



ENEZ INVENTER LE E-COMMERCE DE DEMAIN !

Data Science Game 2018

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# Introduction

Cdiscount is the largest French e-commerce website. We sell all types of goods on our own behalf or through our partner vendors hosted on our marketplace. We are proud to be the partner of the Data Science Game team to propose the final challenge of this 2018 edition.

In this challenge, we provide competitors with a data set consisting of navigation tracking elements ([tracking.data](#)) and a data set describing the hierarchy of product categories ([productid.data](#)). Both data set are described in the section [Dataset TRACKING\\_DATA](#) and [Dataset PRODUCTID\\_CATEGORY](#), respectively.

Each row of the tracking data set contains:

- a session identifier (sid);
- a measure of the time elapsed since the beginning of the session (duration) ;
- one of the 21 possible event types.

A session is defined for a given user as a succession of events. It ends when the time between two successive events exceeds 30 minutes.

The 21 events are made up of :

- the type of page currently visited: [PA](#), [LR](#), [LP](#), [CAROUSEL](#), [SHOW\\_CASE](#) (defined in the corresponding sections);
- and one of the [4 possible actions](#): none, PRODUCT, ADD\_TO\_BASKET, PURCHASE

And an additional 21<sup>st</sup> event that has been added for purchase actions of unidentified origin: [PURCHASE\\_PRODUCT\\_UNKNOWN\\_ORIGIN](#).

In addition to these data, we also provide additional variables that may be common to all event types or take values only for certain types of particular events. There are 32 variables summarized in Section [Dataset "tracking\\_data"](#). The detailed description of the variables specific to each type of event is given in the [appendices](#).

## Goal of the challenge:

**Given the succession of events already observed in a session, you are asked to predict the probability that a purchase action occurs between the last observation available and the end of the session.**

We provide an additional dataset in which the response target is given (session.target) for each session. The target is a boolean variable that is true (1) if a purchase occurred before the end of the current navigation session and false (0) otherwise. More details regarding the construction of the target are given in the section [Dataset](#)

[SESSION\\_TARGET](#). In order to evaluate the performance of your solution, the data set have been split into a training set and a test set by the Data Science Game team.

In respect of the privacy of our users, we voluntarily place the challenge at a session level without any kind user identification. Therefore, all type of personal data has been removed from the data set. In addition, all product related information has been encrypted to ensure equity between all participants (French speaking and others).

# Datasets metadata

	tracking_data	productid_category	session_target
Filename	<i>dsg18_cddiscount_tracking_data.csv.gz</i>	<i>dsg18_cddiscount_productid_category.csv.gz</i>	<i>dsg18_cddiscount_session_target.csv.gz</i>
Filetype	CSV	CSV	CSV
Compression	GZIP	GZIP	GZIP
Size	833 MB	235 MB	11 MB
Memory usage	9.11 GB	1.21 GB	25.81 MB

# Dataset PRODUCTID\_CATEGORY

Variable	Type	Encrypted	Description
product_id	string	True	Product ID
category_product_id_level1	int	True	Product category level 1
category_product_id_level2	int	True	Product category level 2
category_product_id_level3	int	True	Product category level 3

Each product ID is linked to different levels of categories. Level 1 is the most generic and level 3 is the most specific category level, it means **level 1 > level 2 > level 3 > product ID**.

## **Example :**

product_id	category_product_id_level 1	category_product_id_level 2	category_product_id_level 3
	SPORT	BICYCLES	MOUNTAIN BIKE

# Dataset SESSION\_TARGET

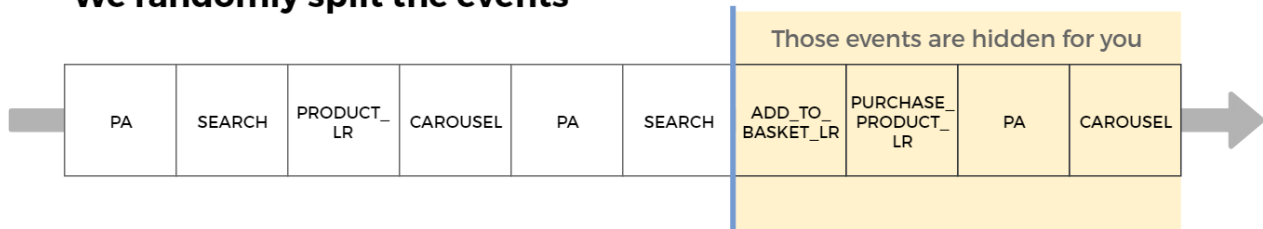
Variable	Type	Encrypted	Description
sid	string	True	Session ID
target	bool	True	Target variable

How the target variable was built ?

**This is a sample sequence of events occuring during a session**

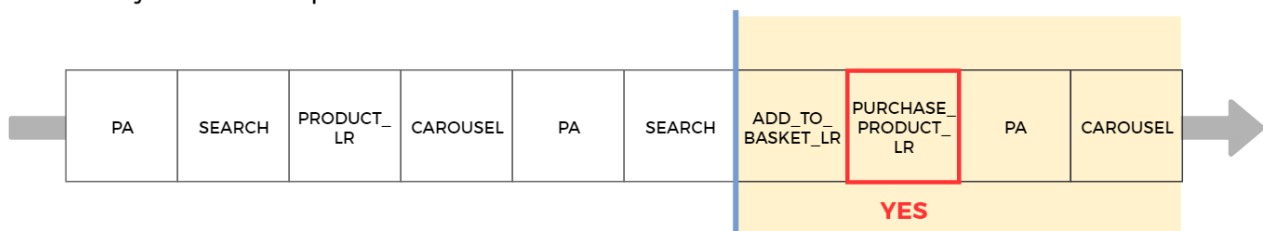


**We randomly split the events**



**Is there at least one purchase event before the end of the current session ?**

Binary classification problem





# Dataset TRACKING\_DATA

- [Dataset "tracking\\_data"](#)
- [3 events per page type](#)
- [Further information about event types](#)
- [Cdiscount page types](#)
  - [PA \(landing page\)](#)
  - [LP \(list product\)](#)
  - [LR \(list result\)](#)
  - [CAROUSEL](#)
  - [SHOW\\_CASE](#)

## Dataset "tracking\_data"

This dataset contains tracking data.

