



# Analysis of Ticketmaster API Data

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## Core Message:

We believe that there are core similarities about events and venues across the nation.

## Questions:

What are the different types of event from the data? What are the Sub Genre of events?


Are there any correlations with having a outside promoter vs. using the venues own promoter?

What were the best times to hold a event based on the different types of events?

# How to get the Ticket Master API

```
{
  "_embedded": {
    "events": [
      {
        "name": "Eagles",
        "type": "event",
        "id": "G5vzZ4g6yzQHe",
        "test": false,
        "url": "https://www.ticketmaster.com/eagles-denver-colorado-03-28-2020/event/1E005751F9E1AF02",
        "locale": "en-us",
        "images": [
          {
            "ratio": "4_3",
            "url": "https://s1.ticketm.net/dam/a/c40/e0f4dedd-b435-4b8b-8fd0-e73e47e93c40_851341_CUSTOM.jpg",
            "width": 305,
            "height": 225,
            "fallback": false
          },
          {
            "ratio": "16_9",
            "url": "https://s1.ticketm.net/dam/a/c40/e0f4dedd-b435-4b8b-8fd0-e73e47e93c40_851341_TABLET_LANDSCAPE_16_9.jpg",
            "width": 1024,
            "height": 576,
            "fallback": false
          },
          {
            "ratio": "3_2",
            "url": "https://s1.ticketm.net/dam/a/c40/e0f4dedd-b435-4b8b-8fd0-e73e47e93c40_851341_RETINA_PORTRAIT_3_2.jpg",
            "width": 640,
            "height": 427,
            "fallback": false
          }
        ]
      }
    ]
  }
}
```

