Census County Data 2015.

Data Visualization (DSC 530/CIS 602-01)

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Dataset Description .

I have used Census County Data 2015. I found this data set from Kaggle. In this data set they have given total population of each county as well percentage of different races in that particular county. They have provided poverty rate of each county. And percentage of type of work is also given. I tried to use most of the attributes in different visualizations. This data set is of 2015.

Dataset Link.

https://www.kaggle.com/muonneutrino/us-census-demographic-data/data

Geojson

visualizations https://gist.githubusercontent.com/dkrathi457/f1b139170c8d0db752e41906d9cdc216/raw/3a181d755ec50a1b2ea98362a5e60fef6c94ff65/us-states.geojson

Data Processing.

I filtered data in javascript only. I made different functions for different visualization. By selecting on state on particular visualization function is got called and data got filtered.

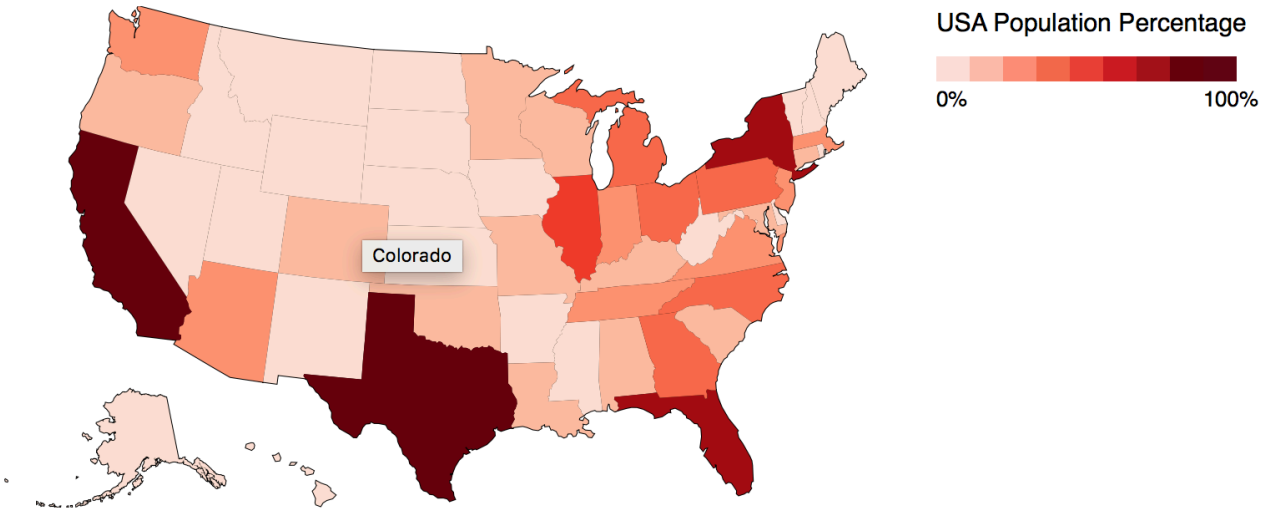
Questions

I tried to answer this questions with visualization.

- What is the population distribution across US in different states?
- Comparison of population by different races between two selected states.
- Percentage of Population and Poverty of Different Races in each County of Selected States.
- Population distribution according to gender in different states.
- Comparison between different job types in selected states.

