I. Introduction

I am a student working on a thesis linked to the rate of completeness of events.

Goal is to assess the completeness of an event per Category. This aims to help event facilities to monitor their sales (Price, authorized Quantity, Categorization, KPI,…)

To do so I need to be able to build a dashboard with the figures per selected events on demand.

Information of completeness can be given through an official event seller by collecting the events where there is still availability per category and those which are complete.

In order to collet that information a bot would be required. Indeed refresh will be made every month to show trends on some specific events.

II. Requirement

The way I am thinking is with an excel sheet, we can inscribe the url of the event and from this collect the data through the bot:

Bot is simulating to take max tickets possible from category 1:

- o Possibility 1: it is possible ➔ Events is not full yet for category 1: "NOT FULL"
- o Possibility 2: It is not possible – only a few are available ➔ Event is nearly full for category 1: "ALMOST FULL"
- o Possibility 3: It is not possible to select any ticket ➔ Event is full for Category 1: "FULL"

Same logic can be done for all the available category per event selected.
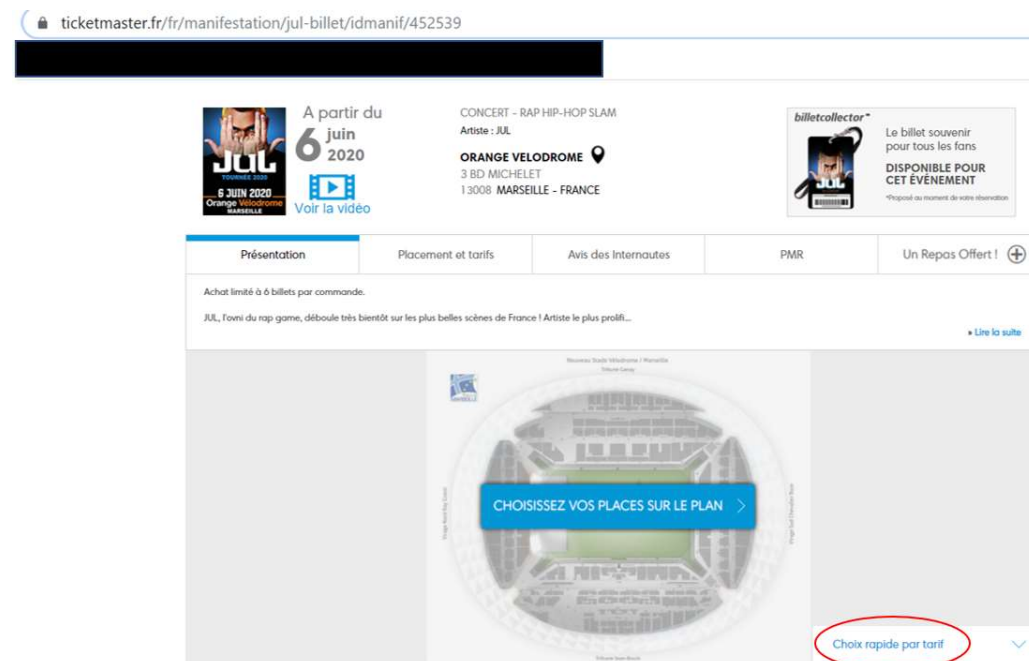
III. Interface available

There are 3 types of event interface in the Official ticket seller.

I will describe the behavior expected by the bot bellow.

1. First Type – with the plan of the event facility

Through the link bellow

https://www.ticketmaster.fr/fr/manifestation/jul-billet/idmanif/452539

The Bot needs to click in the red circled area to open a tab: Click on "Choix rapide par tarif".