Raw



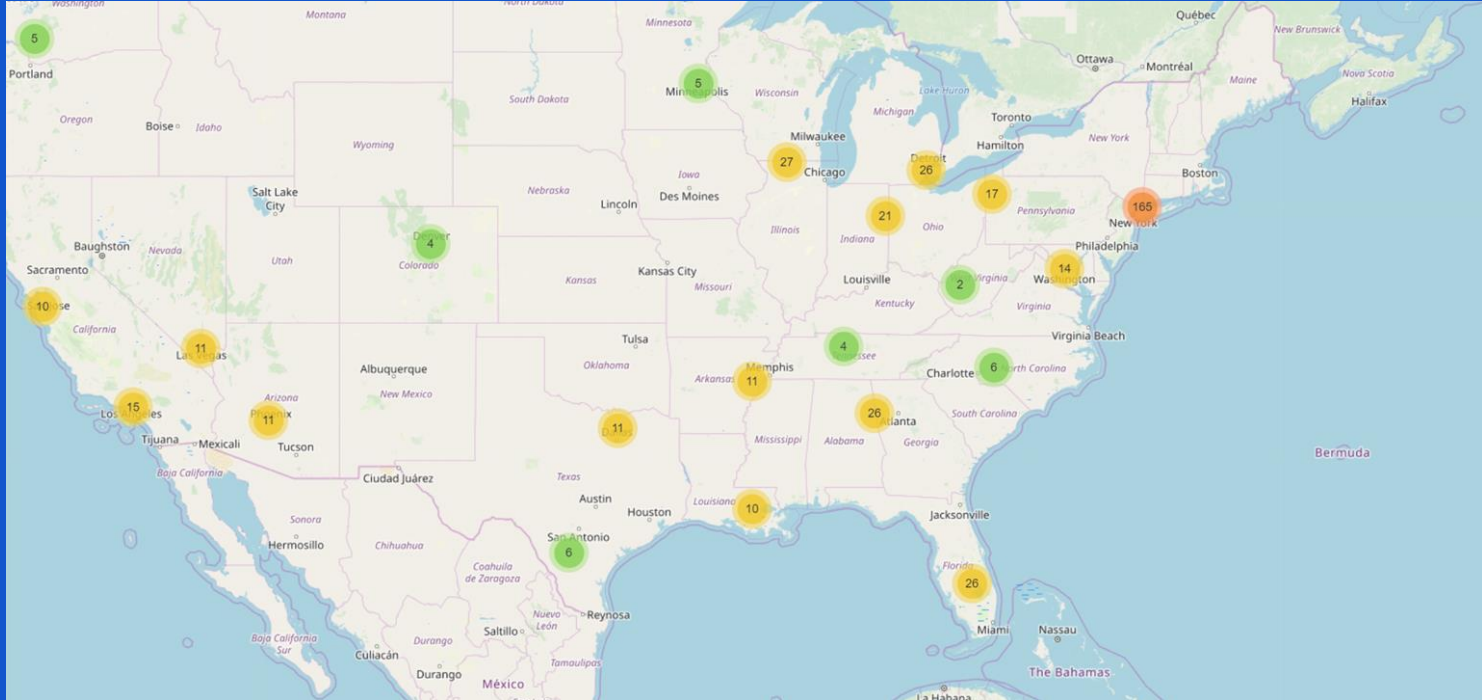
# Categorizing the Information in Pandas And Plot with Mat plot lib


```
baseurl = "https://app.ticketmaster.com/discovery/v2/events.json?"
name = []
presale_name = []
presale_startdate = []
presale_enddate = []
start_dateTime = []
start_localTime = []
start_localDate = []
start_timeZone = []
classification_segment = []
classification_genre = []
classification_subgenre = []
classification_family = []
promoter_name = []
min_price = []
max_price = []
info_ticketlimit = []
city_name = []
state_name = []
code_postal = []
address = []
long_location = []
venue = []
attractions = []
lat_location = []
upcoming_EventsTotal = []
upcoming_EventsTicketMaster = []
for i in range(50):
    response = requests.get(baseurl+"page="+str(i)+"&"+countryCode="+US+"&"+apiKey="+api_key").json()
    for j in range(20):
        try:
            name.append(response["_embedded"]["events"][j]["name"])
        except KeyError:
            name.append("no value")
        try:
            presale_name.append(response["_embedded"]["events"][j]["sales"]["presales"][0]["name"])
        except KeyError:
            presale_name.append("no value")
        try:
            venue.append(response["_embedded"]["events"][j]["_embedded"]["venues"][0]["name"])
        except KeyError:
            venue.append("no value")
        try:
            attractions.append(response["_embedded"]["events"][j]["_embedded"]["attractions"][0]["name"])
        except KeyError:
            attractions.append("no value")
        try:
            presale_startdate.append(response["_embedded"]["events"][j]["sales"]["presales"][0]['startDateTime'])
        except KeyError:
            presale_startdate.append("no value")
        try:
            presale_enddate.append(response["_embedded"]["events"][j]["sales"]["presales"][0]['endDateTime'])
        except KeyError:
            presale_enddate.append("no value")
        try:
            start_timeZone.append(response["_embedded"]["events"][j]["dates"]["timezone"])
        except KeyError:
```

