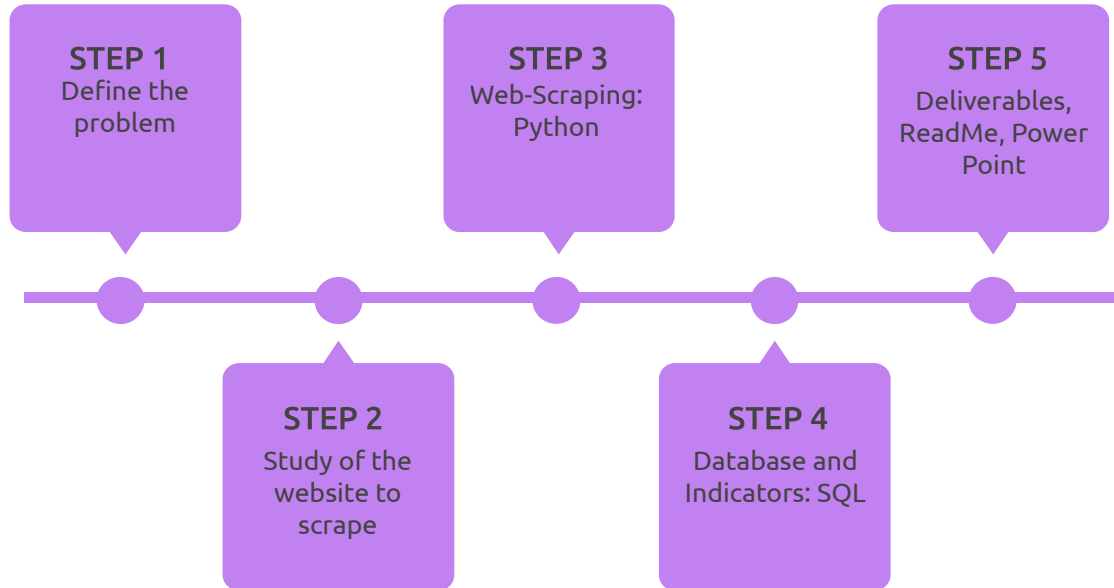
The company operates a **marketplace for refurbished** smartphones and electronics devices.

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



# Project Workflow

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# Project Workflow: Trello Dashboard

The screenshot displays a Trello dashboard for a project named 'Back Market'. The interface is organized into three main columns: 'Da fare' (To Do), 'In esecuzione' (In Progress), and 'Fatto' (Done). Each column contains a list of tasks with progress bars and a '+ Aggiungi un'altra scheda' (Add another card) button at the bottom.

- Da fare (To Do):** Contains one task, 'Prepare Power Point', with a yellow progress bar.
- In esecuzione (In Progress):** Contains one task, 'Crate KPIs with SQL', with a yellow progress bar.
- Fatto (Done):** Contains six tasks, each with a green progress bar: 'Read Project Description', 'Python Code : DataFrame', 'Define the problem:', 'Documentation: Google', 'Create: ReadMe file', and 'Check all the deliverables'. Below these are three more tasks with red progress bars: 'Save Files: CSV', 'Add the DB into SQL', and 'Python Code: Cleaning Data'.


The dashboard also features a top navigation bar with the Trello logo, a search bar, and a list of boards including 'Bacheche', 'BlackJack', 'Free', 'Privata', and 'Invita'. A right sidebar shows a '+ Aggiungi un'altra lista' (Add another list) button and a 'Mostra menu' (Show menu) button.

# 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 € ~~1069,00 €~~

28% discount

Garantie : 12 mois

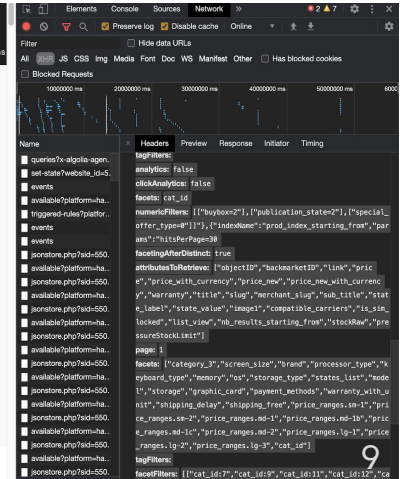
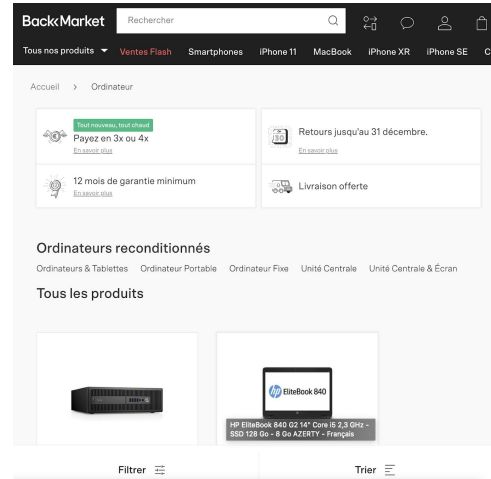
Apparence : État correct

