# Accidental Drug Death from 2012-2018

Group 4

Department of Information Technology, California State University

Los Angeles

Miguel Guzman, Erick Gomez, Jacob Zubiate, Mauricio Ruvalcaba, Steven Flores

#### Abstract

• The increase of drugs has made it possible for people to have access to it more easily than before. The cases of drug abuse have escalated in a more drastic manner throughout the years. This has led to people to abuse them more constantly and seek them more frequently, causing an increase of what they can handle. This leads to unintentional drug overdose death, which has been claiming many people lives. The data obtain on governmental database would allow us to analyze and understand the type of drugs that are more being use as well which ones are being abuse the most. As well which one has a higher death count.

#### Data Size and Information

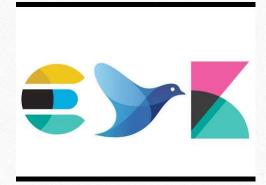
- Data used for this project was acquire from Data.gov
- Data name: Collection of Accidental Drug Related deaths 2012-2018
- Data size: 1.02MB
- Data Source: <a href="https://catalog.data.gov/dataset/accidental-drug-related-deaths-january-2012-sept-2015">https://catalog.data.gov/dataset/accidental-drug-related-deaths-january-2012-sept-2015</a>



• The objective of the study is to analyze, understand, and predict the type of drugs that cause and will cause the most accidental deaths by making use of the data collected from the state of Connecticut

#### Main Work

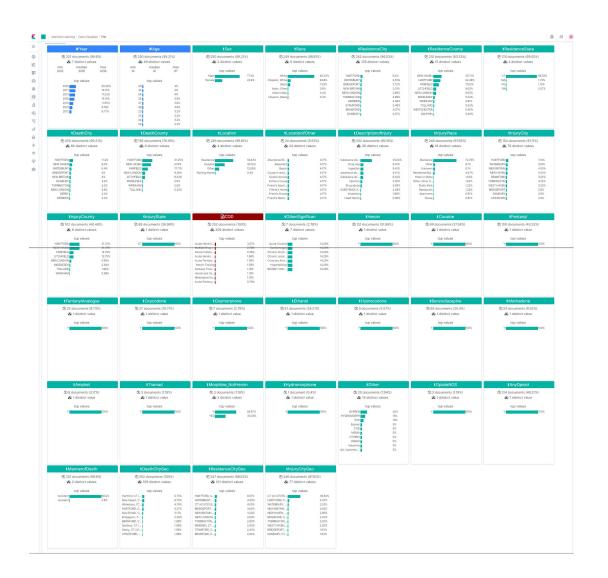
• Using Elastic Cloud and Kibana we created visualiation of the content of the data, that allow us to see and compare some of the important information that is being convey. The data contain information about the people that die due to drug overthose.

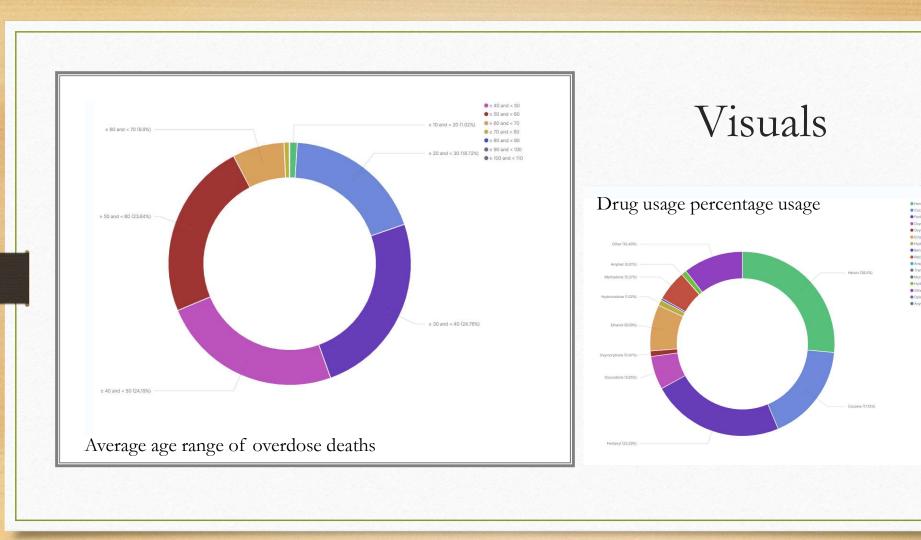




#### Elastic/Kibana Implementation

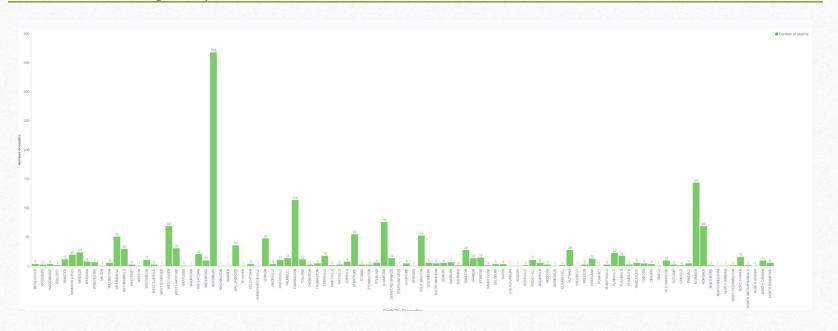
• Using elastic we can visualize graphs of data in a visual manner which allow to understand the information that is collected in a more simplistic manner.