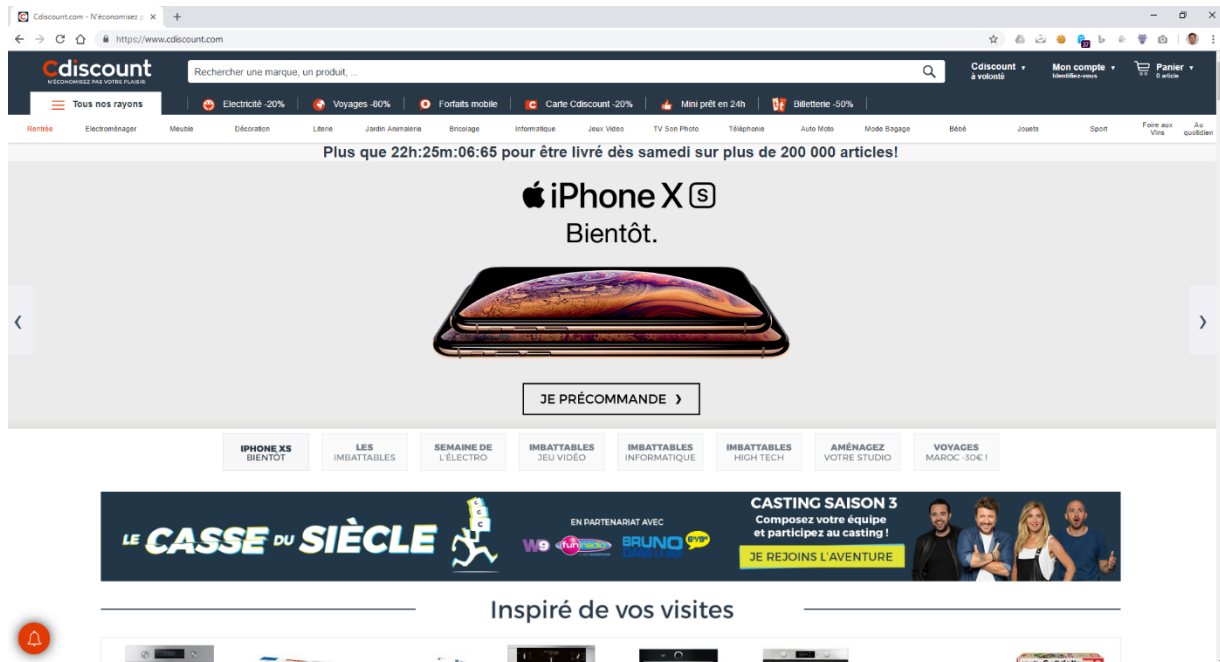
Variable	Type	Encrypted	Description
sid	<i>string</i>	True	Session ID
type	<i>string</i>	False	Event type
query	<i>string</i>	True	Search query written by the customer
nb_query_terms	<i>int</i>	False	Number of query terms
rcount	<i>int</i>	False	Number of results returned
pn	<i>int</i>	False	Page result number
facets	<i>string</i>	True	Filters added
products	<i>stringified JSON</i>	True	List of product objects returned
dproducts	<i>stringified JSON</i>	True	List of product IDs returned
rh	<i>int</i>	False	Screen resolution (height)
rw	<i>int</i>	False	Screen resolution (width)
device	<i>string</i>	True	Customer device
idcar	<i>string</i>	True	Carousel ID where the product has been clicked/added to basket/bought
carproducts	<i>stringified JSON</i>	True	Product list seen on the carousel where the product has been clicked/added to basket/bought
sku	<i>string</i>	True	Product ID displayed to the user
offerid	<i>string</i>	True	Offer ID related to the product ID clicked/added to basket/bought
quantity	<i>int</i>	False	Number of products added to basket or purchased
stype	<i>string</i>	True	Seller type : Cdiscount or Marketplace
sname	<i>string</i>	True	Seller name
ff	<i>boolean</i>	False	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount
oidcar	<i>string</i>	True	Carousel ID where the product has been clicked/added to basket/bought

Variable	Type	Encrypted	Description
ocarproducts	<i>stringified JSON</i>	True	Product list seen on the carousel when the product has been clicked/added to basket/bought
oquery	<i>string</i>	True	Search query written by the customer when the product has been clicked/added to basket/bought
orcount	<i>int</i>	False	Number of results returned when the product has been clicked/added to basket/bought
ofacets	<i>stringified JSON</i>	True	Filters added when the product has been clicked/added to basket/bought
opn	<i>int</i>	False	Page result number when the product has been clicked/added to basket/bought
odproducts	<i>stringified JSON</i>	True	List of product IDs return when the product has been clicked/added to basket/bought
oproducts	<i>stringified JSON</i>	True	List of products objects return by the search engine when the product has been clicked/added to basket/bought
siteid	<i>string</i>	True	Website, tablet or phone
duration	<i>string</i>	False	Event duration
type_simplified	<i>string</i>	False	Simplified event type