# What the CSV file looks like:

EventName	PreSaleName	PreSaleStart	PreSaleEnd	StartDate	StartLocal	StartLocalDate	StartTime	EventCategory	Genre	SubGenre	Family	PromoterName	MinPrice	MaxPrice
Eagles	American	2019-10-2	2019-10-2	2020-04-2	20:00:00	4/24/2020	America/L	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750
Eagles	Official Pla	2019-10-2	2020-02-1	2020-02-1	19:30:00	2/18/2020	America/N	Music	Rock	Pop	FALSE	PROMOTED BY VENUE	129	750
New York	Season Tic	2019-04-1	2019-04-2	2019-11-0	20:15:00	11/4/2019	America/N	Sports	Football	NFL	FALSE	NFL REGULAR SEASON	125	775
Buffalo Bil	Schedule F	2019-04-1	2019-05-0	2019-10-2	13:00:00	10/27/2019	America/N	Sports	Football	NFL	FALSE	NFL REGULAR SEASON	73	250
Indiana Pa	Micro Buy	2019-09-2	2019-09-2	2019-12-1	19:00:00	12/17/2019	America/Ir	Sports	Basketball	NBA	FALSE	NBA REGULAR SEASON	50	2356
Eagles	American	2019-10-1	2019-10-1	2020-02-0	20:00:00	2/7/2020	America/N	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750
Eagles	American	2019-10-1	2019-10-1	2020-03-0	20:00:00	2/29/2020	America/C	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	129	750
Kanye We	Presale	2019-10-2	2019-10-2	2019-10-2	12:00:00	10/27/2019	America/L	Music	Hip-Hop/R	French Ra	FALSE	PROMOTED BY VENUE	10	10
Brooklyn N	American	2019-08-1	2019-08-1	2020-01-2	20:00:00	1/23/2020	America/N	Sports	Basketball	NBA	FALSE	NBA REGULAR SEASON	250	10000
Eagles	American	2019-10-1	2019-10-1	2020-02-0	20:00:00	2/8/2020	America/N	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750
Eagles	Official Pla	2019-10-1	2020-02-1	2020-02-1	20:00:00	2/15/2020	America/N	Music	Rock	Pop	FALSE	PROMOTED BY VENUE	129	750
Eagles	Official Pla	2019-10-1	2020-02-1	2020-02-1	20:00:00	2/14/2020	America/N	Music	Rock	Pop	FALSE	PROMOTED BY VENUE	129	750
Eagles	Live Natio	2019-10-1	2019-10-1	2020-04-1	20:00:00	4/18/2020	America/L	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750
Eagles	American	2019-10-1	2019-10-1	2020-04-1	20:00:00	4/11/2020	America/L	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	129	750
Eagles	American	2019-10-1	2019-10-1	2020-03-0	20:00:00	3/1/2020	America/C	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	129	750
Eagles	Live Natio	2019-10-1	2019-10-1	2020-04-1	20:00:00	4/17/2020	America/L	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750
Pittsburgh	Season Tic	2019-04-2	2019-04-2	2019-11-1	16:25:00	11/10/2019	America/N	Sports	Football	NFL	FALSE	NFL REGULAR SEASON	64	366
Eagles	American	2019-10-2	2019-10-2	2020-02-1	19:30:00	2/11/2020	America/N	Music	Rock	Pop	FALSE	LIVE NATION MUSIC	99	750

# Using Google Maps API to display the Ticketmaster venues data





This Venue Management company wants to buy theatres and concert venues. They have hired our Consulting group to find out what other venue groups are doing.

If all acts were the same how do you run a successful venue business?

