

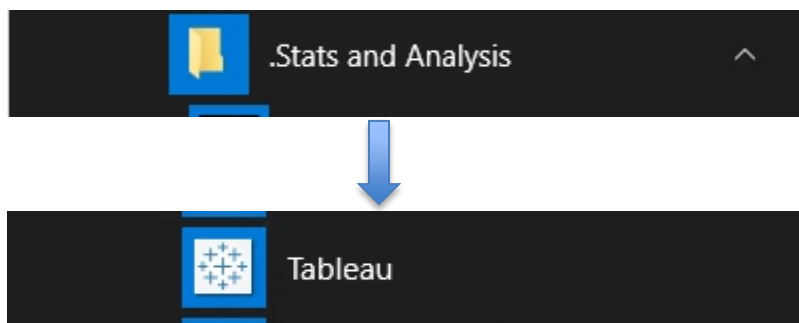
# Steps for connecting to the tableau application for Terp Alumni Association Data Analysis

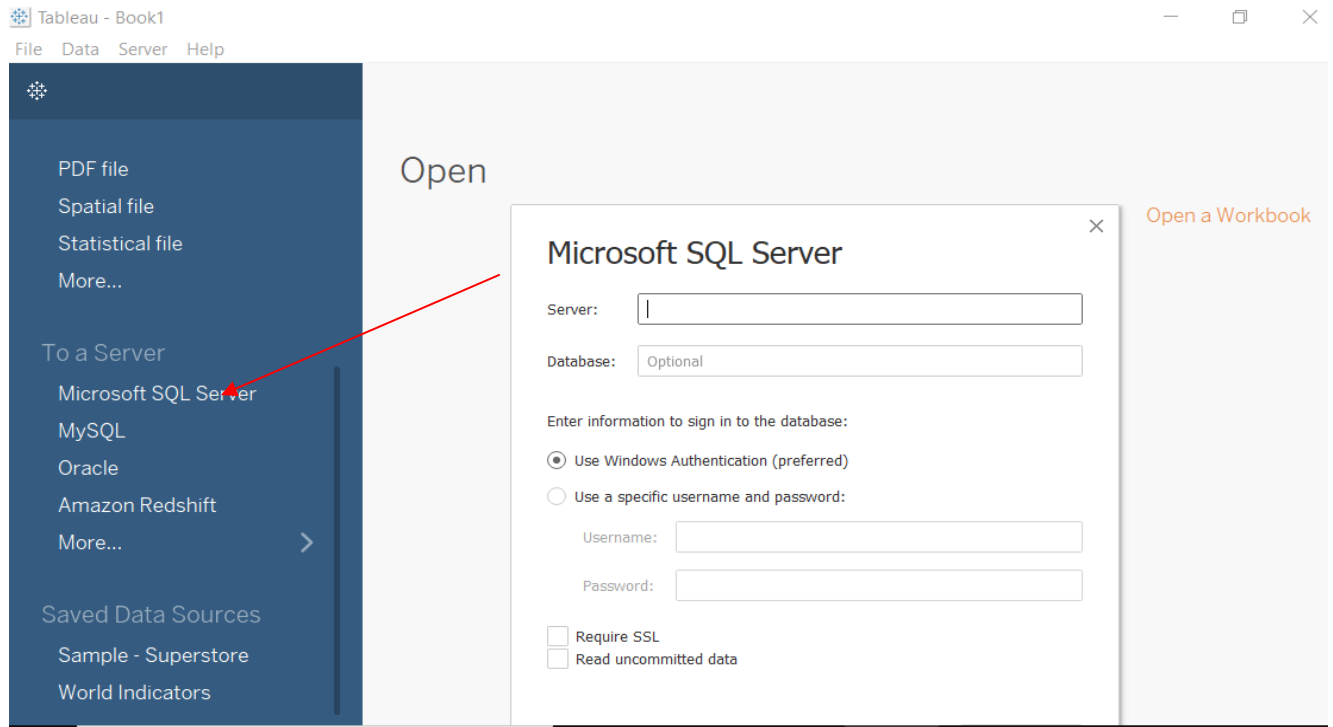
- 1) The first step to open the Tableau application which is currently hosted in the VSmith in Student Desktop under the .Stats and Analysis folder look for Tableau and click on the application for it to be launched

Link for the VSmith application is as show below

<http://vsmith.umd.edu/>

sign in and go to Student Desktop and click on the same





**2 ) Once Table is up and running connect to the connect to the Microsoft Sql Server as shown in the above screenshot**

Microsoft SQL Server

Server: doitsqlx.rhsmith.umd.edu,9703

Database: Project0506\_11

Enter information to sign in to the database:

☐ Use Windows Authentication (preferred)

☒ Use a specific username and password:

Username: BUDT703\_Student\_076

Password:

☐ Require SSL

☐ Read uncommitted data

[Initial SQL...](#)

Sign In

3 ) In the third step we need to add our credentials to connect to the TerpAlum Database by adding the appropriate server details and the database details which are given below .

Server type:

MicroSoft SQL Server

.

Server name:

doitsqlx.rhsmith.umd.edu,9703

Username:

BUDT703\_Student\_nnn

.

Password:

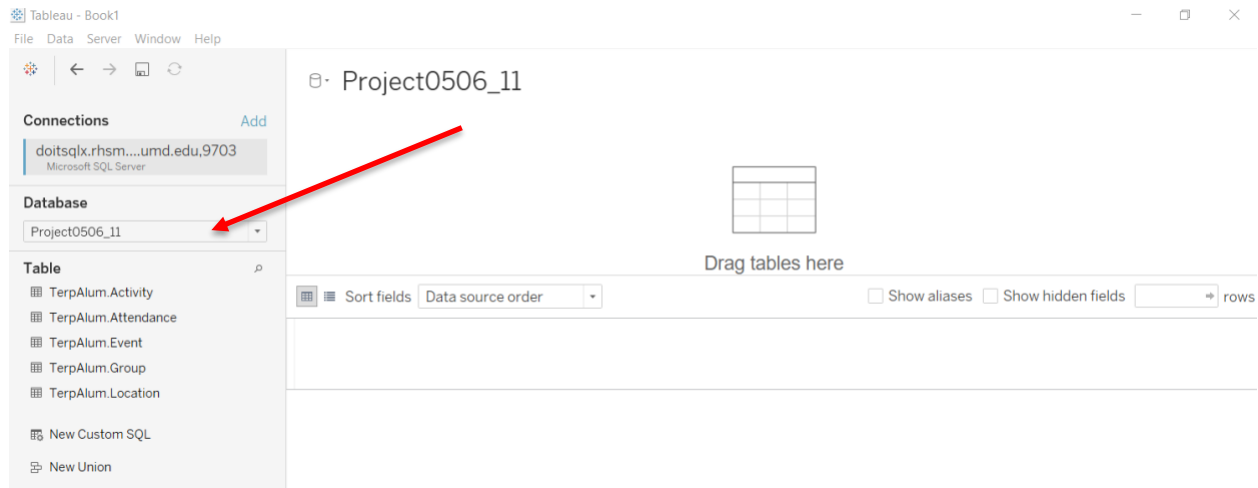
BUDT703\_Student

nnn

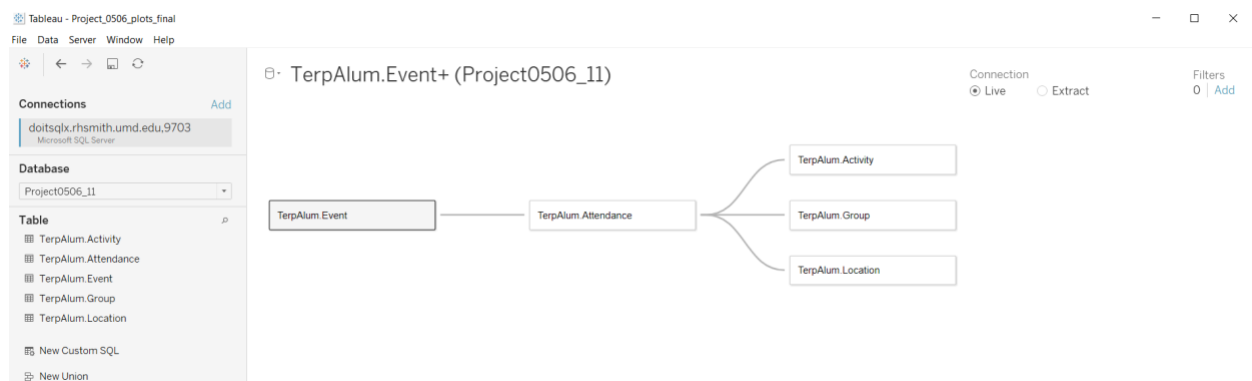
Database would be

Please note that the USERNAME AND PASSWORD ARE CASE SENSITIVE.

4 ) In this step , once the tableau application opens up we need to connect to the right database to see the visualization and in our case the database name is Project0506\_11. Select this from the dropdown to connect to the database .



5 ) In this step , once connected to the database we need make joins and create the source data for the application to create visualizations ,which is shown in the screenshot below how to create the data source used for plotting .



# Business Transaction 1

1.1 What are the Top ten Events with the highest Major Prospects ?

## 1.2 SQL QUERY :-

```
SELECT distinct top 10 e. eveName, max (A. majorProspects) as 'A.majorProspects'
```

```
FROM [TerpAlum.Attendance] A, [TerpAlum.Event] e
```

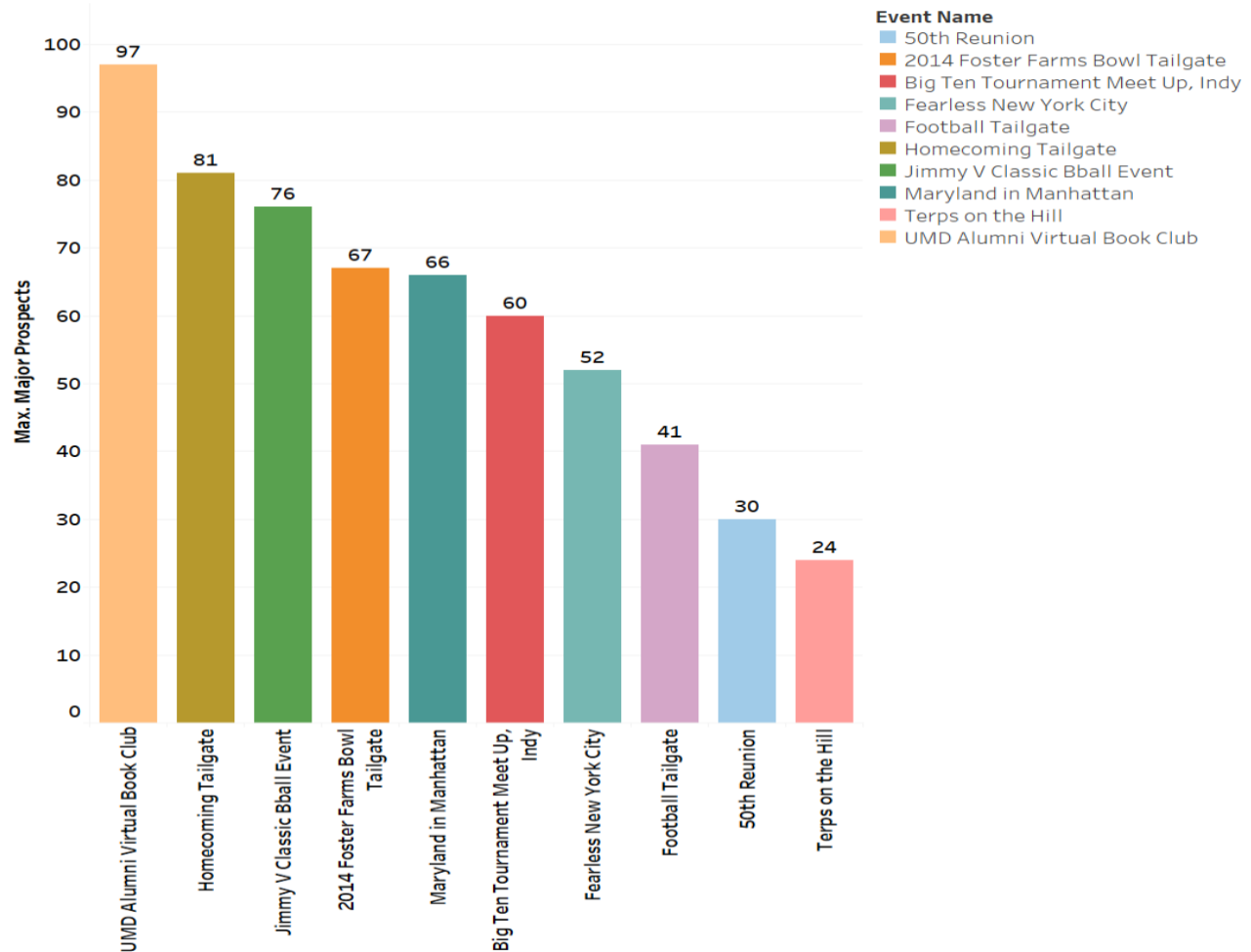
```
where e. eveName= A. eveName
```

```
GROUP BY e. eveName
```

```
ORDER BY max (A. majorProspects) DESC
```

