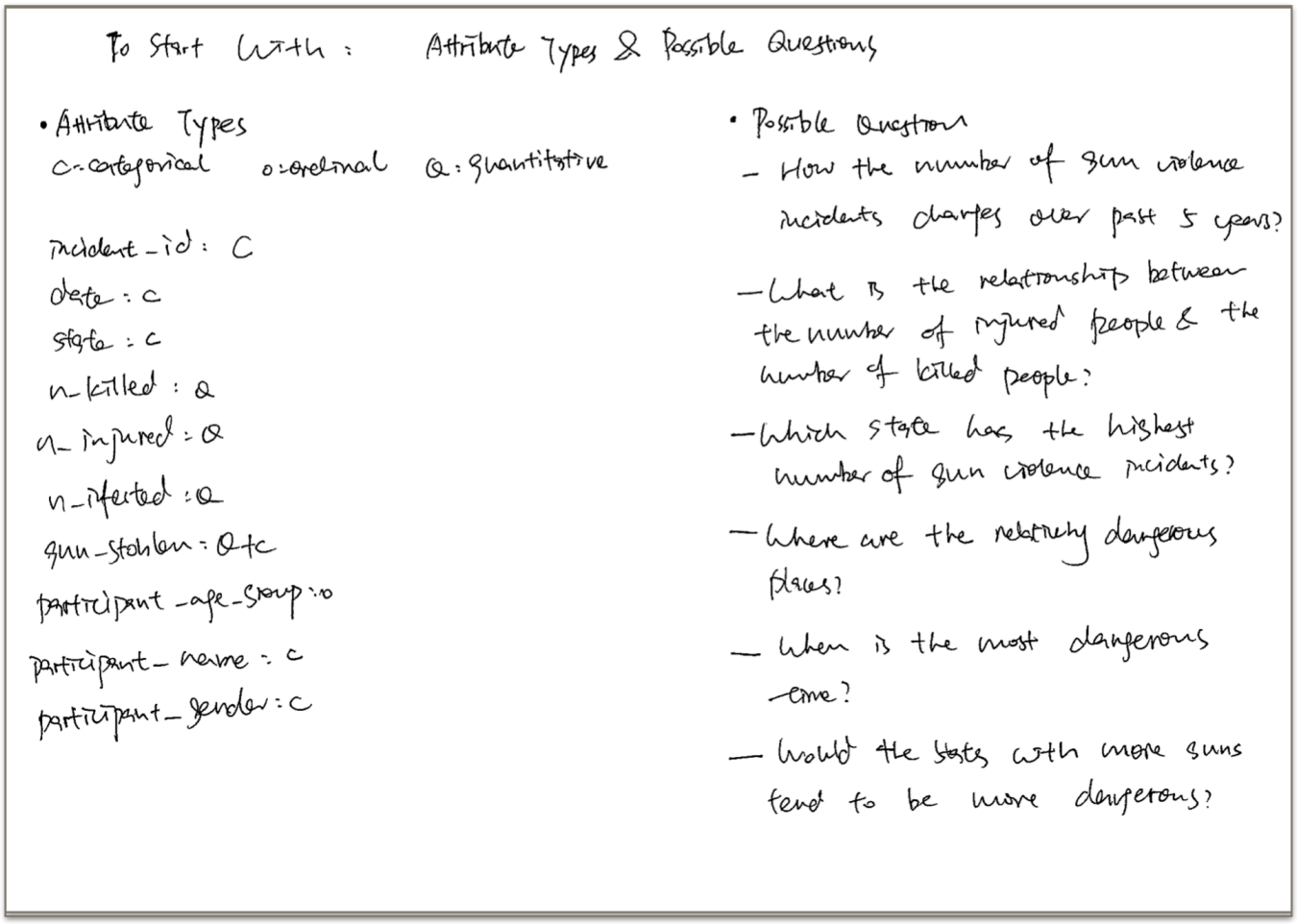
Matriculation Number: 190000096 & 190027923

Preparation of Project 3

Sketches on Paper



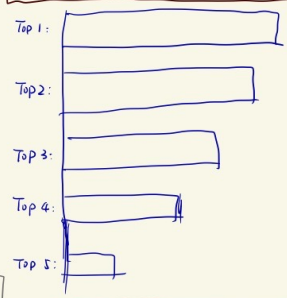
The U.S. Gun Violence Data From 2013~

Question 1: Which state has the highest number of gun related violence?

or city

[State], count [incident_id]

Top dangrous States with highest number of gun related violences.



Map: ① located by Cities.

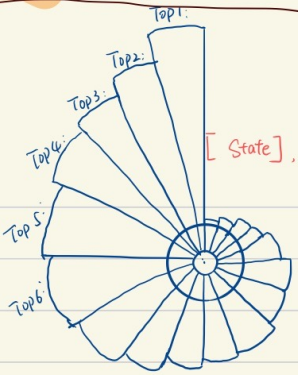
(1) [City_or_Country], count [incident_id]

② located by incidents' location or

[latitude], [longitude]

Giving a straight forward visualization about which area happened gun related incidences more frequently.