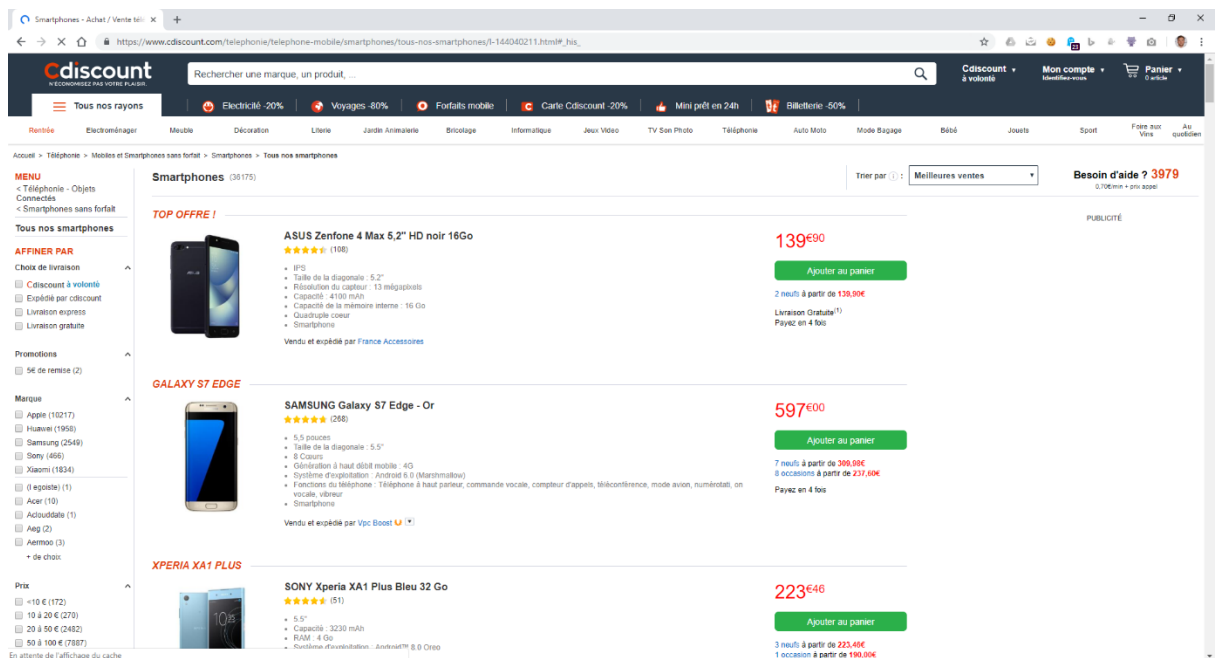
# Cdiscount page types

There are 9 distinct types of web pages detailed below

## PA (landing page)



## LP (list of products)



## LR (list of results) a.k.a SEARCH

iPhone x - Achat / Vente pas cher - X

https://www.cdiscount.com/search/10/iphone%20x.html#\_his

**cdiscount**  
N'ÉCONOMISEZ PAS VOTRE PLAISIR

Tous nos rayons

Electricité -20% | Voyages -80% | Forfaits mobile | Carte Cdiscount -20% | Mini prêt en 24h | Batterie -50%

Reboute | Electronique | Meuble | Décoration | Lingerie | Jardin Aménagement | Bricolage | Informatique | Jeux Vidéo | TV Son Photo | Téléphone | Auto Moto | Mode Bagage | Bébé | Jouets | Sport | Pense aux Vies | Au quotidien

Accueil > Tous les produits > iPhone x >

**CATEGORIES**  
- Téléphone - gps  
Smartphone (5388)

**AFFINER PAR**  
Choix de livraison  
☐ Cdiscount à volonté  
☐ Expédié par cdiscount  
☐ Livraison express  
☐ Livraison gratuite  
Promotions  
☐ 5€ de remise (2)  
Pays de Livraison  
☐ Allemagne (135)  
☐ Belgique (135)  
☐ Espagne (135)  
☐ France (5385)  
☐ Italie (135)  
Neuf ou occasion  
☐ Neuf (872)  
☐ Occasion (4457)  
☐ Reconditionné (57)  
Sécurité  
☐ Empreintes digitales (1935)  
☐ Reconnaissance faciale (37)  
Vendeur  
☐ Immédiat

**iPhone x** (5388) | iPhone 8 | iPhone 7 | iPhone 8 plus | iPhone | iPhone 6 |

Trier par : Pertinence

**Besoin d'aide ? 3979**  
Téléphone - pas d'aide

**TOP VENTE**

**APPLE iPhone X gris sidéral 64Go**  
★★★★★ (48) - Produit Cdiscount à volonté  
Produit disponible à la location  
• Super Retina HD  
• Taille de la diagonale : 5,8"  
• Résolution du capteur : 12 mégapixels  
• Capacité de la mémoire interne : 64 Go  
• Orientation à haut débit mobile : 4G  
• Protection : Revêtement céramique antiréflexe  
• Smartphone  
Vendu et expédié par Cdiscount

1069€00 4160,00€  
90€ d'économie  
Ajouter au panier  
23 neufs et 12 occasions à partir de 629,00€  
0 Retrait en magasin  
Livraison gratuite<sup>(1)</sup>  
Payez en 4 fois

**MEILLEUR AVIS**

**APPLE iPhone 8 Plus rouge 64Go Edition Spéciale**  
★★★★★ (11) - Produit Cdiscount à volonté  
• 5,5 pouces  
• Taille de la diagonale : 5,5"  
• 8 Coeurs  
• Orientation à haut débit mobile : 4G  
• Système d'exploitation : iOS 11  
• Couleur du boîtier : Rouge mat  
• Smartphone  
Vendu par G4Pays et expédié par Cdiscount

747€99 949,00€  
171€ d'économie  
Ajouter au panier  
17 neufs à partir de 747,00€  
1 occasion à partir de 629,00€  
Livraison gratuite<sup>(1)</sup>  
Payez en 4 fois

**A DECOUVRIR**

**APPLE iPhone X 64Go Gris sidéral**  
★★★★★ (8)  
• 5,8" - Super AMOLED capacitive touchscreen  
• Taille de la diagonale : 5,8"  
• Résolution du capteur : 12 mégapixels  
• Capacité : 256Go  
• Smartphone

1018€06 4138,00€  
120€ d'économie  
Ajouter au panier  
4 neufs à partir de 499,00€

## CAROUSEL

Mon Panier Cdiscount.com

https://www.cdiscount.com/basket.html#\_his

**VOTRE PANIER EST VIDE...**

**N'ÉCONOMISEZ PAS VOTRE PLAISIR.**









DES MILLIONS DE PRODUITS DANS 15 UNIVERS SPÉCIALISÉS

COMMENCEZ VOS ACHATS










En vous connectant à votre compte Cdiscount, vous pourrez mémoriser directement les articles qui vous auront plu. Et oui, en navigant connecté sur le site, rien ne se perd (rien ne se transforme non plus remarquez) et vous retrouverez le fil facilement lors d'une prochaine connexion, où que vous soyez.

Me connecter

**TOP VENTES**

 <b>APPLE MacBook Air</b> M002PWA - 13 pouces - Intel ★★★★★ (100) <b>939€99</b>	 <b>FIFA 19 Jeu PS4</b> SE DE REMISE ★★★★★ (100) <b>54€99</b> 69,67€ 7% d'économie	 <b>SAMSUNG UE55MU5222 TV</b> LED Incurve UHD 138 cm (55") ★★★★★ (285) <b>699€99</b> 784,34€ 84€ d'économie	 <b>CANDY DVS1410THC38 - Lave</b> Ringe Rotatif - 19 kg ★★★★★ (106) <b>329€99</b> 670,00€ 249€ d'économie	 <b>HP PC Portable Pavilion 15</b> i4630M - 15,6" FHD - 5-S ★★★★★ (196) <b>649€99</b> 897,98€ 247€ d'économie	 <b>APPLE iPhone 7 noir 32Go</b> ★★★★★ (196) <b>599€99</b> 830,00€ 39€ d'économie	 <b>SAMSUNG UE40KU6456 TV</b> LED UHD 103cm (40") - Smart ★★★★★ (223) <b>589€99</b>	 <b>Ordnance ZwiBox</b> ★★★★★ (100) <b>699€99</b> 109€ d'économie
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**Inspiré de vos visites :**

