POPULATION ANALYTICS

An interactive tool to learn more about population across the world

BDMA – Visual Analytics

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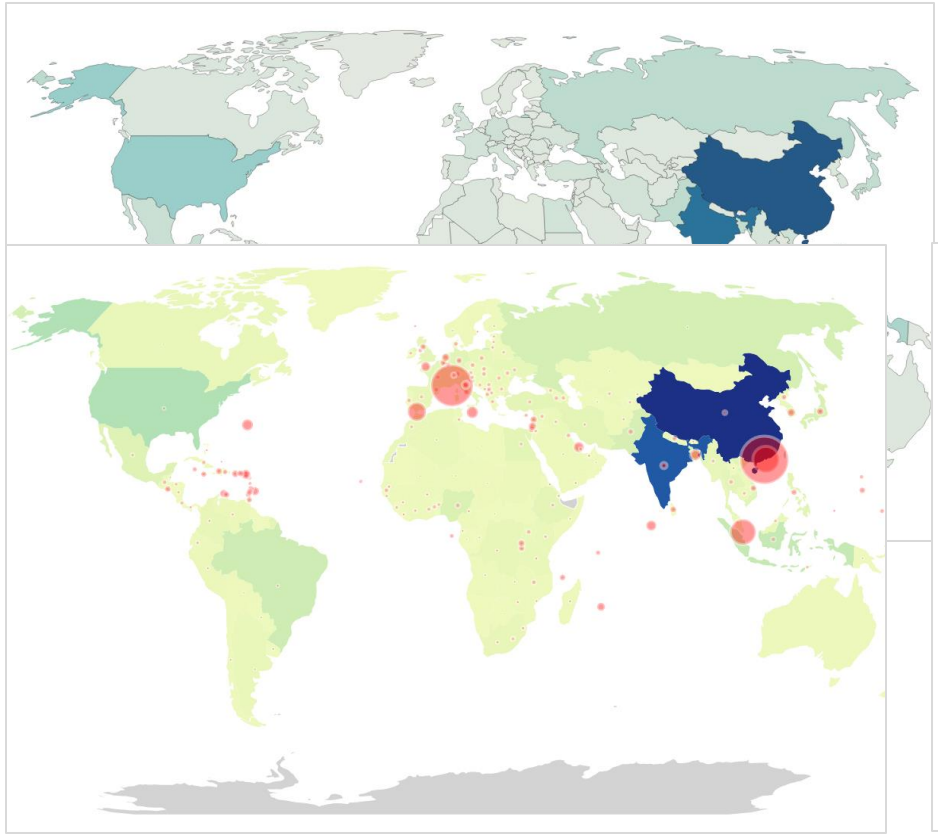
Where do humans live ?

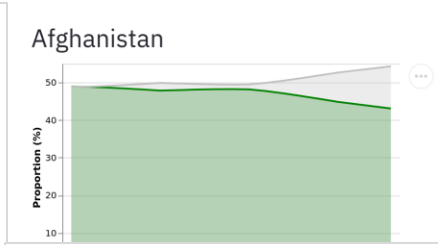
A story by Maria, Pooja and Minato

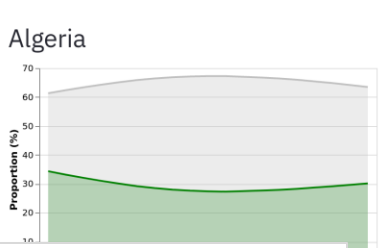
- 7.7 billion people on Earth, 9.7 billion by 2050. However, changes are fast : Asia is the most populated contient but Africa will know a huge increase whereas Europe is declining.
- First question : where do people live ? But our tool digs deeper : where, how, in what conditions, ...

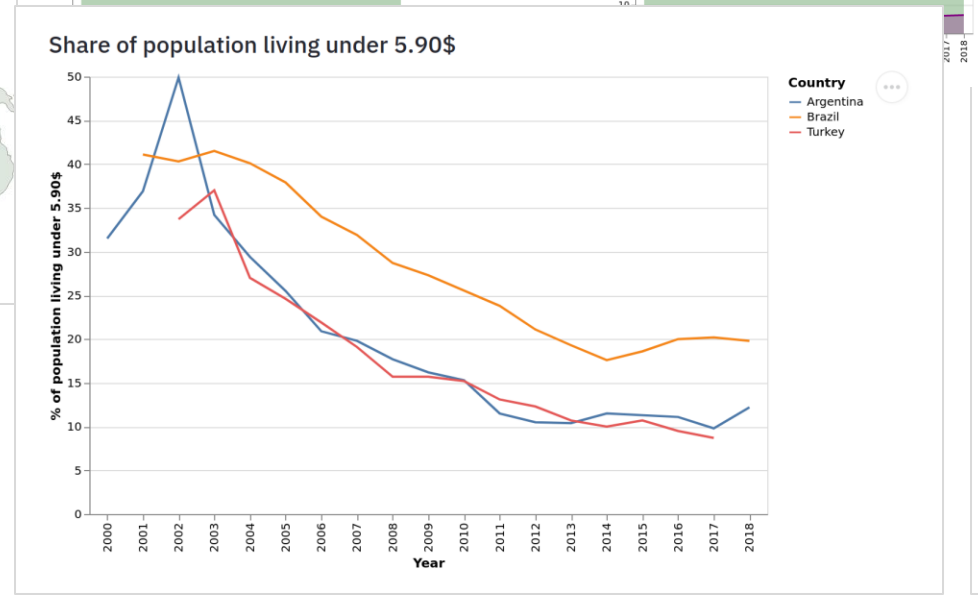
How is the population distributed across the world? What are the main characterics of most and least populated areas? What are the potential evolutions?