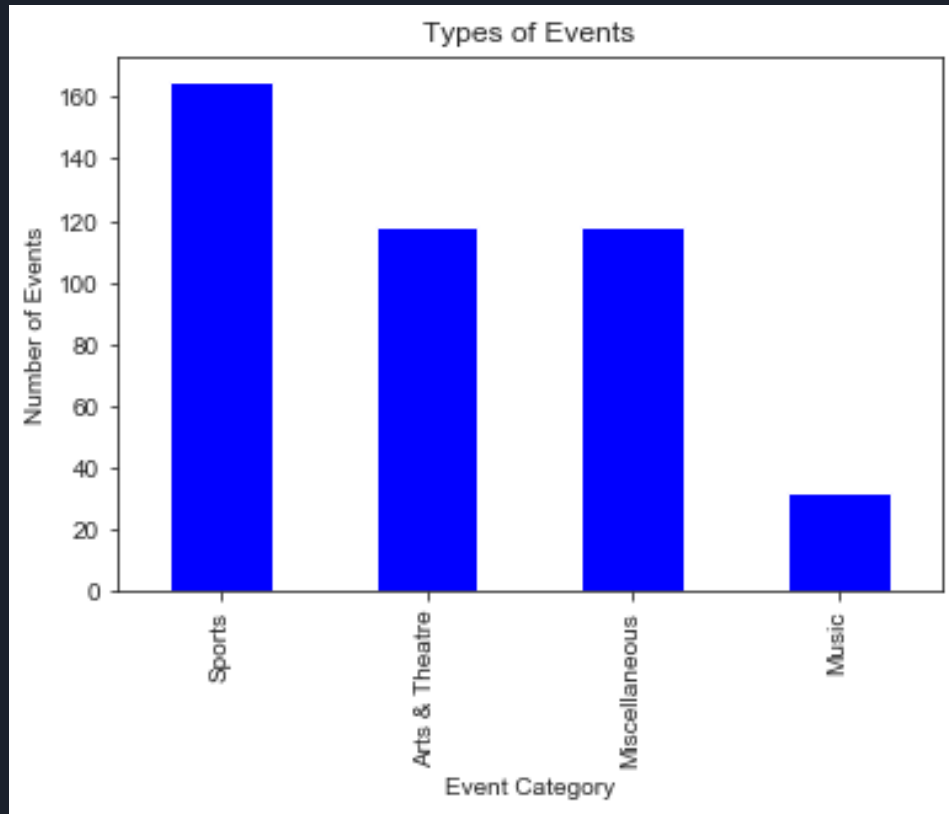
What are some common similarities within the nations venues?

Where are the current venues? Can you map them?

# What are your types of events?

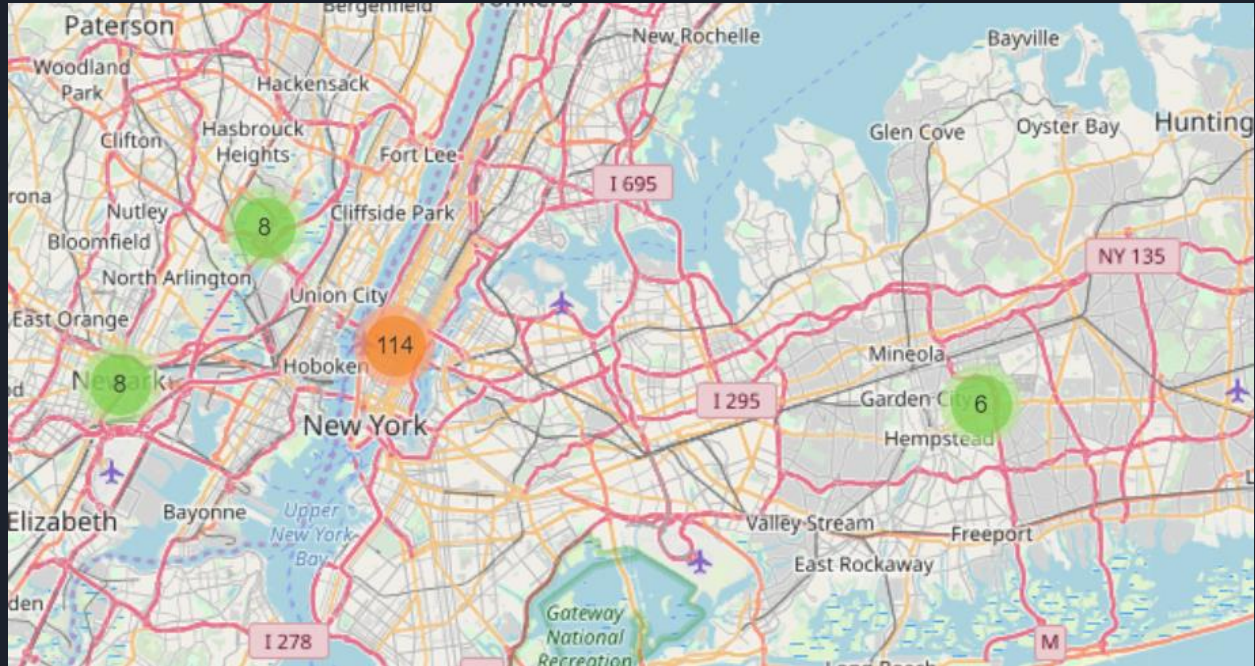
Criteria:

Use data from multiple types of events from around the nation.