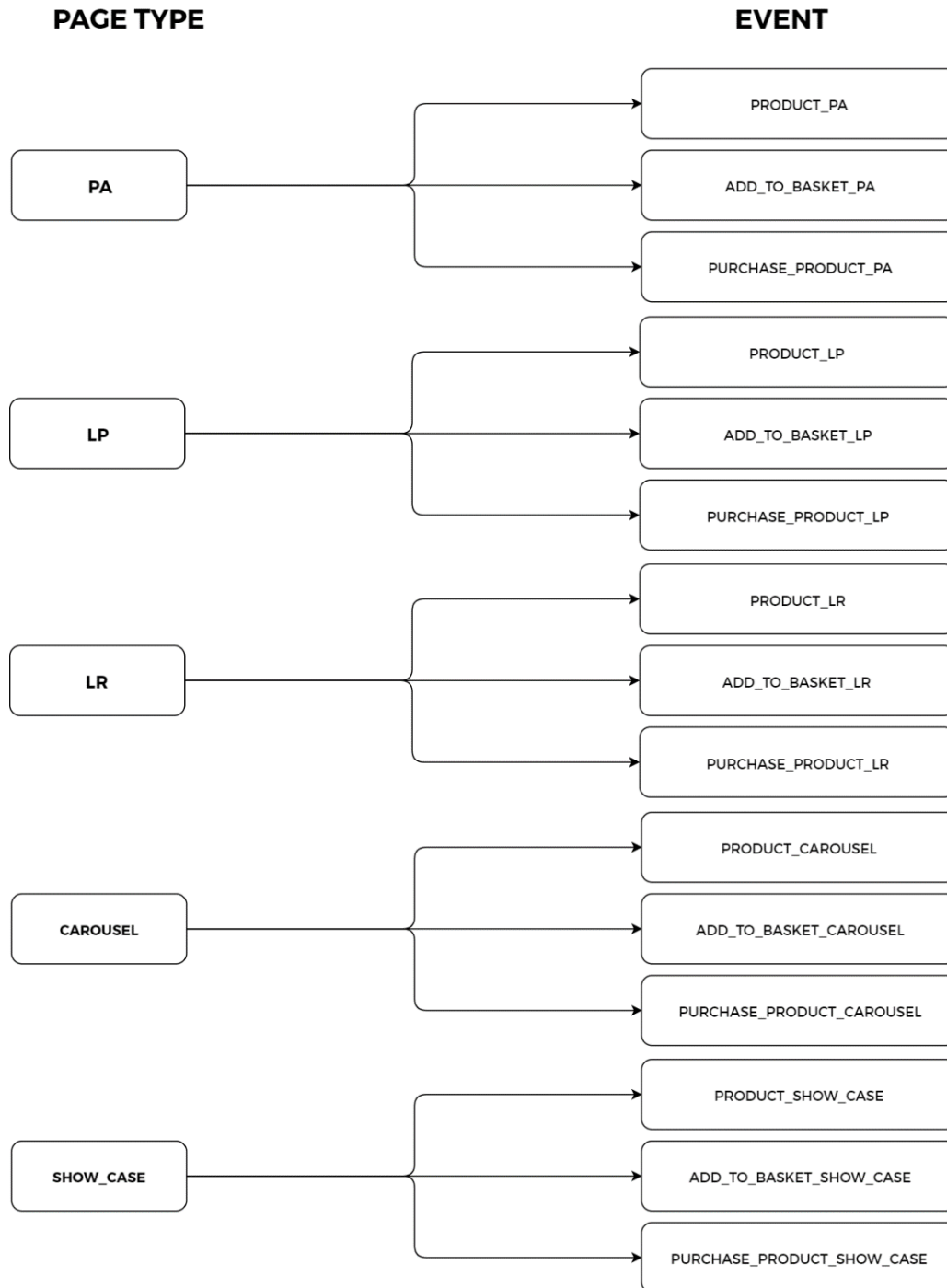










## SHOW\_CASE



## 3 events per page type

Looking at the product page, adding the product to the basket, and then purchasing the product.



**Example:** we can follow a client browsing steps during one session:

- A client is on Cdiscount landing page (type=PA)

- He looks at a product Carousel (type=CAROUSEL)
- He searches "iphone 6s" on search bar (type=SEARCH)



- He adds the product "11dW116I8R9I5" to his basket directly from the search results page (type=ADD\_TO\_BASKET\_LR)

#### RECONDITIONNÉE



#### Apple iPhone 6s Or 64Go Smartphone Débloqué (Reconditionné)

★★★★★ (37)

Occasion - Comme neuf

iPhone 6S 64 Grade A+, AUCUNE trace d'usure, débloqué tous opérateurs, testé sur 25 points de contrôle, livré en 48H en boîte blanche avec accessoires neufs (kit piéton, câble data, chargeur, aiguille sim ). Smartphone Recond.

Vendu et expédié par Smarter

**248€68**

15 occasions à partir de **225,00€**

Ajouter au panier

Livraison Gratuite<sup>(1)</sup>  
Payez en 4 fois

- He has bought the product "11dW116I8R9I5" (type=PURCHASE\_PRODUCT\_LR)

sid	type	query	sku	oquery	duration
8rBidnQL1B0oQ0oKuu61M4rURS wnv91	PA				0 days 00:00:00.000000 000
8rBidnQL1B0oQ0oKuu61M4rURS wnv91	CAROUSEL				0 days 00:00:08.792333 100
8rBidnQL1B0oQ0oKuu61M4rURS wnv91	SEARCH	iphon e 6s			0 days 00:00:52.214568 900
8rBidnQL1B0oQ0oKuu61M4rURS wnv91	ADD_TO_BASKET_LR		11dW116I8R 9I5	iphone 6s	0 days 00:01:02.244364 600
8rBidnQL1B0oQ0oKuu61M4rURS wnv91	PURCHASE_PRODUC T_LR		11dW116I8R 9I5	iphone 6s	0 days 00:01:14.927493 300

# Example

We can follow a client browsing steps during one session:

Sid	type	query	sku	oquery	duration
8rBidnQL1B0oQ0oKuu61M4rURSwnv91	PA				0 days 00:00:00.000000000
8rBidnQL1B0oQ0oKuu61M4rURSwnv91	CAROUSEL				0 days 00:00:08.792333100
8rBidnQL1B0oQ0oKuu61M4rURSwnv91	SEARCH	iphone 6s			0 days 00:00:52.214568900
8rBidnQL1B0oQ0oKuu61M4rURSwnv91	ADD_TO_BASKET_LR		11dW116I8R9I5	iphone 6s	0 days 00:01:02.244364600
8rBidnQL1B0oQ0oKuu61M4rURSwnv91	PURCHASE_PRODUC T_LR		11dW116I8R9I5	iphone 6s	0 days 00:01:14.927493300

- A client is on Cdiscount landing page (type=PA)
- He looks at a product Carousel (type=CAROUSEL)
- He searches "iphone 6s" on search bar (type=SEARCH)



- He adds the product "11dW116I8R9I5" to his basket directly from the search results page (type=ADD\_TO\_BASKET\_LR)

## RECONDITIONNE



### Apple iPhone 6s Or 64Go Smartphone Débloqué (Reconditionné)

★★★★★ (37)

Occasion - Comme neuf

iPhone 6S 64 Grade A+, AUCUNE trace d'usure, débloqué tous opérateurs, testé sur 25 points de contrôle, livré en 48H en boîte blanche avec accessoires neufs (kit piéton, câble data, chargeur, aiguille sim ). Smartphone Recond.

Vendu et expédié par Smarter

**248€68**

15 occasions à partir de **225,00€**

Ajouter au panier

Livraison Gratuite<sup>(1)</sup>  
Payez en 4 fois

- He has bought the product "11dW116I8R9I5" (type=PURCHASE\_PRODUCT\_LR)

# Annex

Next is the detailed description of each variable associated to a particular type of event.

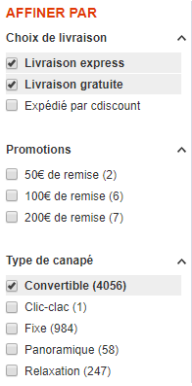
## Variables common to all types



Variable	Description	Example
sid	Session ID	"TY0SqNovRNcdnO1hGtTz6BGD4dtl1DOVuDRCS28mNe2W3Jb0hehmU129JPtX/J6b"
type	Event type	"ADD_TO_BASKET_LR"
type_simplified	Simplified event type	"ADD_TO_BASKET"
rh	Screen resolution (height)	779
rw	Screen resolution (width)	1560
duration	Time elapsed since the beginning of the session	'0 days 00:03:34.165885500'
device	Customer device	A device ID : 3 level category
siteid	Site ID	3 level category : Website, tablet or phone

# ADD\_TO\_BASKET\_CAROUSEL

Variable	Type	Description	Example
sku	string	Product ID added to the basket	"<product_id>"
offerid	string	Offer ID related to the sku (product ID) added to the basket	"<offer_id>"
quantity	int	Number of products added to the basket	1
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller type is not Cdiscount but storage and delivery are provided by Cdiscount	False
oidcar	string	Carousel ID from which the product was added to the basket	"<carousel_id>"
ocarproducts	<i>stringified JSON</i>	<p>Product list seen on the carousel when the product was added to the basket</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>sellerid refers to the Seller ID</li> <li>rate is the average rate given by users</li> <li>rvoter is the number of users that gave a rate to the product</li> <li>pos refers to the product rank in the carousel</li> <li>isinstock is True when the product is available in stock, False otherwise</li> </ul>	<pre>[ { 'sku': '&lt;sku_1&gt;', 'offerid': '&lt;offerid_1&gt;', 'sellerid': '&lt;sellerid_1&gt;', 'rate': 0.0, 'pos': 1, 'rvoter': 0.0, 'prices': 0.0, 'isinstock': True }, { 'sku': '&lt;sku_2&gt;', 'offerid': '&lt;offerid_2&gt;', 'sellerid': '&lt;sellerid_2&gt;', 'rate': 0.0, 'pos': 2, 'rvoter': 0.0, 'prices': 0.0, 'isinstock': True }, ... ]</pre>

Variable	Type	Description	Example
rcount	int	Number of products displayed in the LIST_PRODUCT page.	44
pn	int	Page result number	1, 2, 3, ...
products	stringified JSON	List of product objects seen by the user in the LIST_PRODUCT page <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price nomalized according to the above formula: <math display="block">\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{prices}})}</math> </li> <li>meth is the product placement method</li> <li>stype is the seller type: Cdiscount/ Marketplace</li> </ul>	<pre>[ { 'sku': '&lt;sku_1&gt;', 'offerid': '&lt;offerid_1&gt;', 'price': 3.37, 'meth': '&lt;meth_1&gt;', 'stype': '&lt;stype_1&gt;' }, { 'sku': '&lt;sku_2&gt;', 'offerid': '&lt;offerid_2&gt;', 'price': 66.67, 'meth': '&lt;meth_2&gt;', 'stype': '&lt;stype_2&gt;' }, ... ]</pre>
facets	stringified JSON	Active filters. -> {'<filter_id>': number of active filters}	 <pre>{ "Choix de livraison": 2, "Type de canapé": 1 }</pre>
sku	string	Product ID added to the basket	"<product_id>"
offerid	string	Offer ID related to the sku (product ID) added to the basket	"<offer_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
quantity	int	Number of products added to basket	1