## 1.3 Tableau Visualization

What are top 10 events with the Total Major Prospects?



Maximum of Major Prospects for each eveName (TerpAlum.Attendance). Color shows details about eveName (TerpAlum.Attendance). The view is filtered on eveName (TerpAlum.Attendance), which has multiple members selected.

This above chart shows that top event is UMD Alumni Virtual Book Club Major Prospects

## Business Transaction 2

What are the Top Ten Events with the highest Number of First Time Attendees?

### 2.2 SQL QUERY:-

```
SELECT distinct top 10 e. eveName, max (A. firstTimeAttendees) as
'MaxFirstTimeAttendees'
```

```
FROM [TerpAlum.Attendance] A, [TerpAlum.Event] e
```

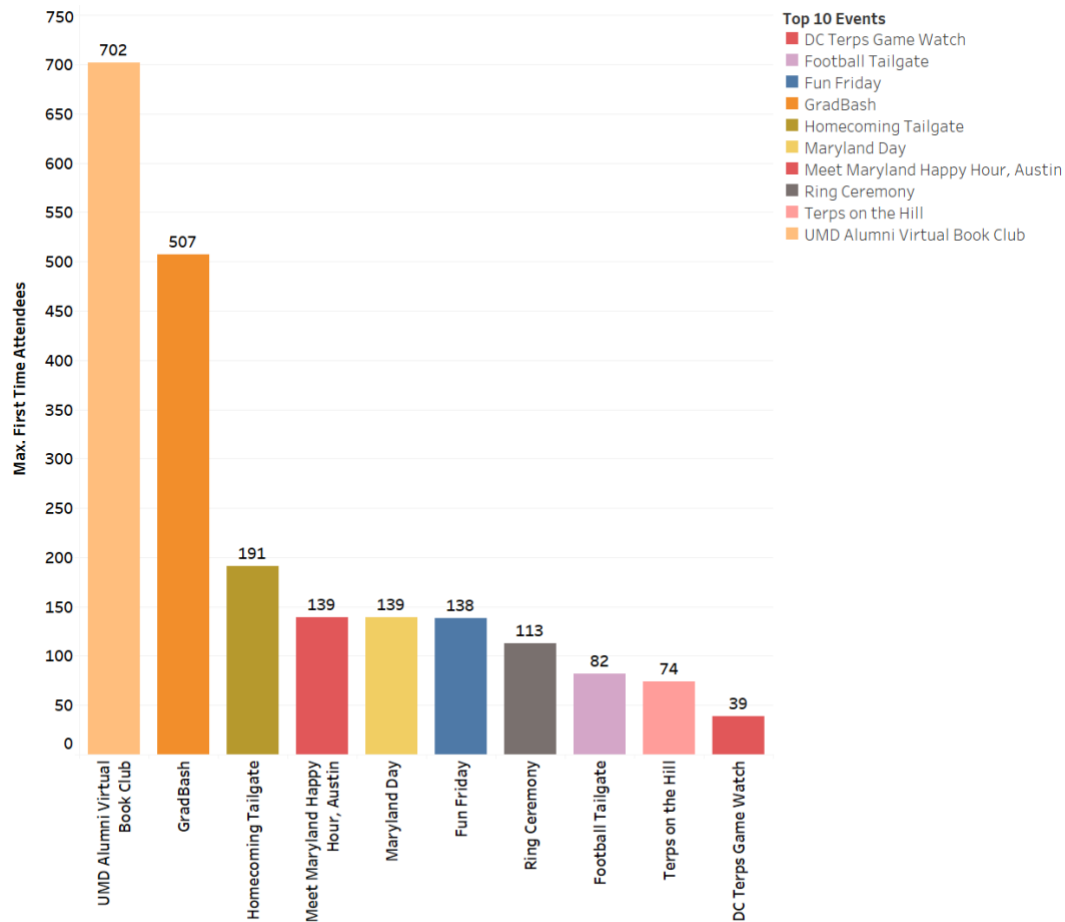
where e. eveName= A. eveName

GROUP BY e. eveName

ORDER BY max (A. firstTimeAttendees) DESC

## 2.3 Tableau Visualization

What are the top 10 events with the total number of First Time Attendance ?



Maximum of First Time Attendees for each eveName (TerpAlum.Attendance). Color shows details about eveName (TerpAlum.Attendance). The view is filtered on eveName (TerpAlum.Attendance), which has multiple members selected.

This above chart shows that top event is UMD Alumni Virtual Book Club with respect to First Time attendees