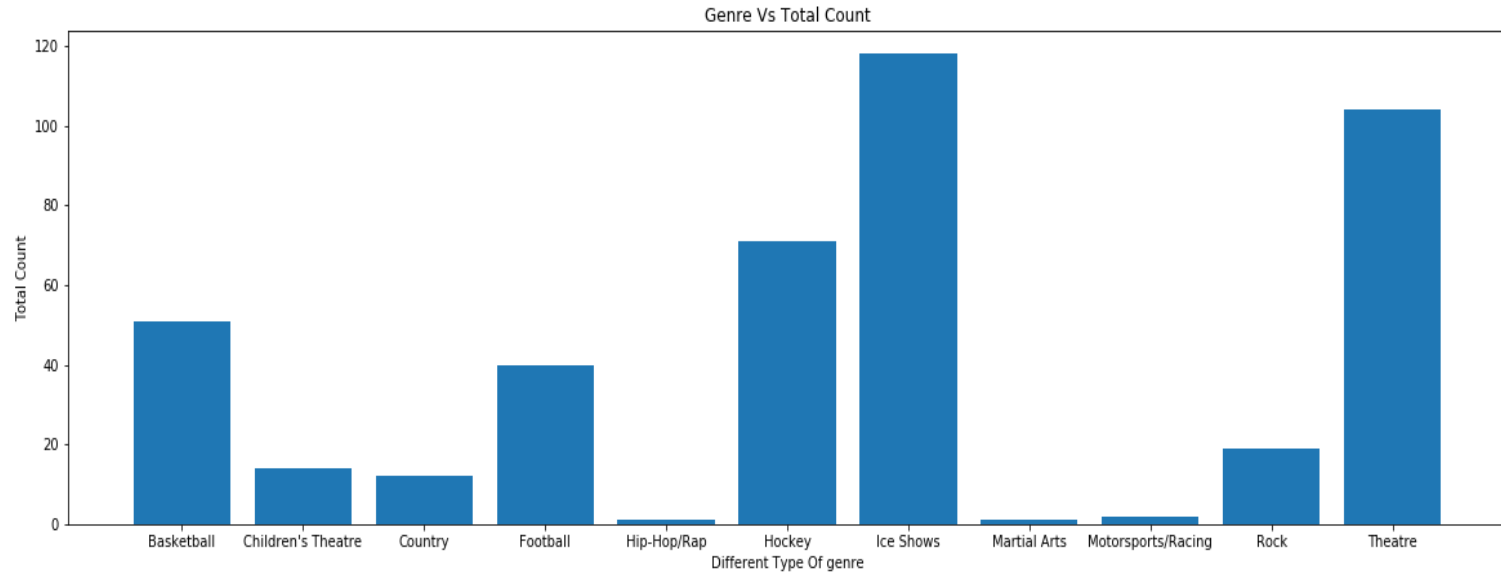




We can find the venues by geographical location using google API



# Types of Events from the From the Data