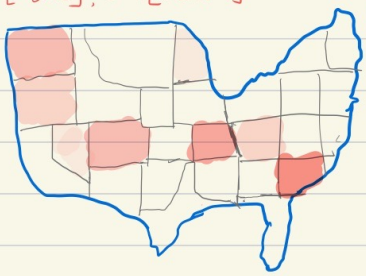
Top cities with highest number of Gun Violence

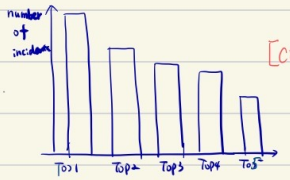


[City_or_Country], count [incident_id]

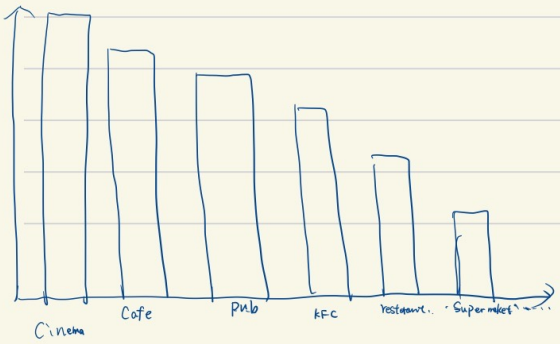
③ located by States.

[State], count [incident_id]

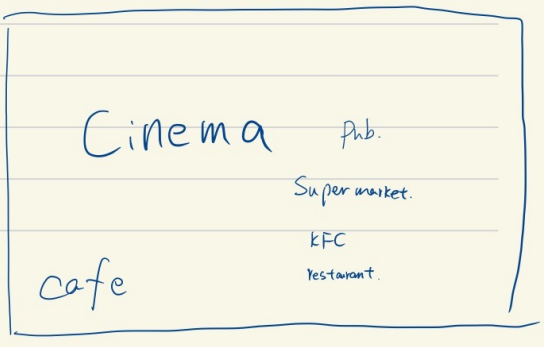




Q2: The dangrous places where have gun related cases a lot.



Word cloud.