## Business Transaction 3

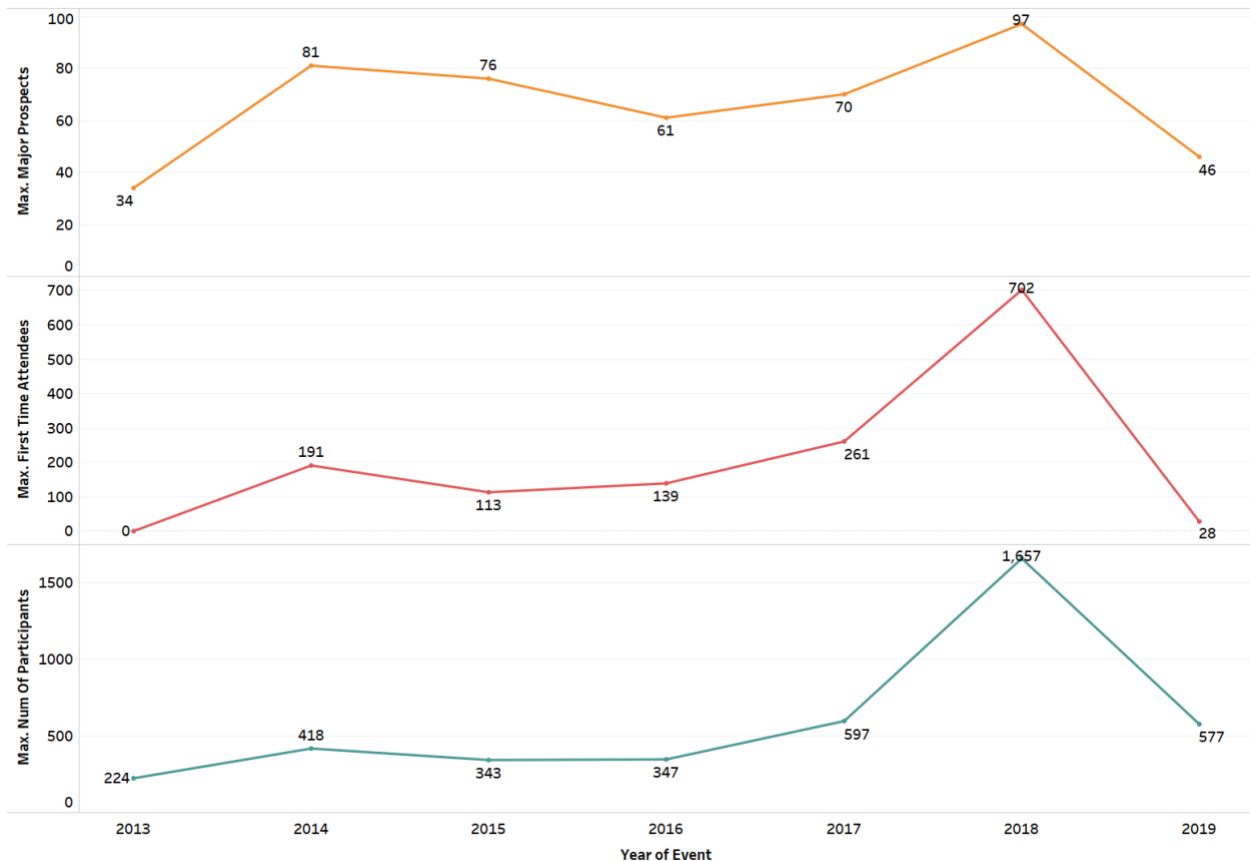
### 3.1 What are the highest Major Prospects, participants ,First Time Attendees across years ?

#### 3.2 SQL QUERY

```
SELECT max (A. majorProspects) as 'TotalMajorPropsects' ,  
DATEPART(YYYY, e.eveDate) as Year  
FROM [TerpAlum.Attendance] A, [TerpAlum.Event] e  
where e. eveDate= A. eveDate  
GROUP BY DATEPART (YYYY, e.eveDate)
```

#### 3.3 Tableau Visualization

What is the total number of major prospects, participants, first-time attendees across years?



The trends of maximum of Major Prospects, maximum of First Time Attendees and maximum of Num Of Participants for eveDate (TerpAlum.Attendance) Year.

This above chart shows that Max prospects ,First Time attendees and number of participants were highest in 2018

## Business Transaction 4



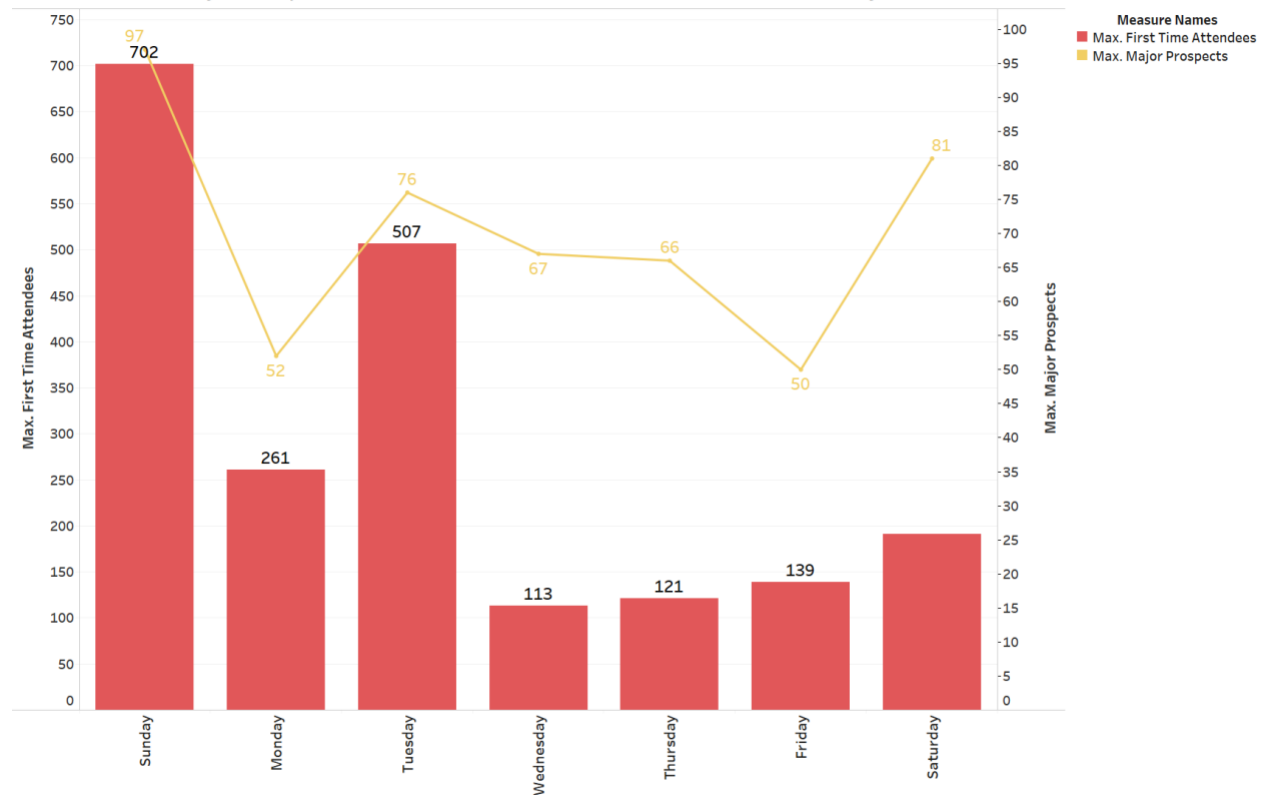
#### 4.1 What are the highest Major Prospects versus highest First-Time attendees across Weekdays?

