# Names of Applicants of Social Security Issued at birth in USA

Project prepared for CEBD 1160 By Wilson Lee

## **Project Objective**

- Find out the most used name in USA history
- The distribution of the name among the different state
- See the change in popularity of a given name

#### **Data Source**

The data for this project is provided by the USA Social Security Administration.

The database consists of the number of Social Security Card applications at birth for a given name.

Website Link:

https://www.ssa.gov/OACT/babynames/limits.html

#### **Provided Data Format**

The provided data is a set of text files, 1 file per state, and is comma delimited.

The application count is aggregated by

- State of application
- Gender of the applicant
- Year of birth of the applicant
- Name of the applicant

#### Example Entry: AK,F,1910,Mary,14

## **Project Development Process**

- Python script and web page developed locally
- Pushed to github repository
- Pull to Amazon's AWS EC2 machine
- Run Python script on EC2 to clean and aggregate data
- Host web page on EC2 through Apache2
- Debug web page through Chrome



#### Why AWS EC2 + Web Server

#### Available options:

- S3 + Static web hosting
  - Con: Limited to 2,000 put requests for free tier. Generated database had more than 31,000+ file
- Award Space + web hosting
  - Con: I tried to upload all fills and was blocked for up loading after 10,000 files

#### Solution:

- Upload the source code and original data set to EC2 and generate the 31,000+ files on EC2.
- Create a web server similar to Airflow

# **Project Output**

The following webpage is the deliverable of this project:

http://ec2-18-222-252-207.us-east-2.compute.amazonaws.com/cebd1160/

This web page consist of the following

- A chart with the total occurance of a selected name in USA over the time frame of the data
- The number of occurance of the name in a given year per year
- The "Top Ten" occurance of male, female and unisex names

## **GitHub Repository**

The GitHub Repository for this project is found in the following link:

https://github.com/wlee0515/US\_Name\_Per\_State\_Project

# Questions?