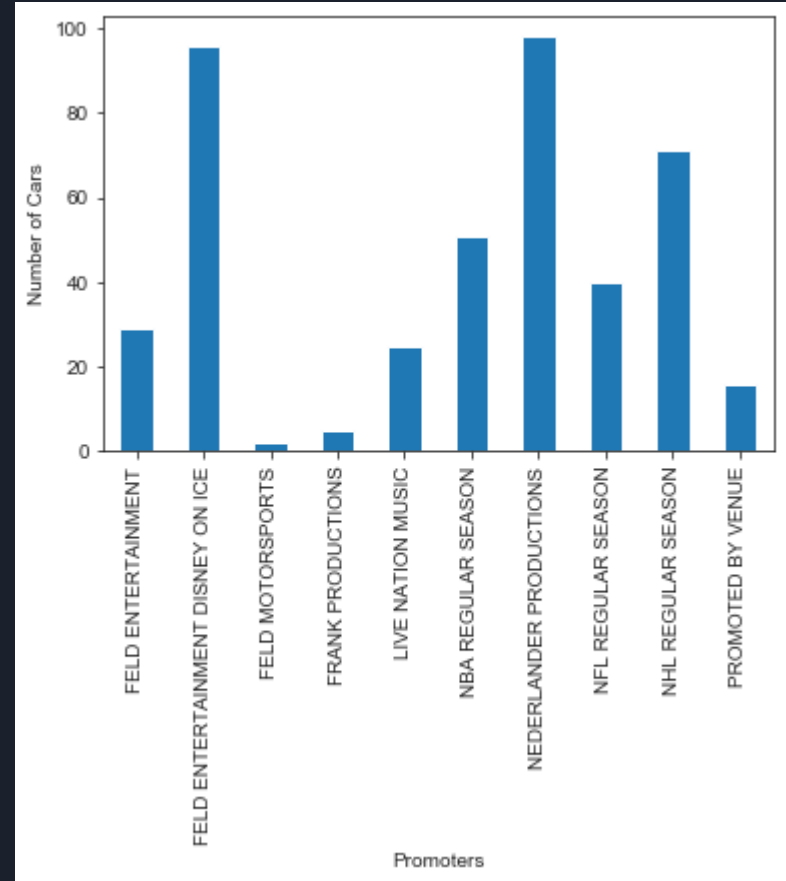


Are these events happening with a Promoter?

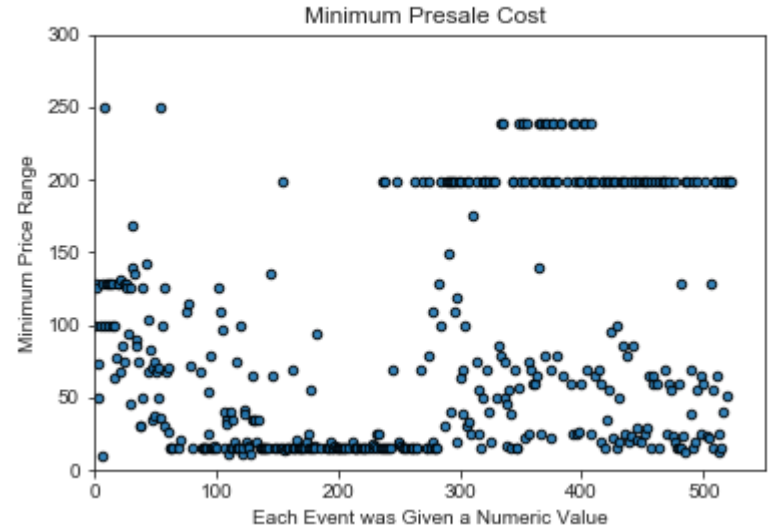
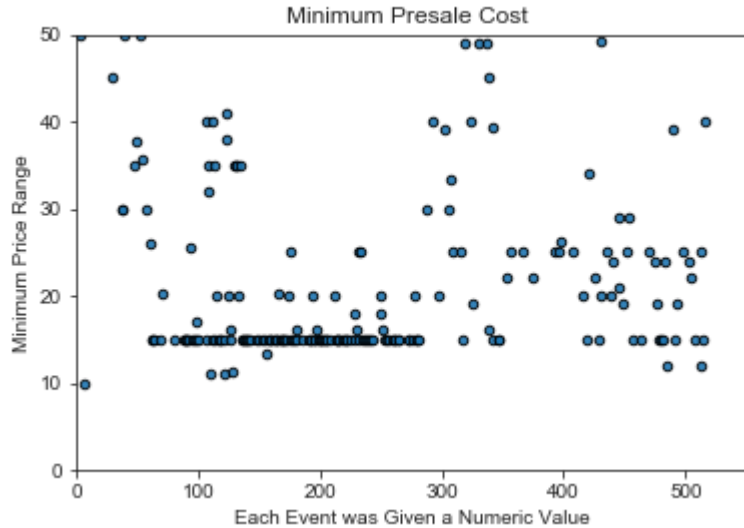
Yes!