#### 4.2 SQL QUERY

```
SELECT max(firstTimeAttendees) as 'TotalFirstTimeAttendees',  
max(majorProspects) as 'TotalMajorPropsects',  
DATEPART (WEEKDAY, e. eveDate) as Weekday  
FROM [TerpAlum.Attendance] A, [TerpAlum.Event] e  
where e. eveName= A. eveDate  
GROUP BY DATEPART (WEEKDAY, e. eveDate)  
ORDER BY DATEPART (WEEKDAY, e. eveDate)
```

#### 4.3 Tableau Visualization

What are Total Major Prospects versus Total First Time Attendees across Week days ?



The trends of Max. First Time Attendees and Max. Major Prospects for eveDate (TerpAlum.Attendance) Weekday. Color shows details about Max. First Time Attendees and Max. Major Prospects.

Weekends should be focused more to get major prospects and First Time Attendees.

## Business Transaction 5

**5 .1 What are the Top 5 locations with the highest number of Major Gift prospects?**

### 5 .2 SQL QUERY:-

```
SELECT distinct top 5 l. locCode, l. locDescription, sum (A. majorProspects) as  
'majorProspects'
```

```
FROM [TerpAlum.Attendance] A, [TerpAlum.Location] l
```

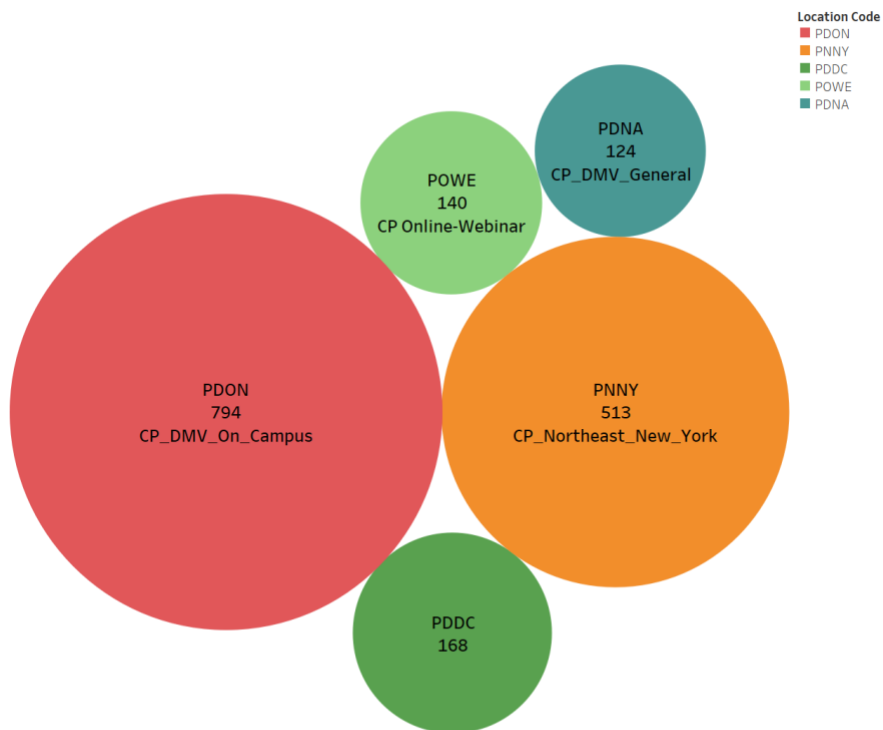
```
where l. locCode= A. locCode
```

```
GROUP BY l. locCode, l. locDescription
```

```
ORDER BY sum (A. majorProspects) DESC
```

### 5.3 Tableau Visualization

What are the top 5 locations with the highest number of major gift prospects?



Loc Code, sum of Major Prospects and Loc Description. Color shows details about Loc Code. Size shows sum of Major Prospects. The marks are labeled by Loc Code, sum of Major Prospects and Loc Description. The view is filtered on Loc Code, which has multiple members selected.

The top locations are DMV on Campus and North East New York for Major gift Prospects