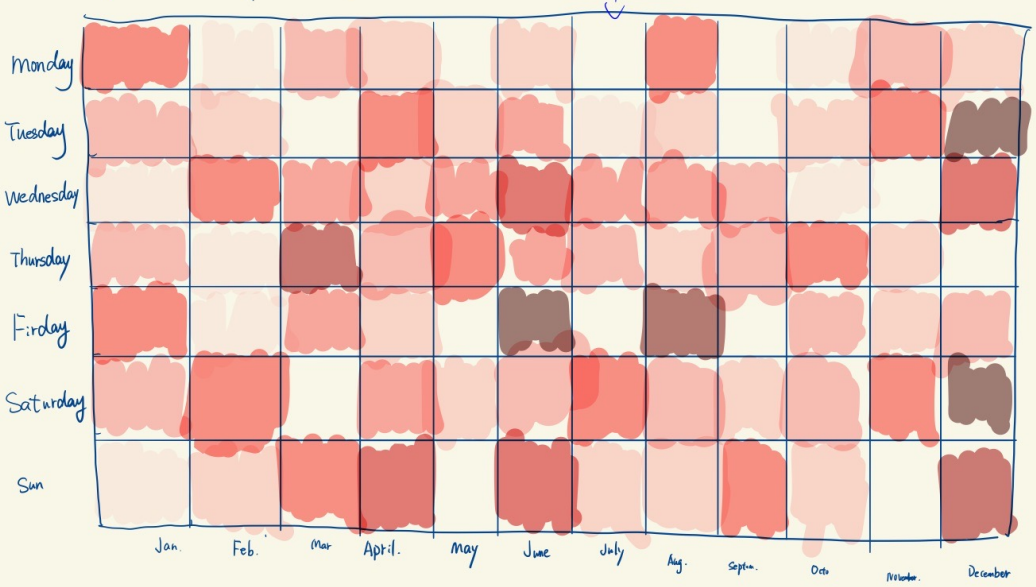


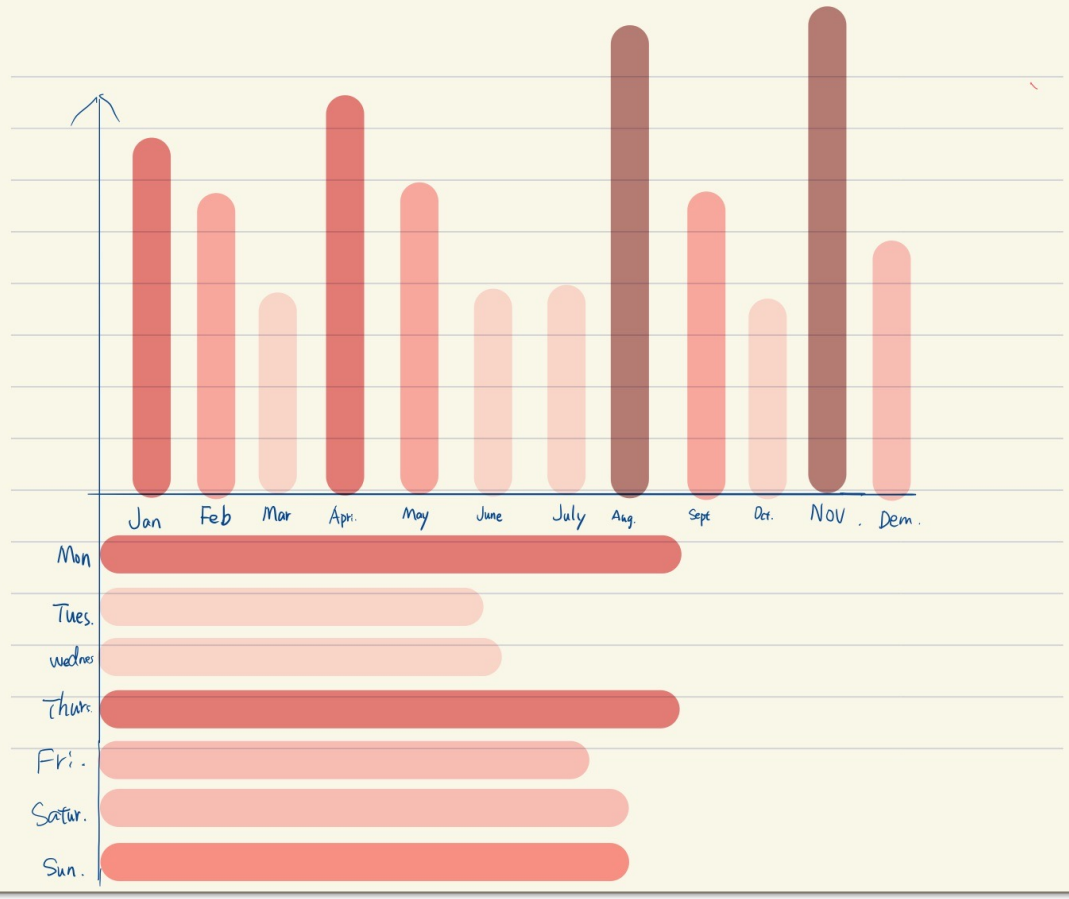
Q3: Based on the data from 2013 ~ 2018,

[date] Count[incident_id]

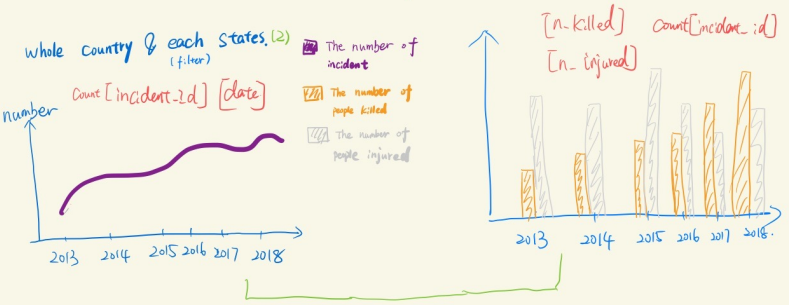
When is it more likely to happen gun violence incidents?

use hue to express different level of quantity.





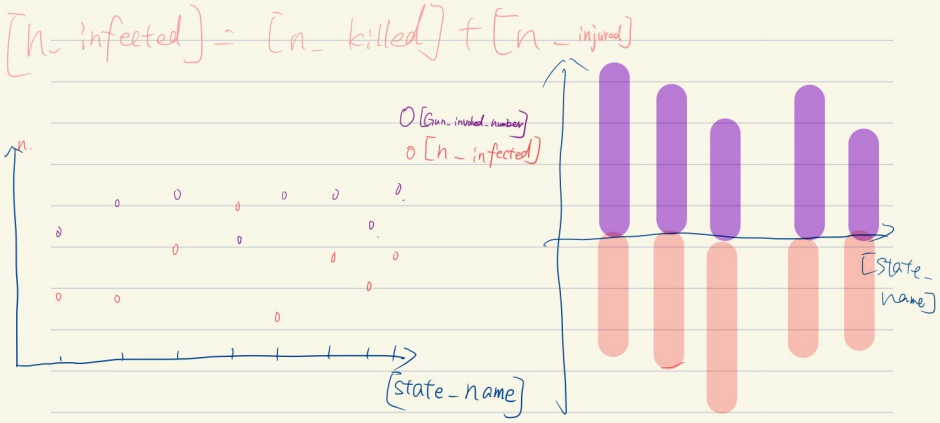
Question4. : The overall Situation of gun violence in the U.S. from 2013~2018?