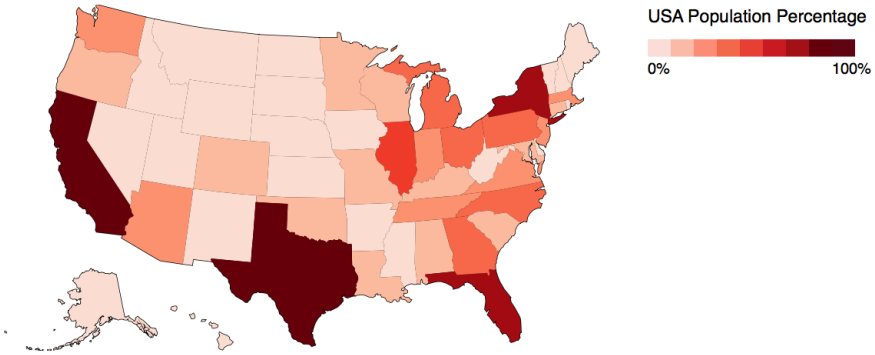
Visualizations

- **What is the population distribution across US in different states?**

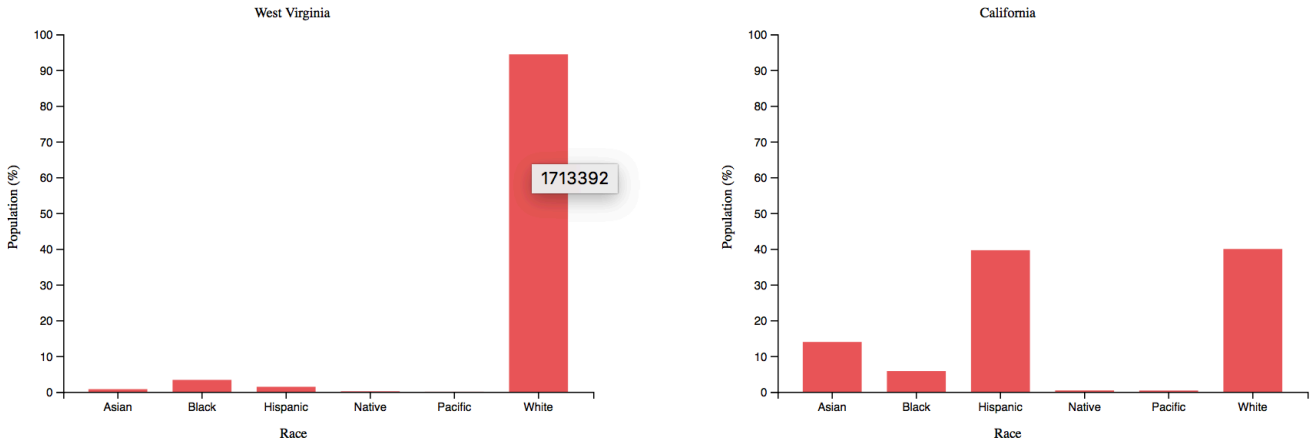


In this I have used Choropleth map. I have used red color scheme and divided it into 9 parts. So in this map more darker color means that state is more populated and lighter color means that state has less population. Here channel is color. On mouse hover name of the state is shown. From above we can tell Texas and California has higher population and west Virginia has low population.

- **Comparison of population by different races between two selected states.**



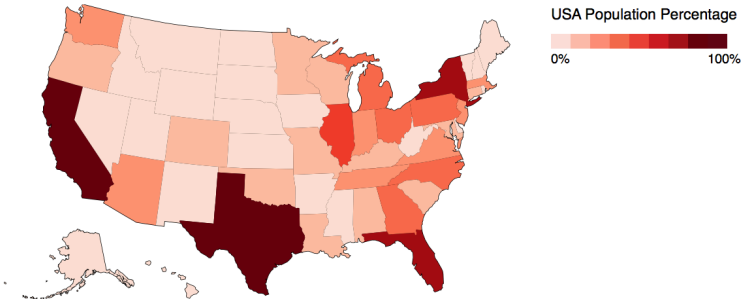
2. Comparison of population by different races between two selected states.



In this first bar char is created by clicking on some state from Choropleth map. This bar chart is showing percentage of each race in that particular state. In data percentage of each race was given by county. Then I first count the population of each race county vise. Then did sum of that or selected state. And then from total population of that state I found percentage of each race. And each bar is representing percentage of that race in selected state. By hovering mouse on this bar it will show population of that race in selected state.Here mark is area. And channel is hight.

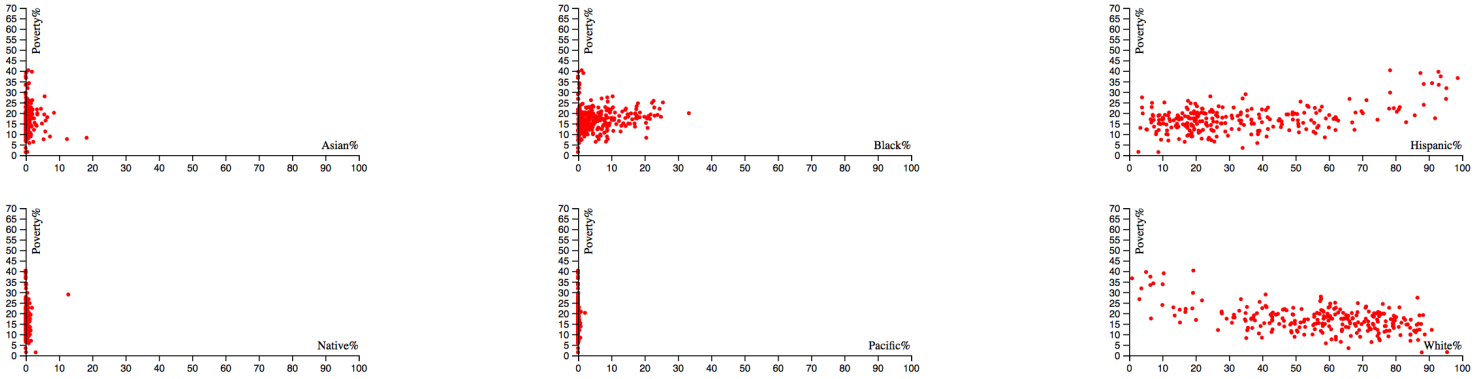
By clicking on other state new bar chart will be created. It is also representing same data. So we can compare different races in selected states. And by clicking on other state bar chart on left will be change.