## Business Transaction 6

**6.1 What are the total number of First-Time attendees from Participants for top 10 locations and top 10 events?**

### 6.2 SQL QUERY

```
SELECT distinct top 10 I.locCode,e.eveName,max(A.firstTimeAttendees) as
'MaxFirstTimeAttendees'

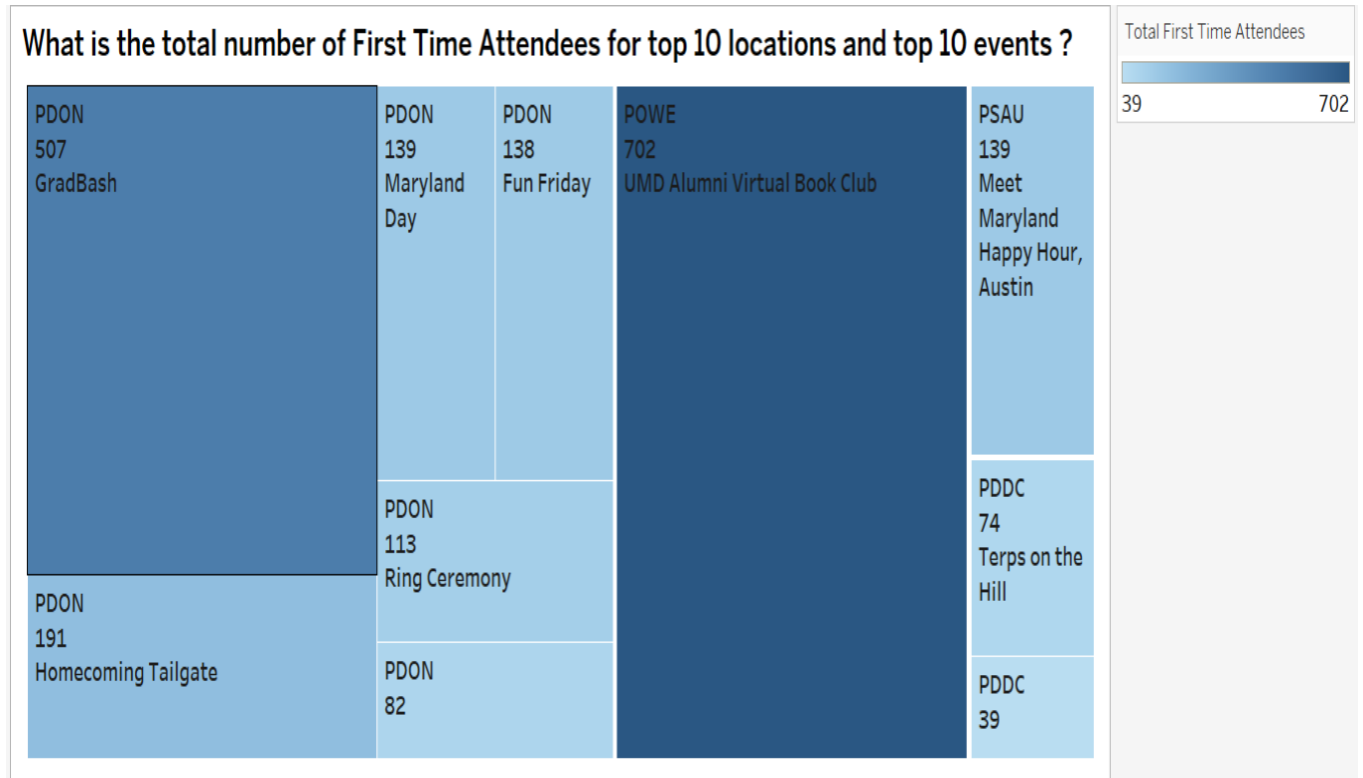
FROM [TerpAlum.Attendance] A,[TerpAlum.Event] e,[TerpAlum.Location] I

where e.eveName= A.eveName AND I.locCode=A.locCode

GROUP BY e.eveName,I.locCode
```

ORDER BY max(A.firstTimeAttendees) DESC

## 6.3 Tableau Visualization



The Location code POWE with virtual Book club meet attract maximum first time attendees

## Business Transaction 7

7.1 What is the highest major prospects versus Total First Time Attendees across Months ?

### 7.2 Sql query

SELECT max (A. firstTimeAttendees) as 'MaxFirstTimeAttendees' ,

max(A. majorProspects) as 'MaxMajorPropsects' ,

DATEPART (MONTH, e. eveDate) as Month

FROM [TerpAlum.Attendance] A, [TerpAlum.Event] e

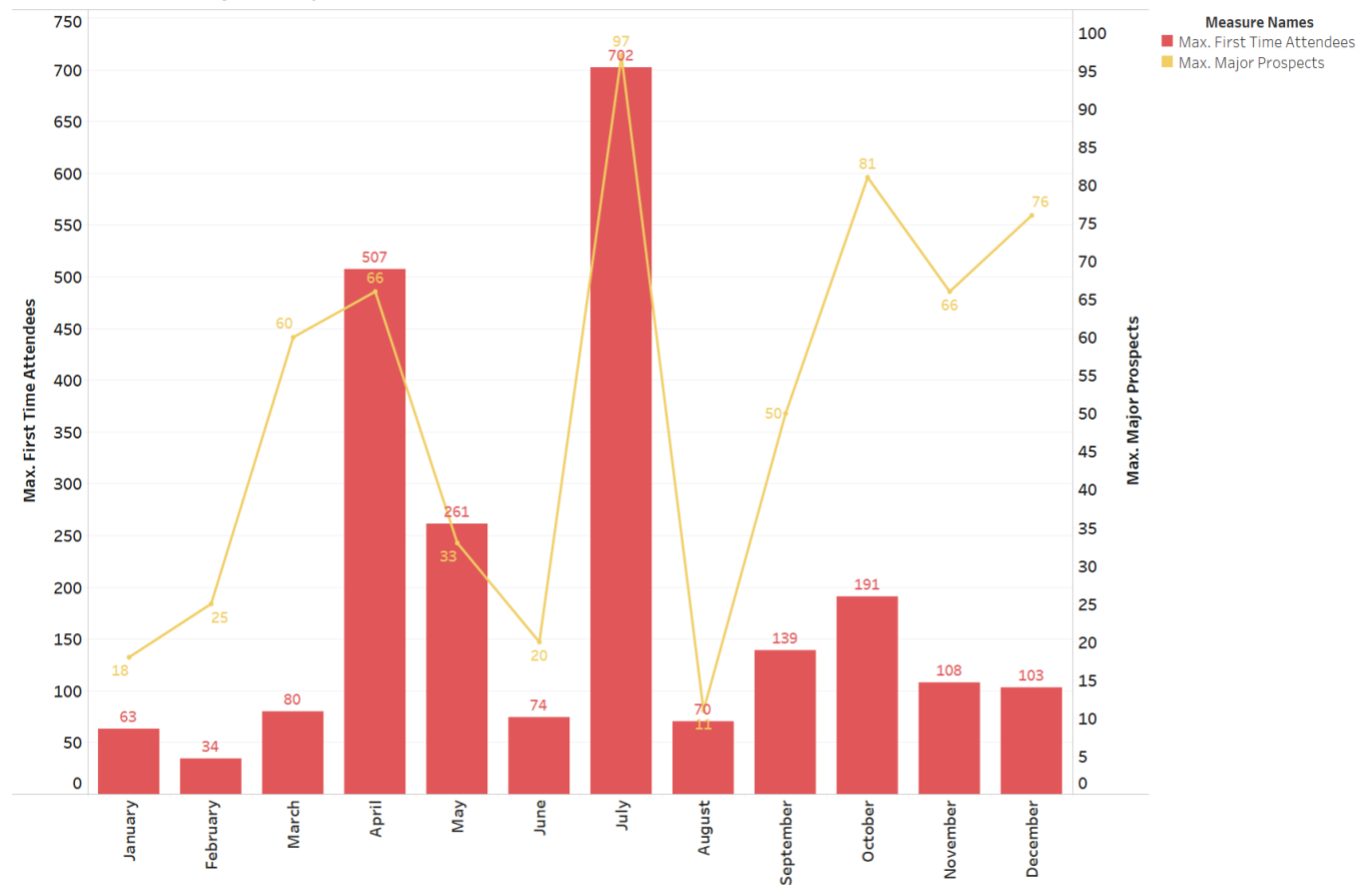
where e. eveDate=A.eveDate

GROUP BY DATEPART (MONTH, e. eveDate)

ORDER BY DATEPART (MONTH, e.eveDate)

## 7.3 Tableau Visualization

What are Total Major Prospects versus Total First Time Attendees across Months ?