Both Chart can be changed by location filter.

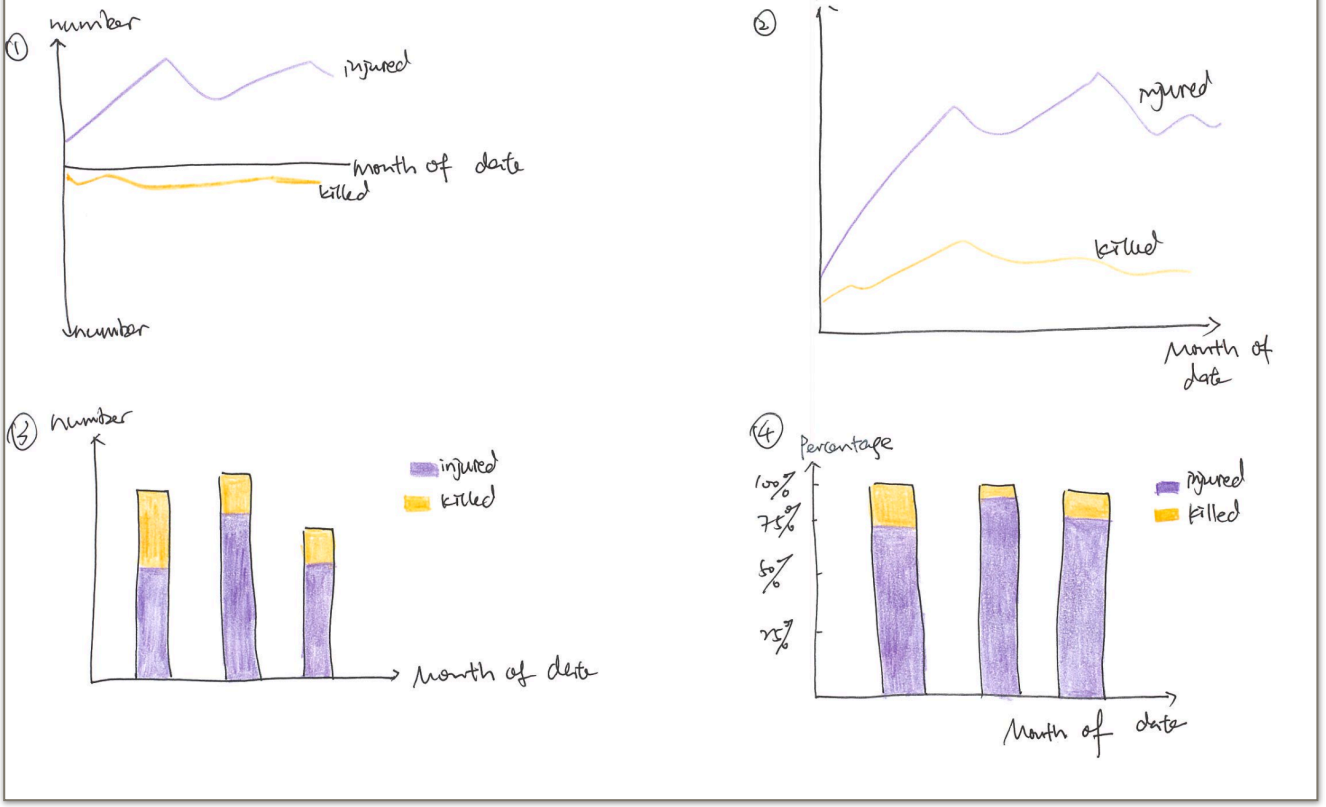
Q5 :

Would the states with more guns be more dangrous (more people infected by gun related incident?)