- **Percentage of Population and Poverty of Different Races in each County of Selected States.**



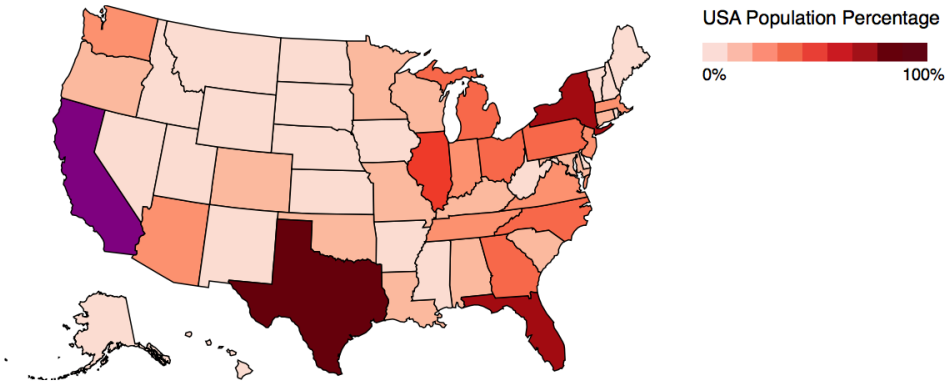
Percentage of Population and Poverty of Different Races in each County of Selected States.

