**Jing:**

1. Hi everyone, we are an oh shoot consultant team. Today, we are going to present our NYC gunshot story.
2. First is the introduction, then will be the data cleaning, next will be our wonderful data analysis, finally will be a brief conclusion.
3. Nowadays, gun violence become a very significant social issue, like some physical and mental health issues. More importantly, from the business perspective, it also has some impacts on real estate values, healthcare expenses, and even the overall economy.

To better comprehend the statistics as a professional consultant team, we chose NYC's gunshot data, and analyzed those shooting incident data. After that, we will come up with the regulation recommendations for the government and recommendations from from the team to help ZeroEyes a company which specialises in AI video gun detection.

**Meet**:

**Vinya**:

Data Cleaning:

1. The first step of data cleaning was to identify incomplete, incorrect, inaccurate, and irrelevant data, and then replace it further with meaningful ones.
2. In this project, we aimed to improve data quality, which helped us to provide more accurate, consistent, and reliable information while doing analysis and also in Machine Learning where machine learning is data-driven. Without data cleaning in place, we can't expect Machine Learning models to perform better.
3. Having analyzed dirty columns that required cleaning, we validated our data by looking for missing or nan values and filling them with meaningful values that aided our analysis.
4. The next step was to remove duplicates and repeated rows.
5. Additionally, we removed columns that did not contribute to our analysis and didn't show any significant results. For instance, we had longitude and latitude columns and the combined column as well which we deleted completely.
6. As a part of data transformation we further went on Renaming Columns which were self explanatory. Also we changed the datatype of columns as required for our analysis. Like, changing into datetime format and extracting year month separately to perform more detailed analysis.
7. We also created a function to clean the values in the location column where the values were grouped and we only needed the meaningful part from it so we used split function to split it into parts and extracted the meaningful data from it.
8. In addition, we further categorized the locations as Meet mentioned, we grouped similar locations such as bars and liquor stores into pubs, which enabled us to find significant results in our analysis.
9. In order to make sure the cleaning was done correctly, we again validated our data post-transformation by using the unique, and isna functions.
10. As we completed the 4 step data cleaning, our data was also set for analysis.
11. Now I would like to pass it on to Akshar to talk about the data analysis part we did for our clients ZeroEyes and New York City Council.

**Srisht**

1. Now I'll be talking about our next client which is the New York City Council who is the governing body of NYC
2. So the New York City Council approached us to analyze past shooting data available to find out which locations in New York are at highest risk, what could be the factors contributing to it, and any solutions we can recommend to help curb this problem.
3. Since we are going to be talking about locations, a map representation of NYC would be the best to visually understand everything.
4. First, with the graph on the left we get a bird’s eye view of NYC. And like Surya already mentioned, it is clearly visible that Brooklyn and Bronx are the riskiest boroughs for people.
5. To get more accurate information, we are going to look at the next graph here which breaks down these boroughs into specific precincts where these incidents were reported.
6. On analyzing this graph we found out precinct 75, which in fact is in Brooklyn, has the highest number of reported incidents of almost 10,500. This was followed by precinct 73 and 67.
7. On further analysis and our research about these locations we found that some of the reasons for high gun violence in these areas could be poverty, distrust among communities, low education rate, etc.

Hence, we recommend NYC council to open more employment opportunities which inturn will help reduce poverty to a certain extent. They can come up with welfare programs to create awareness about anti racism and mental health. Lastly, they should promote education or provide scholarships so that education is accessible to all.