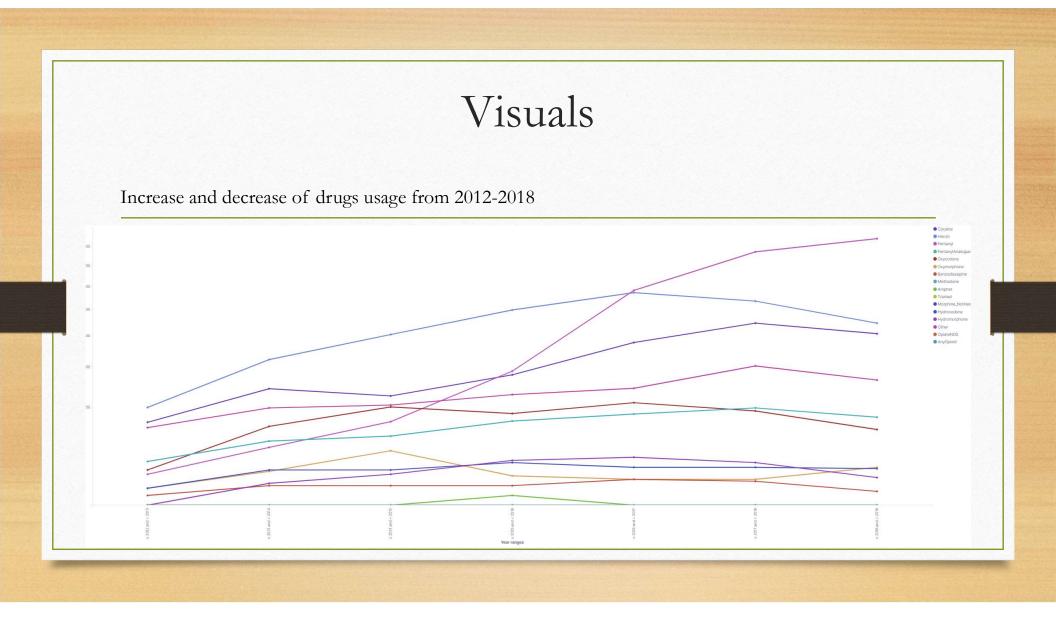




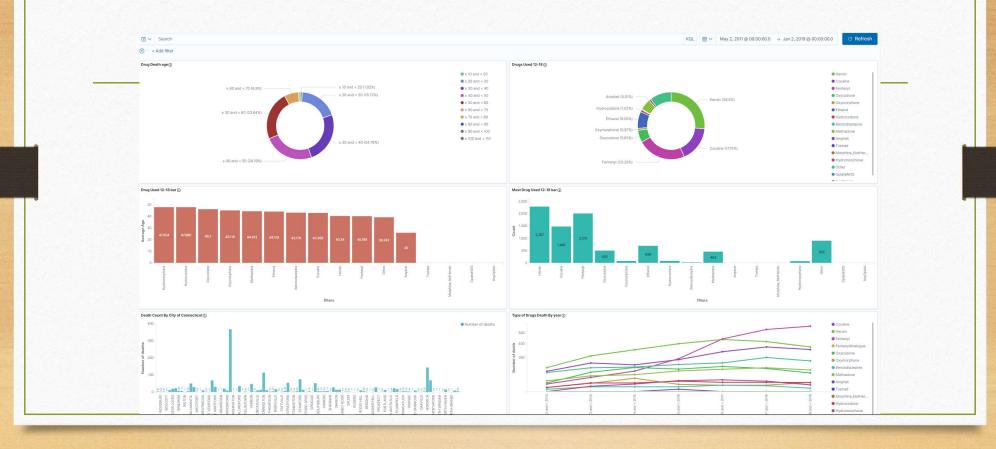
## Visuals

Number of death per city on Connecticut





### Dashboard



## Azure Implementations

- In Azure we made used of Linear Regression which is type of regression analysis where the number of independent variables is one and there is a linear relationship between the independent and dependent variable. Decision tree model is very good at handling tabular data with numerical features, or categorical features with fewer than hundreds of categories.
- With it apply we scored the dataset as get the values that would repesent the prediction of future. As it takes the frequency of the data list rows with similar score and indicates the likelihood of it beeing part of the same type.