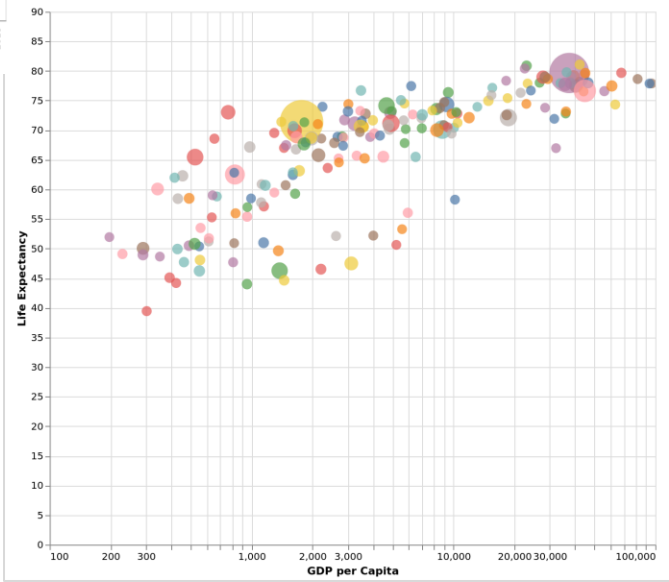
Main features of the tool











Visualize one or two features on a map

Compare choosen countries through years and features

Visualize features on a graph for all countries

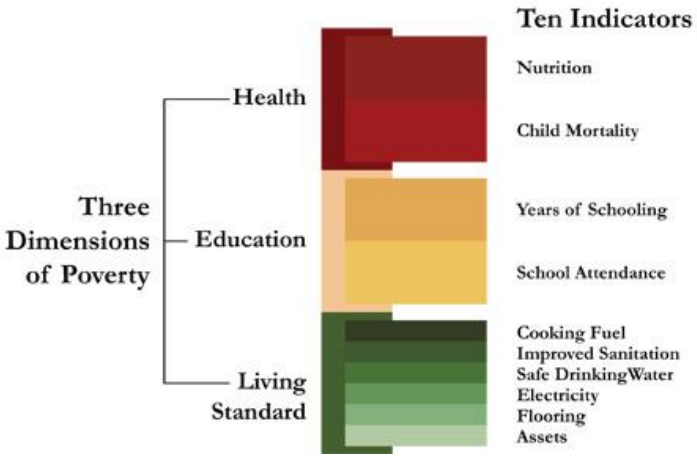
Main parameters: Density, Poverty, GDP per capita, GINI Index, Rural Population, Population living in a city of more than 1 million inhabitants, Unemployment Rate, Life Expectancy, Fertility Rate and Age Distribution of the population in 3 segments. All the data are coming from the World Bank OpenData website

Insights and interesting things

- Highest density are not in most populous countries but on city-countries like Macao, Monaco, Honk-Kong, Singapoor.
- Bubble plot shows the improvement in GDP per Capita increases Life Expectancy. The plot is shifting to the top-right as we shift in the year.
- It is very interesting to see that unemployment is not a rural country issue. In fact countries with high urban rates suffer also, sometimes more, than rural countries.
- We are able to visually see the aging of each country with the comparator. The upcoming evolution will be incredible : in Niger the population is almost 50% young people 50% labor force!
- Poverty graphs help identifying some historical economic events (ex: Argentinian crisis 2001-2002 , Financial crisis in 2007-2008)

Limits and improvements

- Poverty is a difficult feature to measure. Even World Bank and other international institutions had only few values. Various indicators exists but we decided to go with daily revenue.



- Density/Population map take a little time to load depending on the used web browser. *(Note: it works well on firefox and one phone browsers)*

- We may improve our tool by adding a gender dimension: proportion in population, woman employment rate, single parent household, ...

Quick Demo!

https://share.streamlit.io/mariaterrah/visualanalyticsproject/main/app4_final.py