# ADD\_TO\_BASKET\_LP

# ADD\_TO\_BASKET\_LR

Variable	Type	Description	Example
facets	stringified JSON	Active filters. -> {filter_id_#: number of filter selected}	<div> <div> <b>AFFINER PAR</b>  Choix de livraison ^  <input checked="" type="checkbox"/> Livraison express  <input checked="" type="checkbox"/> Livraison gratuite  <input type="checkbox"/> Expédié par cdiscount    Promotions ^  <input type="checkbox"/> 50€ de remise (2)  <input type="checkbox"/> 100€ de remise (6)  <input type="checkbox"/> 200€ de remise (7)    Type de canapé ^  <input checked="" type="checkbox"/> Convertible (4056)  <input type="checkbox"/> Clic-clac (1)  <input type="checkbox"/> Fixe (984)  <input type="checkbox"/> Panoramique (58)  <input type="checkbox"/> Relaxation (247) </div> <div> "{'Choix de livraison': 2, 'Type de canapé': 1}" </div> </div>
rcount	int	Number of products displayed in the SEARCH page.	28
nb_query_terms	int	Number of terms in the query	3
offerid	string	Offer ID related to the sku (product ID) added to the basket	"<offer_id>"
pn	int	Page result number	1
sku	string	Product ID added to the basket	"<product_id>"
query	string	Search query written by the user	"apple iphone 6s"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
oquery	string	Search query written by the user when the product was added to the basket	"apple iphone 6s"
orcount	int	Number of results returned by the search engine when the product was added to the basket	44
ofacets	stringified JSON	Similar to the variable "facets". List of active filters when the product was added to the basket. -> {'<filter_id>': number of active filters}	<div> <div> <b>AFFINER PAR</b>  Choix de livraison ^  <input checked="" type="checkbox"/> Livraison express  <input checked="" type="checkbox"/> Livraison gratuite  <input type="checkbox"/> Expédié par cdiscount    Promotions ^  <input type="checkbox"/> 50€ de remise (2)  <input type="checkbox"/> 100€ de remise (6)  <input type="checkbox"/> 200€ de remise (7)    Type de canapé ^  <input checked="" type="checkbox"/> Convertible (4056)  <input type="checkbox"/> Clic-clac (1)  <input type="checkbox"/> Fixe (984)  <input type="checkbox"/> Panoramique (58)  <input type="checkbox"/> Relaxation (247) </div> <div> "{'Choix de livraison': 2, 'Type de canapé': 1}" </div> </div>
opn	int	Page number in the search engine list of results from which the product was added to the basket	1

Variable	Type	Description	Example
odproducts	<i>stringified JSON</i>	List of skus (product ID) returned by the search engine when the product was added to the basket	['<sku_1>', '<sku_2>', ...]
oproducts	<i>stringified JSON</i>	<p>List of product objects returned by the search engine (SEARCH page) when the product was added to the basket</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price nomalized according to the above formula:</li> </ul> $\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{prices}})}$ <ul style="list-style-type: none"> <li>meth is the product placement method</li> <li>stype is the seller type: Cdiscount/Marketplace</li> </ul>	<pre>[ { 'sku': '&lt;sku_1&gt;', 'offerid': '&lt;offerid_1&gt;', 'price': 7.59, 'meth': '&lt;meth_1&gt;', 'stype': '&lt;stype_1&gt;' }, { 'sku': '&lt;sku_2&gt;', 'offerid': '&lt;offerid_2&gt;', 'price': 1.31, 'meth': '&lt;meth_2&gt;', 'stype': '&lt;stype_2&gt;' }, ... ]</pre>
quantity	int	Number of products added to basket	1

# ADD\_TO\_BASKET\_PA

Variable	Type	Description	Example
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
offerid	string	Offer ID related to the product ID added to basket	"<offer_id>"
sku	string	Product ID added to the basket	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
quantity	int	Number of products added to basket	1

# ADD\_TO\_BASKET\_SHOW\_CASE

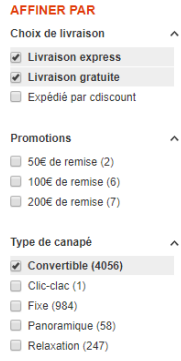
Variable	Type	Description	Example
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
offerid	string	Offer ID related to the product ID added to basket	"<offer_id>"
sku	string	Product ID added to the basket	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
quantity	int	Number of products added to basket	1

# CAROUSEL

Variable	Type	Description	Example
idcar	string	Carousel ID	"<id_car>"
carproducts	stringified JSON	<p>Product list seen on the carousel</p> <ul style="list-style-type: none"><li>■ sku is the Product ID</li><li>■ offerid refers to the Offer ID</li><li>■ sellerid refers to the Seller ID</li><li>■ rate is the average rate given by users</li><li>■ rvoter is the number of users that gave a rate to the product</li><li>■ pos refers to the product position into the carousel</li><li>■ instock is True when the product is available in stock, False otherwise</li></ul>	<pre>"[ { 'sku': '&lt;sku_1&gt;', 'offerid': '&lt;offerid_1&gt;', 'sellerid': '&lt;sellerid_1&gt;', 'rate': 0.0, 'pos': 1, 'rvoter': 0.0, 'prices': 0.0, 'isinstock': True }, { 'sku': '&lt;sku_2&gt;', 'offerid': '&lt;offerid_2&gt;', 'sellerid': '&lt;selledid_2&gt;', 'rate': 0.0, 'pos': 2, 'rvoter': 0.0, 'prices': 0.0, 'isinstock': True }, ... ]"</pre>



# LIST\_PRODUCT

Variable	Type	Description	Example
facets	stringified JSON	Active filters. -> {filter_id_#: number of filter selected}	 <pre>{   "Choix de livraison": 2,   "Type de canapé": 1 }</pre>
products	stringified JSON	<p>List of product objects seen by the user.</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price normalized according to the above formula</li> </ul> $\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{price}})}$ <ul style="list-style-type: none"> <li>meth is the product placement method</li> <li>stype is the seller type: Cdiscount or Marketplace</li> </ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'price': 42.48,     'meth': '&lt;meth_1&gt;',     'stype': '&lt;stype_1&gt;'   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'price': 49.02,     'meth': '&lt;meth_2&gt;',     'stype': '&lt;stype_2&gt;'   },   ... ]</pre>
rcount	int	Number of products returned	23
pn	int	Page result number	1, 2, 3, ...

# PA

When users are on the landing page, we do not have any information about what products they can see. This is why products field is empty.

# PRODUCT\_CAROUSEL

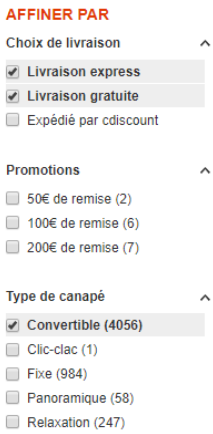
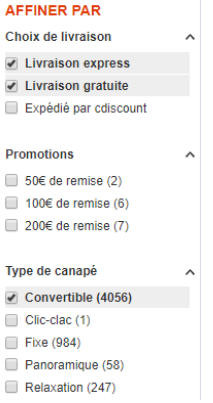
Variable	Type	Description	Example
sku	string	Product ID displayed to the user	"<product_id>"
offerid	string	Offer ID related to the product ID displayed	"<offer_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
oidcar	string	Carousel ID where the product was clicked	"<carousel_id>"
ocarproducts	<i>stringified JSON</i>	<p>Product list seen on the carousel when the product was clicked</p> <ul style="list-style-type: none"><li>• sku is the Product ID</li><li>• offerid refers to the Offer ID</li><li>• sellerid refers to the Seller ID</li><li>• rate is the average rate given by users</li><li>• rvoter is the number of users that gave a rate to the product</li><li>• pos refers to the product position into the carousel</li><li>• instock is True when the product is available in stock, False otherwise</li></ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'sellerid': '&lt;sellerid_1&gt;',     'rate': 0.0,     'pos': 1,     'rvoter': 0.0,     'instock': True   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'sellerid': '&lt;sellerid_2&gt;',     'rate': 0.0,     'pos': 2,     'rvoter': 0.0,     'instock': True   },   ... ]</pre>