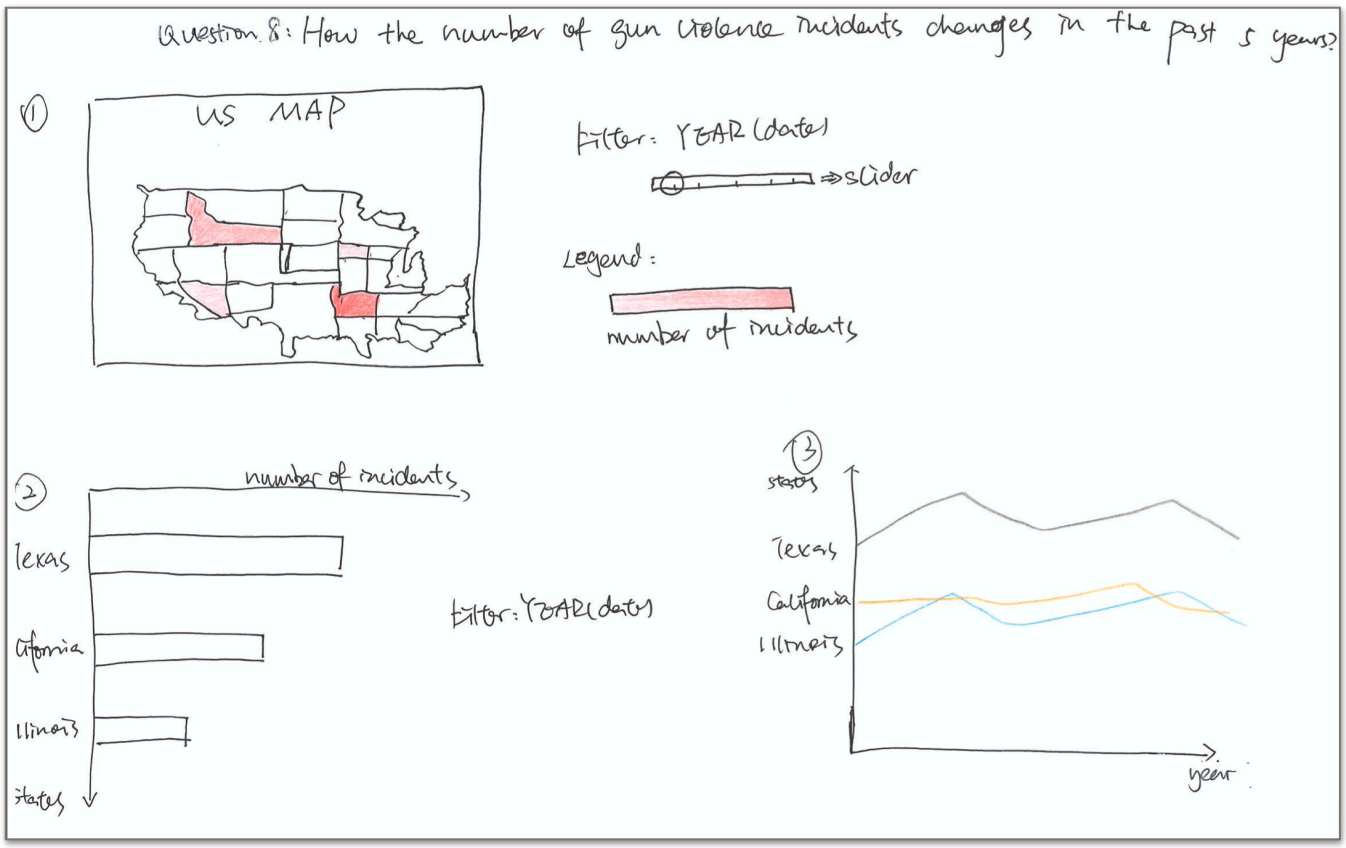


Q6 : The dangrous places where have gun related cases a lot.

Question 7: What is the relationship between the number of injured people & the number of killed people in gun violence incidents?



Question 8: How the number of gun violence incidents changes in the past 5 years?



Sketch Analyse:

Sketch Analyse

Q1: Map: + see a geographical distribution

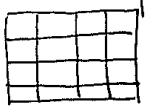
+ know which area is the most dangerous
- difficult to compare. colors of two states may be similar.

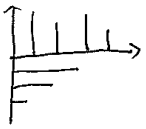
bar chart: + see rank & compare

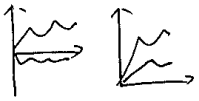
- too many states.
the chart may be very long.

Rose diagram: + beautiful diagram

+ see rank
- technical: can we make this in D3.js?

Q3: heatmap: + interesting

+ get an overview of which day is the most dangerous.
- difficult to rank & compare.

bar chart: + can see the most dangerous months & days

- not a day of month
- meaningfulless

Q7: ① ② line gram + easy to compare (② > ①)

+ show general trend
- cannot see an overall number
- cannot see percentage

③ (stacked) bar chart

+ see the overall number
- hard to compare injured & kill number.