Should the Venue Management Company have its own promotion side of the business?

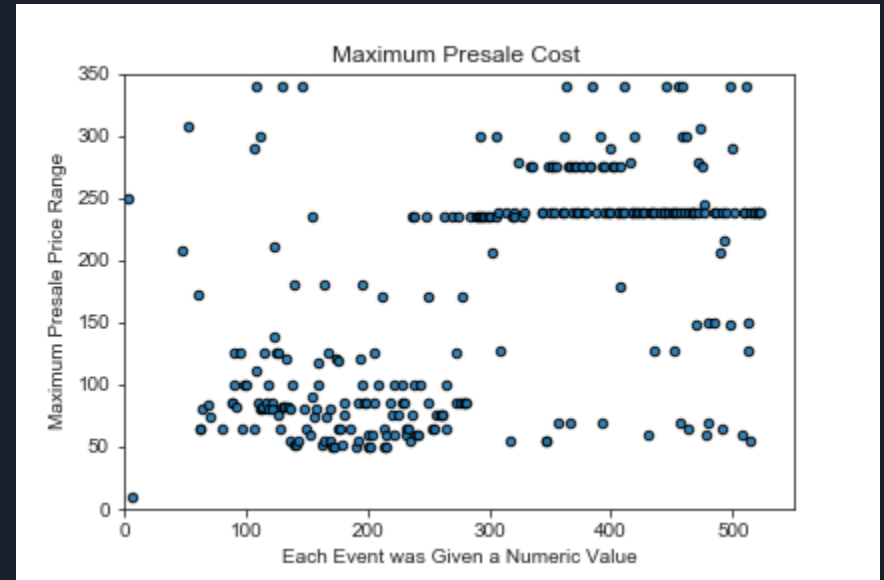
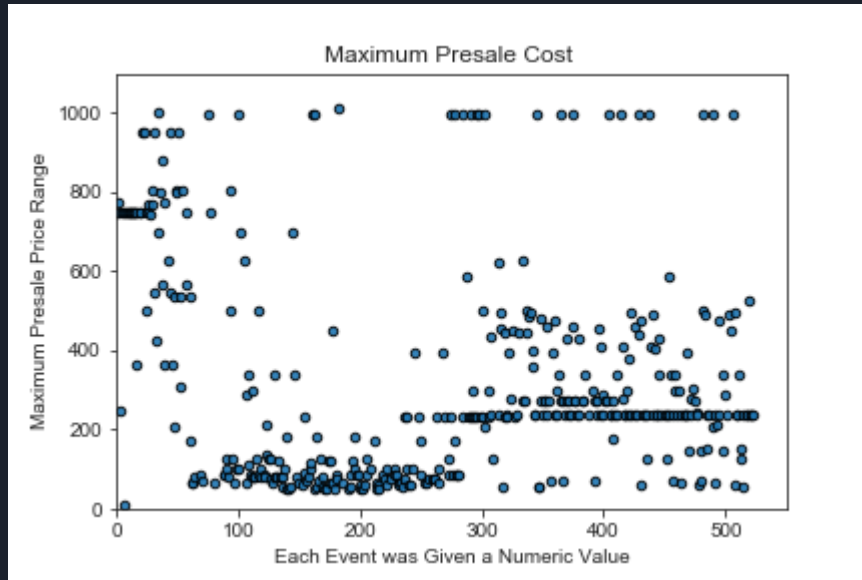
It can be useful to hire a promoter for these events.