# PRODUCT\_LP

Variable	Type	Description	Example
rcount	int	Number of products displayed in the LIST_PRODUCT page when the product was clicked.	44
pn	int	Page result number	1, 2, 3, ...
products	stringified JSON	<p>List of product objects seen by the user in the LIST_PRODUCT page when the product was clicked.</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price nomalized according to the above formula</li> </ul> $\text{product\_price} = 100 \times \frac{\text{product\_price}}{\max(\text{products\_price})}$ <ul style="list-style-type: none"> <li>meth is the product placement method</li> <li>stype is the seller type</li> </ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'price': 42.48,     'meth': '&lt;meth_1&gt;',     'stype': '&lt;stype_1&gt;'   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'price': 49.02,     'meth': '&lt;meth_2&gt;',     'stype': '&lt;stype_2&gt;'   },   ... ]</pre>
facets	stringified JSON	<p>Active added.</p> <p>-&gt; {'&lt;filter_id&gt;': number of filter selected}</p>	<div> <b>AFFINER PAR</b> <div> Choix de livraison <div> <input checked="" type="checkbox"/> Livraison express <input checked="" type="checkbox"/> Livraison gratuite <input type="checkbox"/> Expédié par cdiscount </div> Promotions <div> <input type="checkbox"/> 50€ de remise (2) <input type="checkbox"/> 100€ de remise (6) <input type="checkbox"/> 200€ de remise (7) </div> Type de canapé <div> <input checked="" type="checkbox"/> Convertible (4056) <input type="checkbox"/> Clic-clac (1) <input type="checkbox"/> Fixe (984) <input type="checkbox"/> Panoramique (58) <input type="checkbox"/> Relaxation (247) </div> </div> </div> <p>"{'Choix de livraison': 2, 'Type de canapé': 1}"</p>
sku	string	Product ID displayed to the user	"<product_id>"
offerid	string	Offer ID related to the product ID clicked	"<offer_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type : Cdiscount or Marketplace	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False



# PRODUCT\_LR

Variable	Type	Description	Example
facets	stringified JSON	Active filters. -> {filter_id_#: number of filter selected}	 <p>"{'Choix de livraison': 2, 'Type de canapé': 1}"</p>
rcount	int	Number of products displayed in the SEARCH page	44
nb_query_terms	int	Number of terms in the query	3
offerid	string	Offer ID related to the sku (product ID) clicked	"<offer_id>"
pn	int	Page result number when the product was clicked.	1
sku	string	Product ID displayed to the user	"<product_id>"
query	string	Search query written by the user	"apple iphone 6s"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
oquery	string	Search query written by the user when the product was clicked	"apple iphone 6s"
orcount	int	Number of results displayed in the SEARCH page when the product was clicked.	44
ofacets	stringified JSON	Similar to the variable "facets". List of active filters when the product was added to the basket. -> {'<filter_id>': number of active filters}	 <p>"{'Choix de livraison': 2, 'Type de canapé': 1}"</p>

Variable	Type	Description	Example
opn	int	Page number in the search engine list of results from which the product was clicked	1
odproducts	<i>stringified JSON</i>	List of skus (product ID) returned by the search engine when the product was clicked	['<sku_1>', '<sku_1>', ...]
oproducts	<i>stringified JSON</i>	<p>List of product objects returned by the search engine (SEARCH page) when the product was clicked.</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price nomalized according to the above formula:</li> </ul> $\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{prices}})}$ <ul style="list-style-type: none"> <li>meth is the product placement method</li> <li>stype is the seller type</li> </ul>	<pre>"[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'price': 7.59,     'meth': '&lt;meth_1&gt;',     'stype': '&lt;stype_1&gt;'   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'price': 1.31,     'meth': '&lt;meth_2&gt;',     'stype': '&lt;stype_2&gt;'   },   ... ]"</pre>

# PRODUCT\_PA

Variable	Type	Description	Example
sku	string	Product ID displayed to the user	"<product_id>"
offerid	string	Offer ID related to the product ID clicked	"<offer_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False



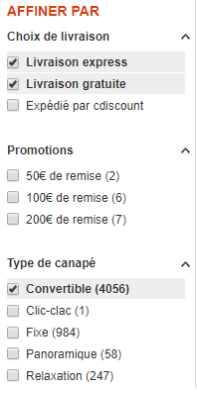
# PRODUCT\_SHOW\_CASE

Variable	Type	Description	Example
sku	string	Product ID displayed to the user	"<product_id>"
offerid	string	Offer ID related to the product ID clicked	"<offer_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False

# PURCHASE\_PRODUCT\_CAROUSEL

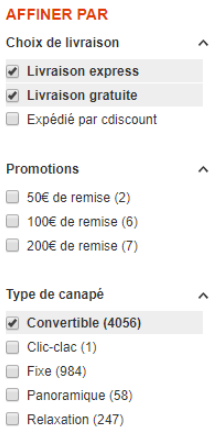
Variable	Type	Description	Example
sku	string	Product ID purchased	"<product_id>"
offerid	string	Offer ID related to the product ID purchased	"<offer_id>"
quantity	int	Number of products purchased	1
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
oidcar	string	Carousel ID where the product has been purchased	"<carousel_id>"
ocarproducts	<i>stringified JSON</i>	Product list seen on the carousel when the product was purchased <ul style="list-style-type: none"> <li>• sku is the Product ID</li> <li>• offerid refers to the Offer ID</li> <li>• sellerid refers to the Seller ID</li> <li>• rate is the average rate given by users</li> <li>• rvoter is the number of users that gave a rate to the product</li> <li>• pos refers to the product position into the carousel</li> <li>• instock is True when the product is available in stock, False otherwise</li> </ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'sellerid': '&lt;sellerid_1&gt;',     'rate': 0.0,     'pos': 1,     'rvoter': 0.0,     'instock': True   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'sellerid': '&lt;sellerid_2&gt;',     'rate': 0.0,     'pos': 2,     'rvoter': 0.0,     'instock': True   },   ... ]</pre>