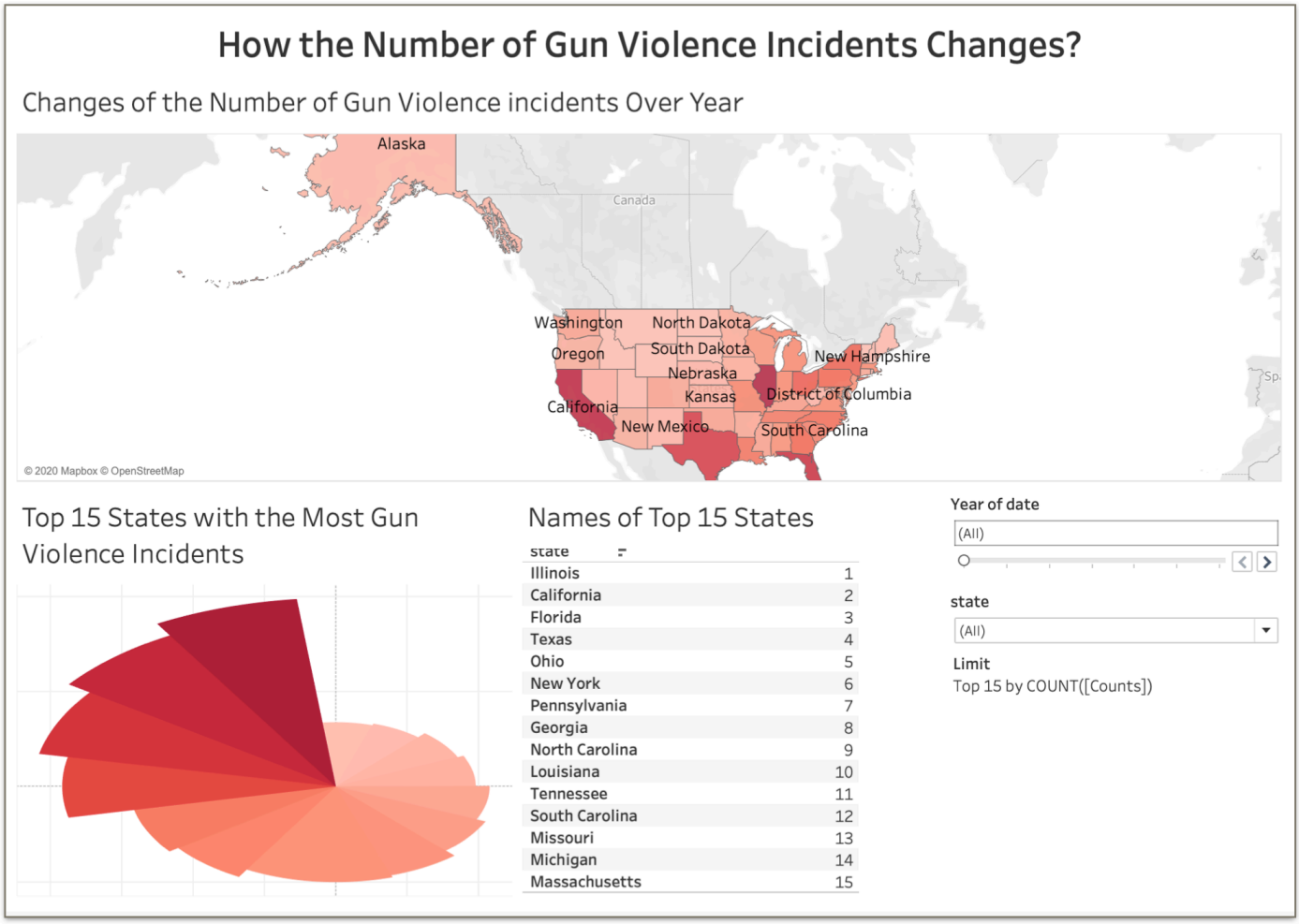
④ normalized stacked bar chart:

+ see the percentage distribution
- In this occasion, sum is more meaningful.
- Differences between bars may be small.