The trends of Max. First Time Attendees and Max. Major Prospects for eveDate (TerpAlum.Attendance) Month. Color shows details about Max. First Time Attendees and Max. Major Prospects.

The month that saw maximum attendance and Major prospects is July followed by April

# Business Transaction 8

8.1 What is the distribution to the Major Prospects and First Time Attendees of the Average age with respect?

## 8.2 SQL query

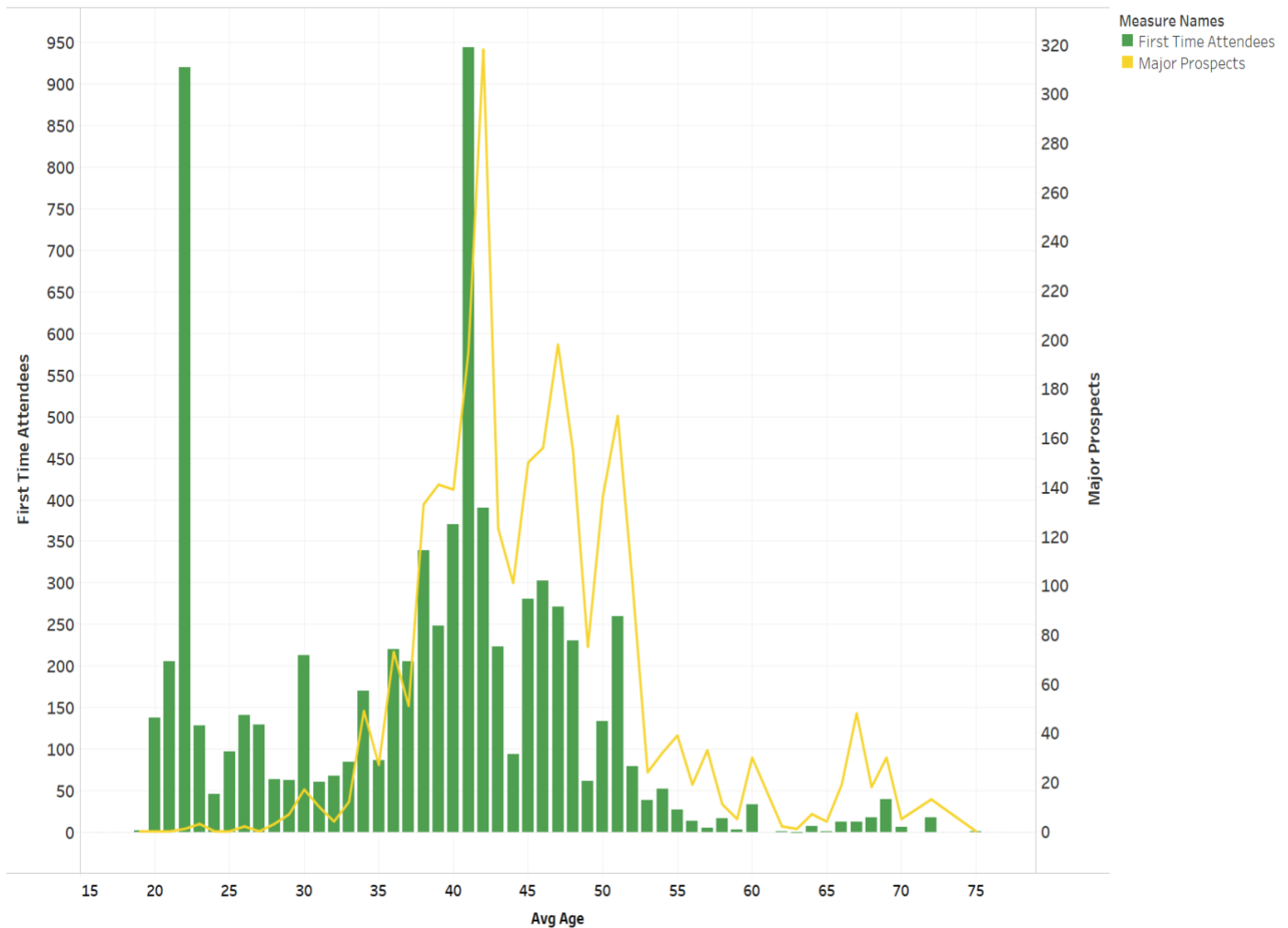
```
SELECT SUM (firstTimeAttendees) AS 'FirstTimeAttendees', SUM (majorProspects) AS  
'MajorProspects',
```

```
avgAge FROM [TerpAlum.Attendance]
```

```
GROUP BY avgAge
```

## 8.3 Tableau Visualization

What is the distribution of First Time Attendees and Major Prospects with respect to Average Age?

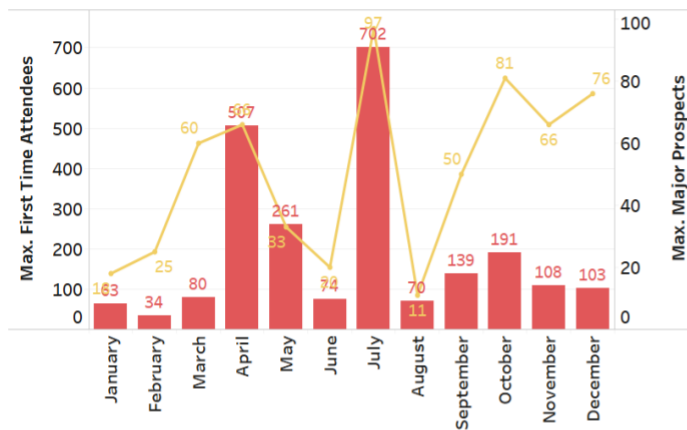


The trends of First Time Attendees and Major Prospects for Avg Age. Color shows details about First Time Attendees and Major Prospects.

