How Violence is Killing Us :
Violent Deaths in Colombia Between 2000 and 2012

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http://jcmendez.gkudos.com/hw3/

Description

- Use visualization to get a better understanding of violent deaths in Colombia.
- Dataset Title:
  - Estadísticas vitales - defunciones - Información acerca de defunciones en el pais por causas violentas 2000 a 2012
  - Url https://www.datos.gov.co/Mapas-Nacionales/Estad-sticas-vitales-defunciones/w2fy-cjwm/data
  - Source: DANE
  - Number of Rows: 342424
  - Number of Columns: 10

Main Dataset

- Dataset Name: Estadísticas vitales - defunciones
- Dataset Type: Table, Static
- Attributes:
  - anio: quantitative, ordered, sequential
  - sexo: categorical
  - edad: quantitative, ordered, sequential
  - cbas1: categorical (International Classification of Diseases CIE 10 [1], 4 positions code)

1 http://cie10.org/Cie10_Descargas.php

Derived Datasets

- Dataset Name: Estadísticas vitales - summary
- Dataset Type: Table, Static
- Attributes:
  - anio: quantitative, ordered, sequential
  - count: quantitative, ordered, sequential
- Derivation: Group by year

- Dataset Name: Estadísticas vitales - summary by year / sex
- Dataset Type: Table, Static
- Attributes:
  - anio: quantitative, ordered, sequential
  - count: quantitative, ordered, sequential
  - sexo: categorical
- Derivation: Group by year, sexo

Derived Datasets

- Dataset Name: Estadísticas vitales - summary by age
- Dataset Type: Table, Static
- Attributes:
  - anio: quantitative, ordered, sequential
  - categoria_edad: categorical (groups according to DANE. i.e. *“De 5 a 14 años”*)
  - count: quantitative, ordered, sequential
- Derivation:
  - Group by year, age group

- Dataset Name: Estadísticas vitales - summary by cause
- Dataset Type: Table, Static
- Attributes:
  - anio: quantitative, ordered, sequential
  - Dec10: categorical (CIE 10, 3 positions code)
  - count: quantitative, ordered, sequential
- Derivation: Group by year, Dec10

Tasks

1. **Discover Trends** in the number of deaths per year due to violent causes
2. **Compare Trends** of deaths per year due to violent causes having into account sex , cause or age

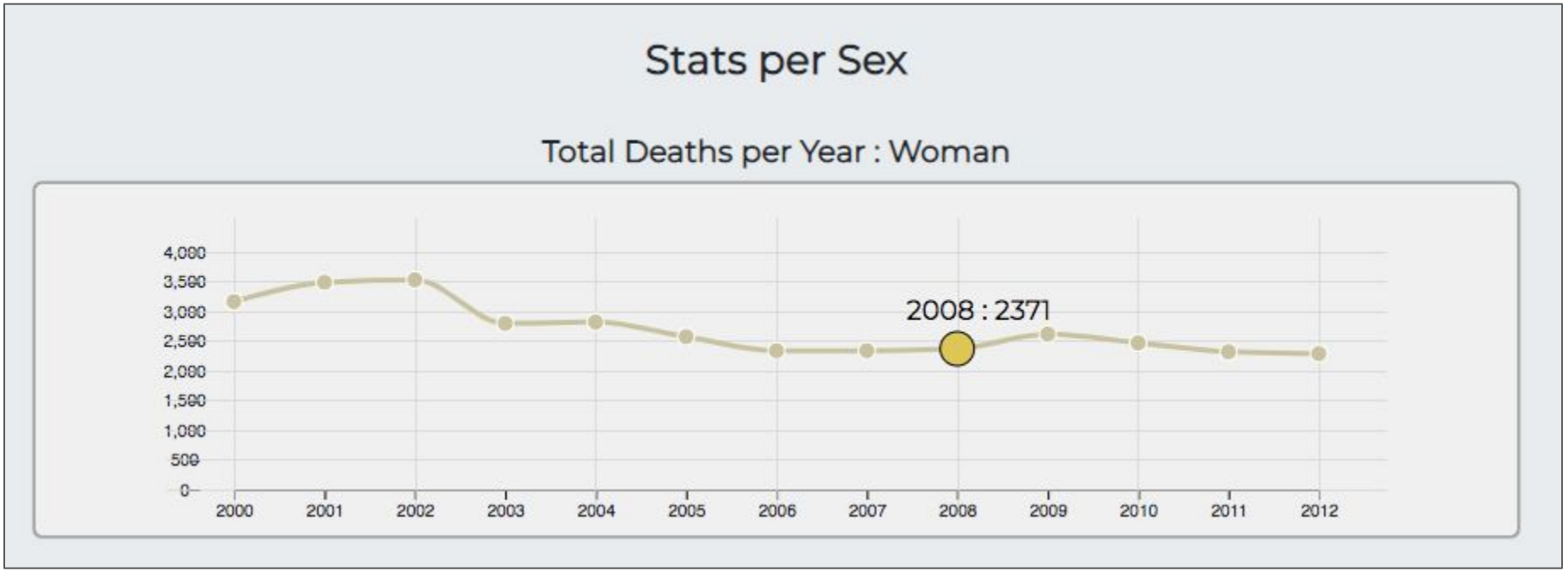
Abstractions

- Idioms: Line Chart
  - Mark: line
    - Attributes:
      - Year
      - Total number of events, Total number of events per sex, age, cause.
    - Channels:
      - Position on a common scale, X position, Y Position
  - Mark: point
    - Attributes:
      - Year
      - Total number of events, Total number of events per sex, age, cause.
    - Channel:
      - Position on a common scale, X position, Y Position, Size

Demo


How Violence is Killing Us
Total
Sex
Age
Cause
How Violence is Killing Us : Violent Deaths in Colombia Between 2000 and 2012
Total Deaths per Year
Stats per Sex
Total Deaths per Year : Woman
Total Deaths per Year : Man

Demo


Stats per Sex
Total Deaths per Year : Woman
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2008 : 2371
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012

Technologies

- Pre-processing:
  - Python, Pandas, seaborn
- Client:
  - D3 v5.7.0
  - Angular JS
  - Gulp
  - Bootstrap
  - CSS

Insights

- If you are an adult male between 15 - 44 years, probably you should take care of your personal security.
- Most common causes of violent deaths are related to guns and knifes
- CIE-10 classification it is really huge.

Difficulties

- Observable “*automagically*” handles a lot of things that you have to implement by yourself. (...more development time, but more control over visualizations…)

Achievements

- A reusable AngularJS component (“*directive*”) was created.
- D3 + AngularJS allow to create powerful SPAs