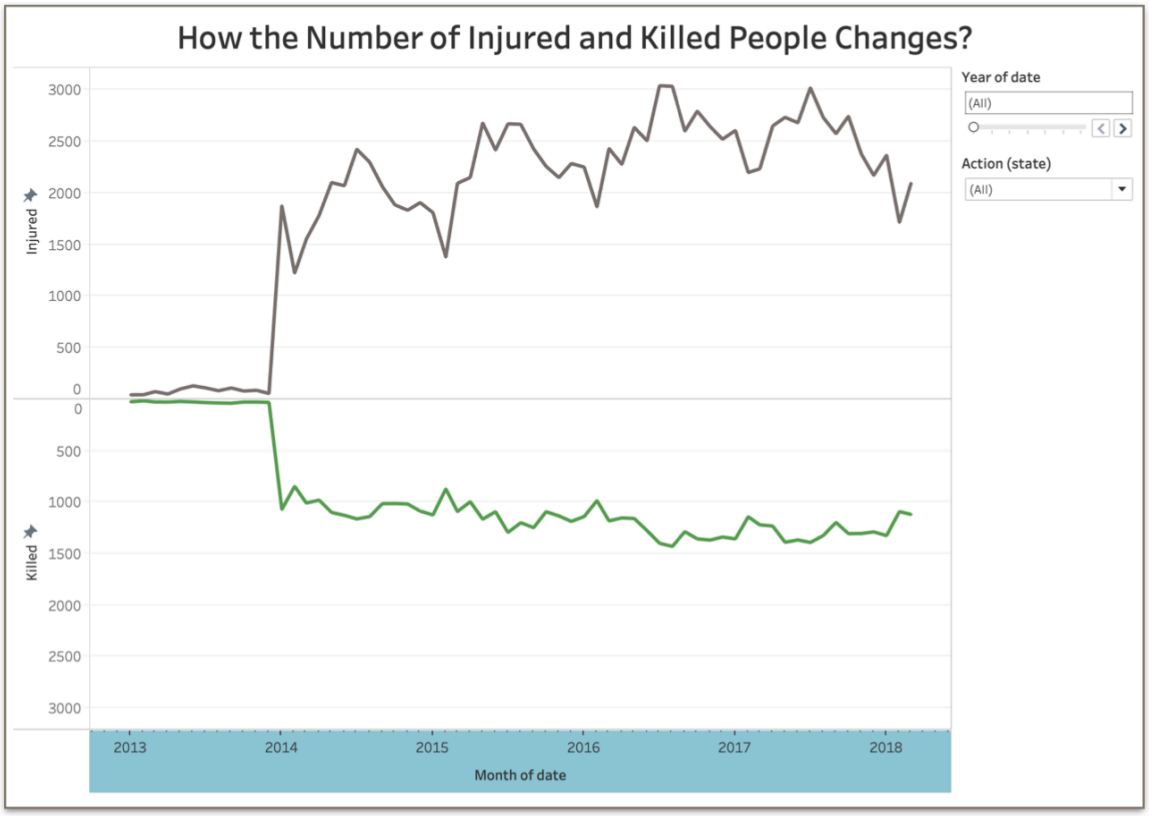
Sketches in Tableau

— Screenshots of the dashboards in sketches_in_tableau.twbx

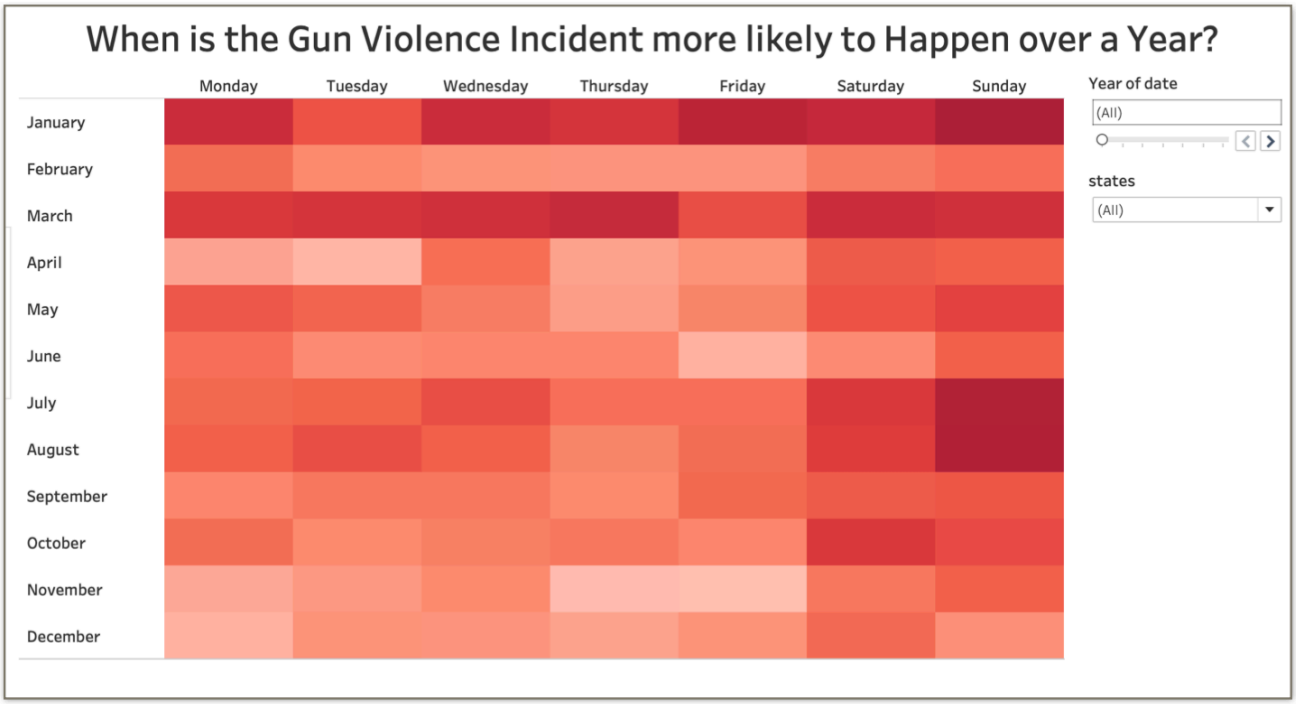
— Dashboard 1



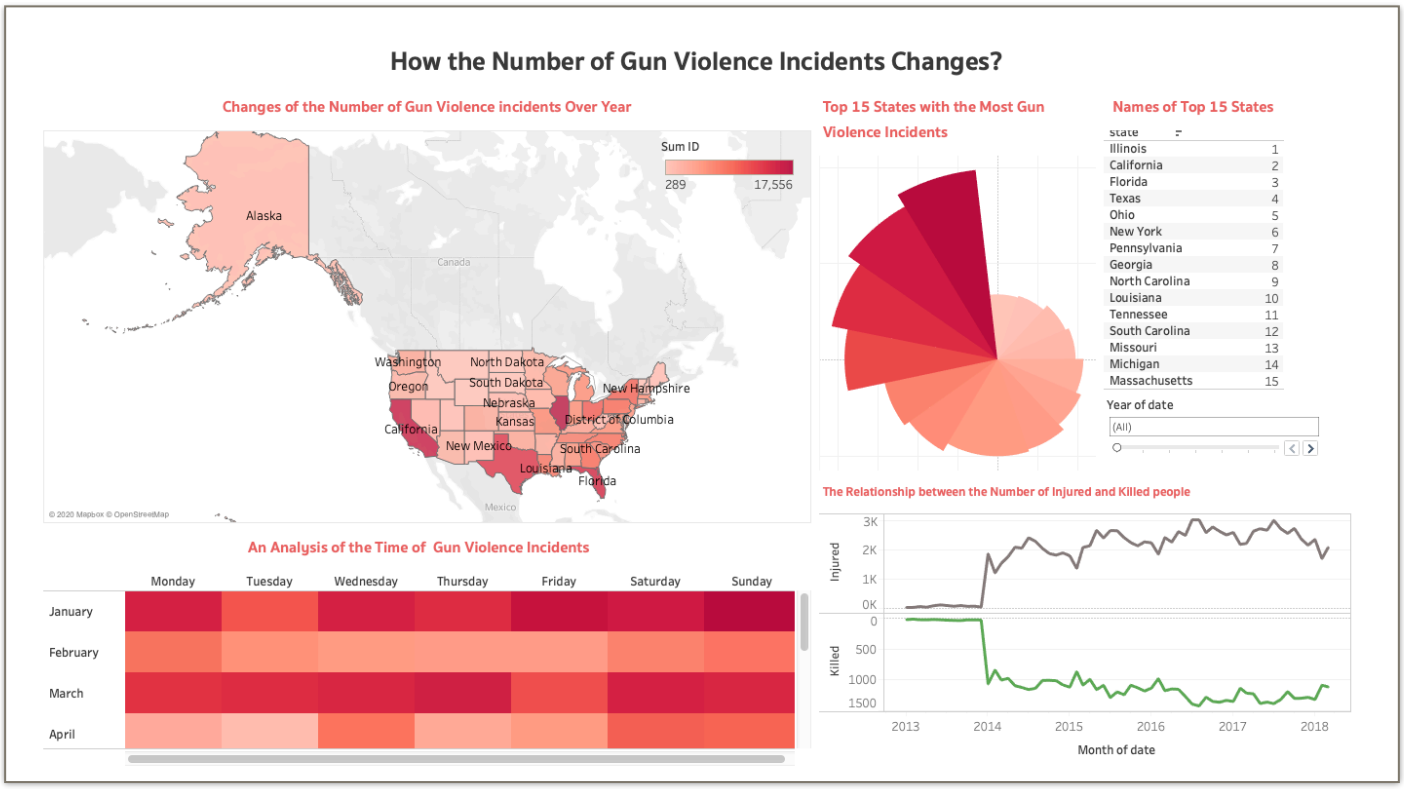
— ***Dashboard 2***



— ***Dashboard 3***



— *Dashboard 4*


How the Number of Gun Violence Incidents Changes?
Changes of the Number of Gun Violence incidents Over Year
Sum ID
289
17,556
Alaska
Canada
Washington
Oregon
California
North Dakota
South Dakota
Nebraska
Kansas
New Mexico
Louisiana
Florida
South Carolina
District of Columbia
New Hampshire
Mexico
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Top 15 States with the Most Gun Violence Incidents
Names of Top 15 States
state
Illinois 1
California 2
Florida 3
Texas 4
Ohio 5
New York 6
Pennsylvania 7
Georgia 8
North Carolina 9
Louisiana 10
Tennessee 11
South Carolina 12
Missouri 13
Michigan 14
Massachusetts 15
Year of date
(All)
An Analysis of the Time of Gun Violence Incidents
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
January
February
March
April
The Relationship between the Number of Injured and Killed people
Injured
3K
2K
1K
0K
Killed
0
500
1000
1500
2013
2014
2015
2016
2017
2018
Month of date