Nouveau Stade Vélodrome / Marseille
Tribune Ganay

CAT1   CAT2   CAT3   PELOUSE

JUL
ORANGE VELODROME
MARSEILLE

6 PLACES CONTIGUES
O - RANG 49 - PLACE 12 - COQUE
O - RANG 49 - PLACE 11 - COQUE
O - RANG 49 - PLACE 10 - COQUE
O - RANG 49 - PLACE 9 - COQUE
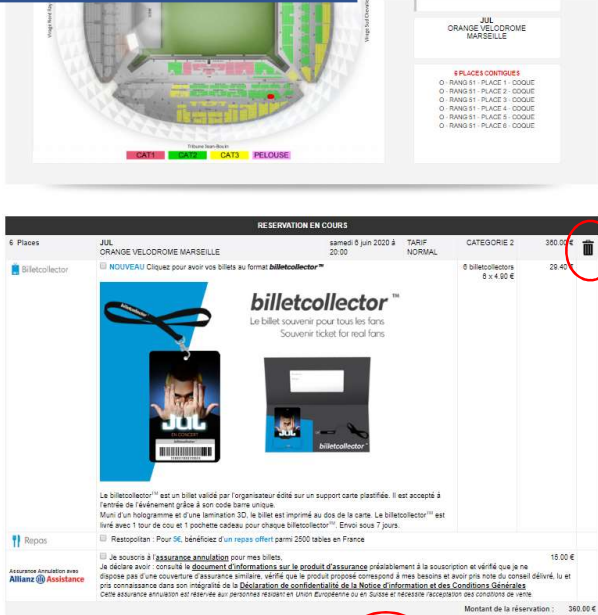O - RANG 49 - PLACE 8 - COQUE
O - RANG 49 - PLACE 7 - COQUE

If it is possible to select the maximum available tickets of CAT2 and we are on the confirmation webpage (like you can see on the left), it means the Event is not full for CAT2.

Report on the excel sheet the result for CAT2:"Not Full"

RESERVATION EN COURS							Durée pour finaliser votre commande
6 Places	JUL ORANGE VELODROME MARSEILLE	samedi 6 juin 2020 à 20:00	TARIF NORMAL	CATEGORIE 2	360.00 €	🗑	**19: 38**
Billetcollector	NOUVEAU Cliquez pour avoir vos billets au format **billetcollector™**			6 billetcollectors 6 x 4.90 €	29.40 €		**Votre panier**

🔒 ticketmaster.fr/fr/panier

JUL
ORANGE VELODROME
MARSEILLE

6 PLACES CONTIGUES
O - RANG 51 - PLACE 1 - COQUE
O - RANG 51 - PLACE 2 - COQUE
O - RANG 51 - PLACE 3 - COQUE
O - RANG 51 - PLACE 4 - COQUE
O - RANG 51 - PLACE 5 - COQUE
O - RANG 51 - PLACE 6 - COQUE

CAT1   CAT2   CAT3   PELOUSE

After being in the confirmation page, it is mandatory to remove the selected tickets from the account in order to continue to check availability from another category.

⇨ **Click on the trash (circled in red) or in "ANNULER".** *Both choices are possible.*

And proceed to check to the next category. (CAT1, CAT3, PELOUSE)

RESERVATION EN COURS						
6 Places	JUL ORANGE VELODROME MARSEILLE	samedi 6 juin 2020 à 20:00	TARIF NORMAL	CATEGORIE 2	360.00 €	🗑
Billetcollector	NOUVEAU Cliquez pour avoir vos billets au format **billetcollector™**			6 billetcollectors 6 x 4.90 €	29.40 €	

billetcollector™
Le billet souvenir pour tous les fans
Souvenir ticket for real fans

Le billetcollector™ est un billet validé par l'organisateur édité sur un support carte plastifiée. Il est accepté à l'entrée de l'événement grâce à son code barre unique.
Muni d'un hologramme et d'une lamination 3D, le billet est imprimé au dos de la carte. Le billetcollector™ est livré avec 1 tour de cou et 1 pochette cadeau pour chaque billetcollector™. Envoi sous 7 jours.

🍴 Repas   ☐ Restopolitan : Pour 9€, bénéficiez d'un repas offert parmi 2500 tables en France

Assurance Annulation avec **Allianz ⓘ Assistance**   ☐ Je souscris à l'assurance annulation pour mes billets.   15.00 €
Je déclare avoir : consulté le document d'informations sur le produit d'assurance préalablement à la souscription et vérifié que je ne dispose pas d'une couverture d'assurance similaire, vérifié que le produit proposé correspond à mes besoins et avoir pris note du conseil délivré, lu et pris connaissance dans son intégralité de la Déclaration de confidentialité de la Notice d'information et des Conditions Générales. Cette assurance annulation est réservée aux personnes résidant en Union Européenne ou en Suisse et nécessite acceptation des conditions de vente

Montant de la réservation :   360.00 €

ANNULER   AUTRE COMMANDE   VALIDER

Durée pour finaliser votre commande
1: 47
Votre panier

DÉCOUVREZ LES AUTRES ÉVÉNEMENTS DE CE LIEU :

For this example. The same methodology needs to be done for :

- CAT1
- CAT2
- CAT3
- PELOUSE

As we can see in the bellow PrintScreen, it is not possible to select tickets from CAT1 et PELOUSE.