Texas

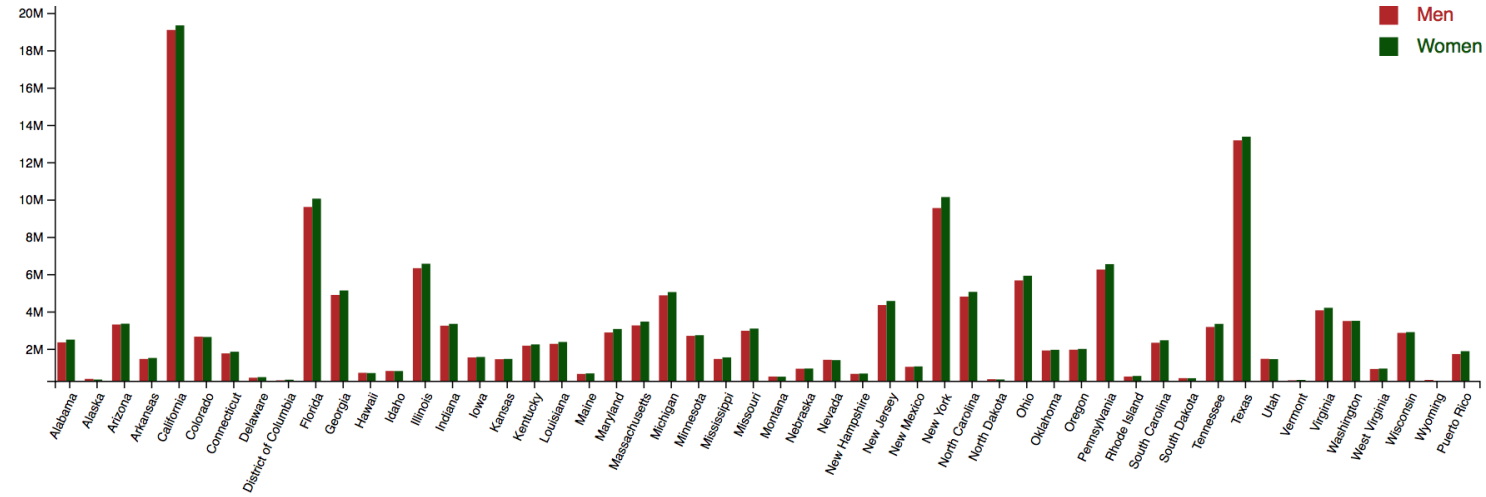


This scatter plot is also created by clicking of some state from Choropleth map. There are six scatter plot created of each race. Each red dot is representing county of selected state. so, all red dots in one plot is all counties of that selected state. And x-axis is representing percentage of population of that race in that particular county. And y-axis is representing poverty rate of that county. So we can see in which race is population is less or more and according to that what is poverty rate. Here mark is dot and channel is horizontal and vertical position. And on y-axis have have kept scale till 70% only because highest poverty was 70%. First I kept it till 100% but then all red dots were clustered near left bottom corner. I filter data by state so function is returning me all counties of selected state.

- **Population distribution according to gender in different states.**

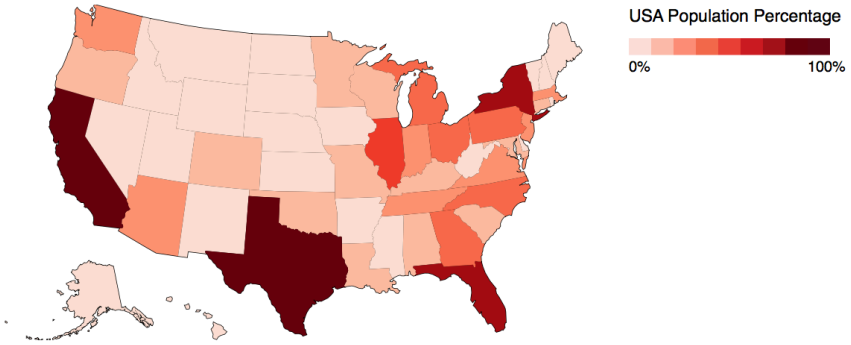


Population distribution according to gender in different states

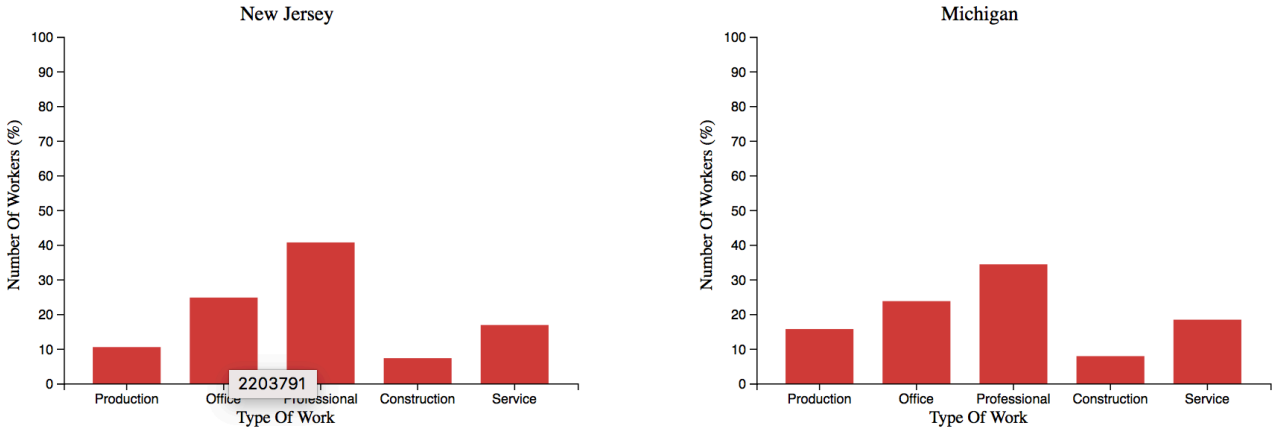


In this visualization I have created bar chart. This bar chart is showing population of men and women of each state. And x-axis is showing each state of US. And y-axis is representing population. So hight of bars are pollution of men and women of that state. Here make is size and channel is color. This is static but I have given hover effect. If we hover on some bar it will highlight that state in Choropleth map. And also it is showing exact population.

- **Comparison between different job types in selected states.**



Comparison between different job types in selected states



This is similar to second visualization. First bar chart will be created by clicking on one state. Second chart will be created buy clicking on second sate. So we can compact data of two states. X-axis is showing different types of works. And y-axis is showing percentage of workers in their field. Here mark is area. And channel is hight. I have also given hover effect on each bar. By hovering on bar it will show actual number of workers of that bar in that state.