-1350 g de déchets électronique

Voir +



## 2. Study of the Website to scrape:



### 3. Web-Scraping: Python

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#### BACK MARKET: ORDINATEUR RECONDITIONNE

##### Web Scraping & DataFrame

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

## 4. DB and Indicators: SQL

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Sequel Pro

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- 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	350000 ms

**Name**

- 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...
- available?platform=ha&la...
- jsonstore.php?sid=5503...
- available?platform=ha&la...
- jsonstore.php?sid=5503...

**Headers**

**General**

**Request URL:** https://9x8zudunn9-dsn.algo...  
Algolia%20for%20JavaScript%20(4.8.0)%3B%...  
2)&x-algolia-api-key=38f3a5eacbbd01a763DUNN9

**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)**

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# 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

TABLES	backmarketid	price	stockraw	pressurestocklimit	warranty	state_value	state_label	title	price_new
computer	339245	199	31	20	12	4	Stallone	Dell Latitude 5175 11" Core m5 1,1 GHz - SSD 128 Go - 4 Go	992 1
	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.)

The screenshot displays a web interface for a computer marketplace. At the top, there's a navigation bar with 'Tous nos produits' and a search bar containing 'ordinateur'. Below the navigation bar, there are filters on the left side and a grid of product listings on the right.

**Filters:**

- PC Hybride 2 en 1 - 298**
- Voir plus**
- Taille écran (pouces)**
  - ☒ Peu importe
  - ☐ Jusqu'à 10,9" - 26
  - ☐ De 11 à 12,9" - 1018
  - ☐ De 13 à 14,9" - 2644
  - ☐ De 15 à 16,9" - 1262
  - ☐ De 17 à 20,9" - 3642
  - ☐ De 21 à 23,9" - 3035
- Voir plus**
- Marque**
  - ☒ Peu importe
  - ☐ Apple - 1893
  - ☐ Samsung - 5
  - ☐ Dell - 5839
  - ☐ HP - 5009
  - ☐ Lenovo - 2786
  - ☐ Fujitsu - 796
- Voir plus**

**Product Listings:**

- MacBook Air 13" (Mi-2017) - Core i5 1,8 GHz - SSD 256 G...**  
à partir de **826,00 €** ~~1400,00 €~~  
Garantie : 12 mois
- MacBook Air 11" (Début 2015) - Core i5 1,6 GHz - SSD 128...**  
à partir de **495,00 €** ~~949,00 €~~  
Garantie : 12 mois
- MacBook Air 13" (Début 2015) - Core i5 1,6 GHz - SSD 256...**  
à partir de **687,00 €** ~~1449,00 €~~  
Garantie : 12 mois
- Hp ProDesk 600 G1 SFF Core i5 3,3 GHz - SSD 256 Go RA...**  
à partir de **199,00 €** ~~669,00 €~~  
Garantie : 12 mois
- MacBook Air 13" (Mi-2017) - Core i7 2,2 GHz - SSD 512 G...**  
à partir de **900,00 €** ~~1779,00 €~~  
Garantie : 12 mois
- MacBook Pro 13" (Mi-2012) - Core i5 2,5 GHz - HDD 500 ...**  
à partir de **539,00 €** ~~1499,00 €~~  
Garantie : 12 mois

URL: <https://www.backmarket.fr/hp-prodesk-600-g1-sff-core-i5-33-ghz-ssd-256-go-ram-8-go-pas-cher/106578.html?pi=4>



# Price

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- **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*



Choisissez l'aspect [Plaît-il ?](#)

BON PLAN !

Stallone	État correct	Bon état	Très bon état	Comme neuf
809,00 €	787,00 €	805,00 €	820,00 €	1009,00 €

Écran : peut présenter de micro rayures, invisibles une fois l'écran allumé.

Coque : peut présenter des signes d'usure visibles, notamment des rayures perceptibles au toucher.

Clavier/Trackpad : peuvent présenter de micro rayures imperceptibles au toucher.

# Aesthetic Condition

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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

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*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

# Thanks!

Does anyone have any questions?