» Lire la suite

Nouveau Stade Vélodrome / Marseille
Tribune Ganay

Impossible to select CAT1

| CAT1 | CAT2 | CAT3 | PELOUSE |

Choisissez vos places sur le plan

| CHOISISSEZ VOTRE SEANCE | samedi 6 juin 2020 à 20:00 ▼ |

	CAT1	CAT2	CAT3	PELOUSE
PLACEMENT	Epuisé²	Auto¹ ▼	Auto¹ ▼	Epuisé³
TARIF NORMAL	70.00 €	60.00 € 6 ▼	50.00 € 0 ▼	38.00 €

ANNULER   VALIDER

/idmanif/452539#

As it is not possible to select CAT1, it means the event is full for CAT1.

Report on the excel sheet the result for CAT1: "FULL"

2. Second Type – without the plan of the event facility

https://www.ticketmaster.fr/fr/manifestation/ninho-billet/idmanif/468002

🔒 ticketmaster.fr/fr/manifestation/ninho-billet/idmanif/468002

Paris   Lille   Lyon   Toulouse   Nantes   Marseille   Montpellier   Strasbourg   Nice   Bordeaux   Rennes   ⊕ de villes

🏠 > CONCERT > RAP HIP-HOP SLAM > NINHO

NINHO ★ ★ ★ ★ ★

A partir du
10 mars
2020

▶ Voir la vidéo

CONCERT - RAP HIP-HOP SLAM
Artiste : NINHO

ZENITH ARENA LILLE 📍
1 Boulevard Cites Unies
59000 LILLE - FRANCE

| Présentation | Placement et tarifs | Avis des Internautes | PMR | Un Repas Offert ! ⊕ |

Auteur de deux gros succès consécutifs avec M.I.L.S et Comme Prévu, Ninho est revenu avec M.I.L.S 2.0, mixtape surprise grâce à laquelle il a brillé e...

» Lire la suite

| CHOISISSEZ VOTRE SEANCE | mardi 10 mars 2020 à 20:00 ▼ |

	ASSIS	DEBOUT
PLACEMENT	PL LIBRE ▼	PARTERRE ▼
TARIF NORMAL	47.00 € 20 ▼	36.00 € 0 ▼

ANNULER   VALIDER

For each Category available, the bot will select the maximum tickets available. In our example we start with "ASSIS"

In our example it is 20.

Then the bot will click on validate

3. Third Type – with captcha

https://www.ticketmaster.fr/fr/manifestation/aya-nakamura-billet/idmanif/455222

The bot will have to fill the captcha to open the event facility webpage.

The process to retrieve information will be the same as presented previously.
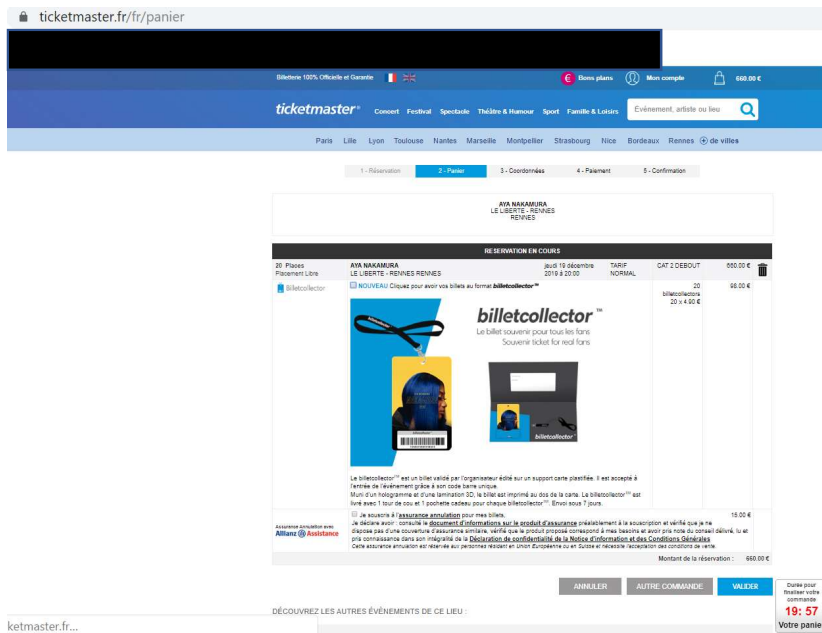
If it is possible to select the maximum available tickets of C2 DEBOUT and we are on the confirmation webpage (like you can see on the left), it means the Event is not full for C2 DEBOUT.