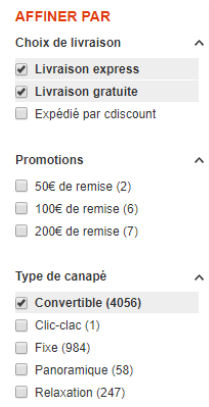
# PURCHASE\_PRODUCT\_LP

Variable	Type	Description	Example
facets	stringified JSON	Active filters. -> {filter_id_#: number of filter selected}	 <p>"{ 'Choix de livraison': 2, 'Type de canapé': 1 }"</p>
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
offerid	string	Offer ID related to the sku (product ID) purchased	"<offer_id>"
pn	int	Page result number	1, 2, 3, ...
products	stringified JSON	List of product objects seen by the user in the LIST_PRODUCT page <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price normalized according to the above formula:               <math display="block">\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{prices}})}</math> </li> <li>meth is the product placement method</li> <li>stype is the seller type: Cdiscount/ Marketplace</li> </ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'price': 3.37,     'meth': '&lt;meth_1&gt;',     'stype': '&lt;stype_1&gt;'   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'price': 66.67,     'meth': '&lt;meth_2&gt;',     'stype': '&lt;stype_2&gt;'   },   ... ]</pre>
quantity	int	Number of products purchased	1
rcount	int	Number of products displayed in the LIST_PRODUCT page	44
sku	string	Product ID purchased	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace



# PURCHASE\_PRODUCT\_LR

Variable	Type	Description	Example
facets	stringified JSON	Active filters. -> {filter_id_#: number of filter selected}	 <pre>{   "Choix de livraison": 2,   "Type de canapé": 1 }</pre>
rcount	int	Number of products displayed in the SEARCH page.	44
nb_query_terms	int	Number of terms in the query	3
offerid	string	Offer ID related to the sku (product ID) added to the basket	"<offer_id>"
pn	int	Page result number	1
sku	string	Product ID purchased	"<product_id>"
query	string	Search query written by the user	"apple iphone 6s"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
oquery	string	Search query written by the user when the product was added to the basket	"apple iphone 6s"
orcount	int	Number of results returned by the search engine when the product was added to the basket	44

Variable	Type	Description	Example
ofacets	stringified JSON	<p>Similar to the variable "facets".</p> <p>List of active filters when the product was added to the basket</p> <p>-&gt; {'&lt;filter_id&gt;': number of active filters}</p>	 <p>"{'Choix de livraison': 2, 'Type de canapé': 1}"</p>
opn	int	Page number in the search engine list of results from which the product was added to the basket	1
odproducts	stringified JSON	List of skus (product ID) returned by the search engine when the product was added to the basket	
oproducts	stringified JSON	<p>List of products objects return by the search engine when the product was added to the basket</p> <ul style="list-style-type: none"> <li>sku is the Product ID</li> <li>offerid refers to the Offer ID</li> <li>product price nomalized according to the above formula:</li> </ul> $\text{product\_price} = 100 \times \frac{\text{product\_price}}{\max(\text{products\_pri})}$ <ul style="list-style-type: none"> <li>meth is the product placement method</li> <li>stype is the seller type</li> </ul>	<pre>"[ { 'sku': '&lt;sku_1&gt;', 'offerid': '&lt;offerid_1&gt;', 'price': 7.59, 'meth': '&lt;meth_1&gt;', 'stype': '&lt;stype_1&gt;' }, { 'sku': '&lt;sku_2&gt;', 'offerid': '&lt;offerid_2&gt;', 'price': 1.31, 'meth': '&lt;meth_2&gt;', 'stype': '&lt;stype_2&gt;' }, ... ]"</pre>
quantity	int	Number of products purchased	1

# PURCHASE\_PRODUCT\_PA

Variable	Type	Description	Example
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
offerid	string	Offer ID related to the product ID purchased	"<offer_id>"
sku	string	Product ID purchased	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
quantity	int	Number of products purchased	1

# PURCHASE\_PRODUCT\_SHOW\_CASE

Variable	Type	Description	Example
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
offerid	string	Offer ID related to the product ID purchased	"<offer_id>"
sku	string	Product ID purchased	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
quantity	int	Number of products purchased	1



# PURCHASE\_PRODUCT\_UNKNOWN\_ORIGIN

Variable	Type	Description	Example
offerid	string	Offer ID related to the sku (product ID) bought	"<offer_id>"
sku	string	Product ID purchased	"<product_id>"
sname	string	Seller name	"<seller_name>"
stype	string	Seller type	Cdiscount or Marketplace
ff	boolean	True if the seller is not Cdiscount but storage and delivery are provided by Cdiscount	False
quantity	int	Number of products purchased	1

# SEARCH

Variable	Type	Description	Example
query	string	Search query written by the customer	"apple iphone 6s"
nb_query_terms	int	Number of terms in the query	3
rcount	int	Number of products displayed in the SEARCH page.	44
pn	int	Page result number	1, 2, 3, ...
products	stringified JSON	List of product objects returned by the search engine (SEARCH page) <ul style="list-style-type: none"> <li>• sku is the Product ID</li> <li>• offerid refers to the Offer ID</li> <li>• product price nomalized according to the above formula:  <math display="block">\text{product}_{\text{price}} = 100 \times \frac{\text{product}_{\text{price}}}{\max(\text{products}_{\text{price}})}</math> </li> <li>• meth is the product placement method</li> <li>• stype is the seller type: Cdiscount/Marketplace</li> </ul>	<pre>[   {     'sku': '&lt;sku_1&gt;',     'offerid': '&lt;offerid_1&gt;',     'price': 7.59,     'meth': '&lt;meth_1&gt;',     'stype': '&lt;stype_1&gt;'   },   {     'sku': '&lt;sku_2&gt;',     'offerid': '&lt;offerid_2&gt;',     'price': 1.31,     'meth': '&lt;meth_2&gt;',     'stype': '&lt;stype_2&gt;'   },   ... ]</pre>
dproducts	stringified JSON	List of skus (product ID) returned by the search engine	['<sku_1>', '<sku_2>', ...]
facets	stringified JSON	Active filters. -> {'<filter_id>': number of filter selected}	<p>"{'Choix de livraison': 2, 'Type de canapé': 1}"</p>

# SHOW\_CASE

When users are on a show case page, we do not have any information about what products they can see. This is why products field is empty.