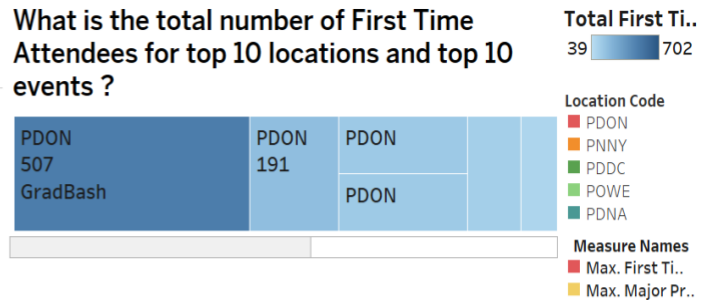
The average age which provides major prospects and have highest first time attendees is 35 to 55

## Dashboard 1

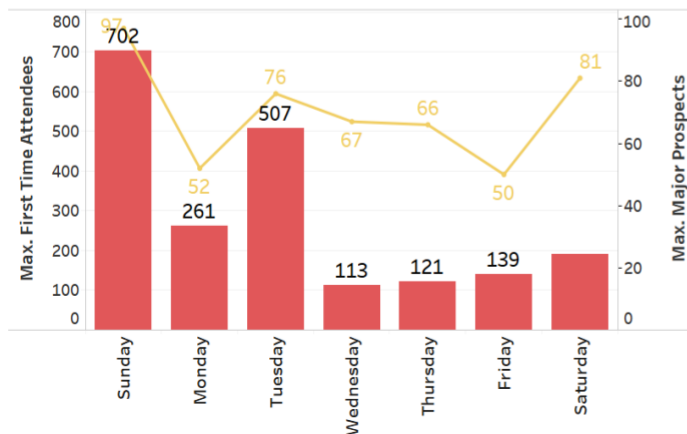
What are Total Major Prospects versus Total First Time Attendees across Months ?



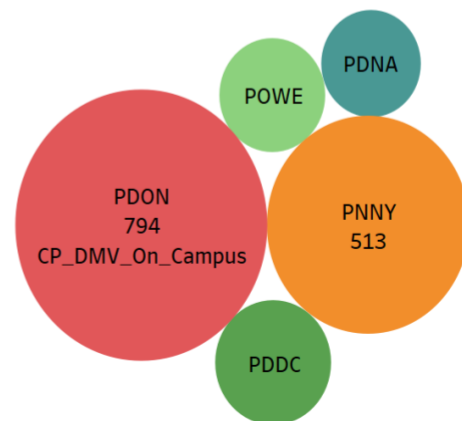
What is the total number of First Time Attendees for top 10 locations and top 10 events ?



What are Total Major Prospects versus Total First Time Attendees across Week days ?



What are the top 5 locations with the highest number of major gift prospects?

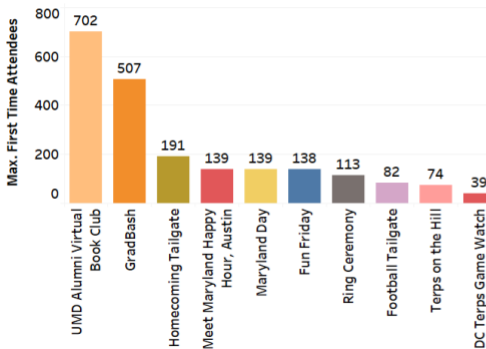


The above Dashboard helps the user in visualizing the top 5 locations , top ten events and also their correlation with respect to the Major Prospects and the First Time attendees across the week days and months .

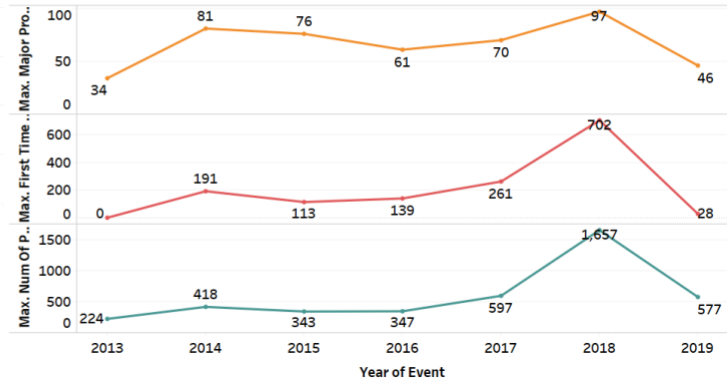


# Dashboard 2

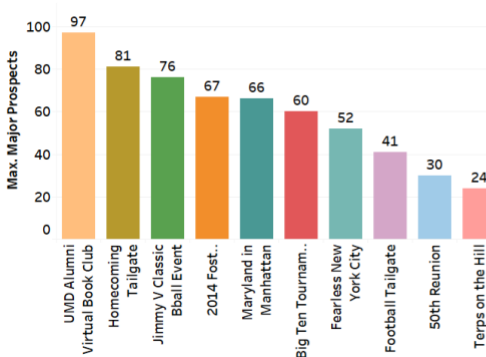
What are the top 10 events with the total number of First Time Attendance ?



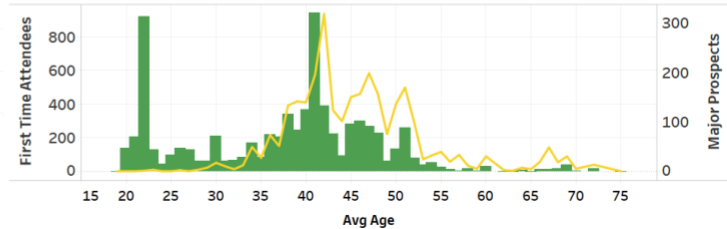
What is the total number of major prospects, participants, first-time attendees across years?



What are top 10 events with the Total Major Prospects?



What is the distribution of First Time Attendees and Major Prospects with respect to Average Age?



The above Dashboard helps the user in visualizing the top 10 Events with respect to the major prospects , top ten events with respect to first time attendees, it also helps the users to visualize the time series trend across years and helps in identifying the correlation between the major prospects and First Time attendees across average age .