Report on the excel sheet the result for C2 DEBOUT:"Not Full"
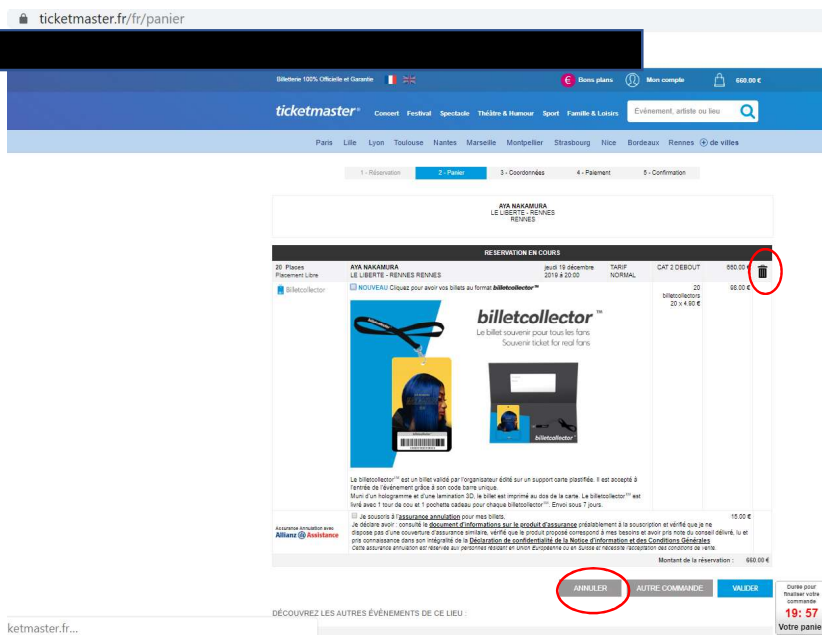
After being in the confirmation page, it is mandatory to remove the selected tickets from the account in order to continue to check availability from another category.

⇨ Click on the trash (circled in red) or in "ANNULER". *Both choices are possible.*

And proceed to check to the next categories (CARRE OR, C1 ASSIS, CAT3)

IV. Result of retrieving information

As there is 3 kind of identified process. If it is 3 separates way of doing, maybe in order to ease the dev, perhaps we can do as followed:

- Excel Sheet Tab1: **Facility Plan**

	A	B	C	D	E	F	G	H
1	Facility event Webpage	CAT1	CAT2	CAT3	PELOUSE	CARRE OR	EARLY	FOSSE
2	https://www.ticketmaster.fr/fr/manifestation/jul-billet/idmanif/452539	FULL	NOT FULL	NOT FULL	FULL			
3	https://www.ticketmaster.fr/fr/manifestation/stars-80-triomphe-billet/idmanif/437526	NOT FULL	NOT FULL			ALMOST FULL		
4	https://www.ticketmaster.fr/fr/manifestation/ninho-billet/idmanif/460416#	NOT FULL	NOT FULL		FULL	FULL	FULL	

Facility Plan | Without Facilty Plan | Captcha | ⊕

You can click on the Facility event webpage examples bellow

https://www.ticketmaster.fr/fr/manifestation/jul-billet/idmanif/452539

https://www.ticketmaster.fr/fr/manifestation/stars-80-triomphe-billet/idmanif/437526

https://www.ticketmaster.fr/fr/manifestation/ninho-billet/idmanif/460416#

All the Facility event webpage inscribed manually into the Excell Sheet.

All the category (in yellow in our example) needs to be implemented thanks to the bot:

By identifying the existing Category in the facility event.

- for Line 2 (idmanif/452539): only "CAT1", "CAT2", "CAT3" and "PELOUSE"
- for line 3 (idmanif/437526): only "CARRE OR", "CAT1" and "CAT2
- for line 3 (idmanif/460416#): only "CARRE OR", "CAT1", "EARLY", "CAT2" and "FOSSE"

Or to ease the Dev. Those Category can be added manually into the excel sheet.

Macro will give the result: FULL, NOT FULL ALMOST FULL.

The bot needs to fill per event and per category if is it full, almost full or not full

Example of **ALMOST FULL** situation (see next page). (CARRE OR for https://www.ticketmaster.fr/fr/manifestation/stars-80-triomphe-billet/idmanif/437526)

For Tab 2 (Without Facilty Plan) and Tab 3 (Captcha) of the Excel Sheet, the same logic will be taken.