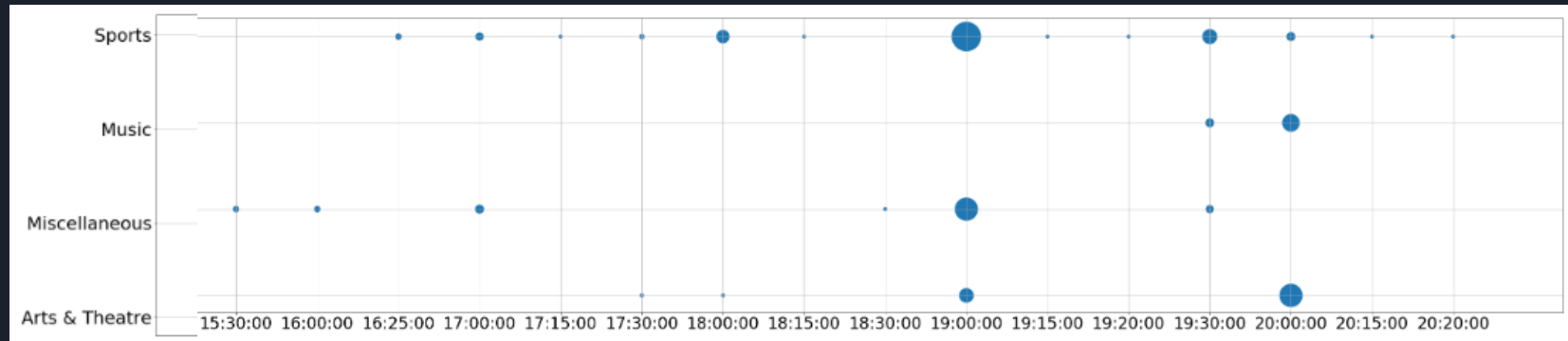
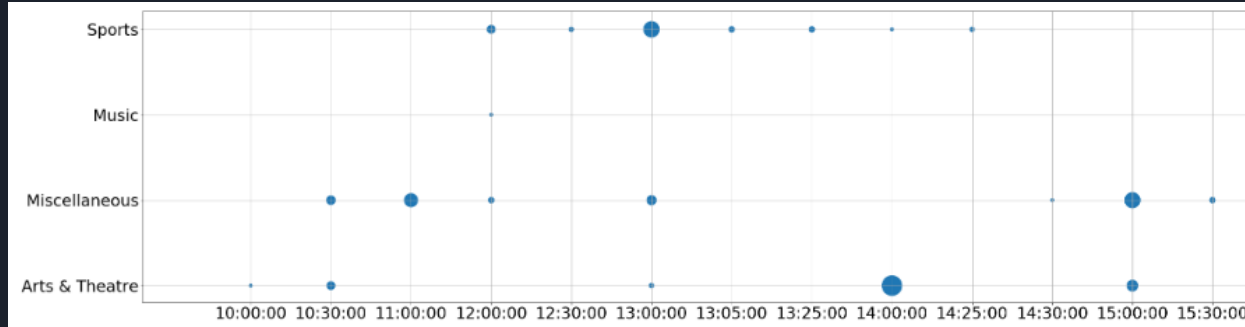
# What are the minimum pre sale cost of a ticket?



# What are the maximum pre sale cost of a ticket for all types of events?



# What is the most popular start time for each type of events ?





## Conclusions:

- We can use Google Maps API Data to zoom into each of the geographical location and find a potential venue.
- No matter what type of venue you have it is important to work with a promoter if you want more events.
- There is a difference of pre sale tickets based on who's performing
- Each type of event has its most popular start time:
  - Sports events: 7:00 PM, 6:00 PM, & 7:30 PM
  - Music: 8:00 PM
  - Art & Theatre: 8:00 PM and 7:00 PM
  - Miscellaneous: 7:00 PM



# Q & A