Project 3 Proposal

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GitHub Link: https://github.com/AleidvdZ/Project_3.git

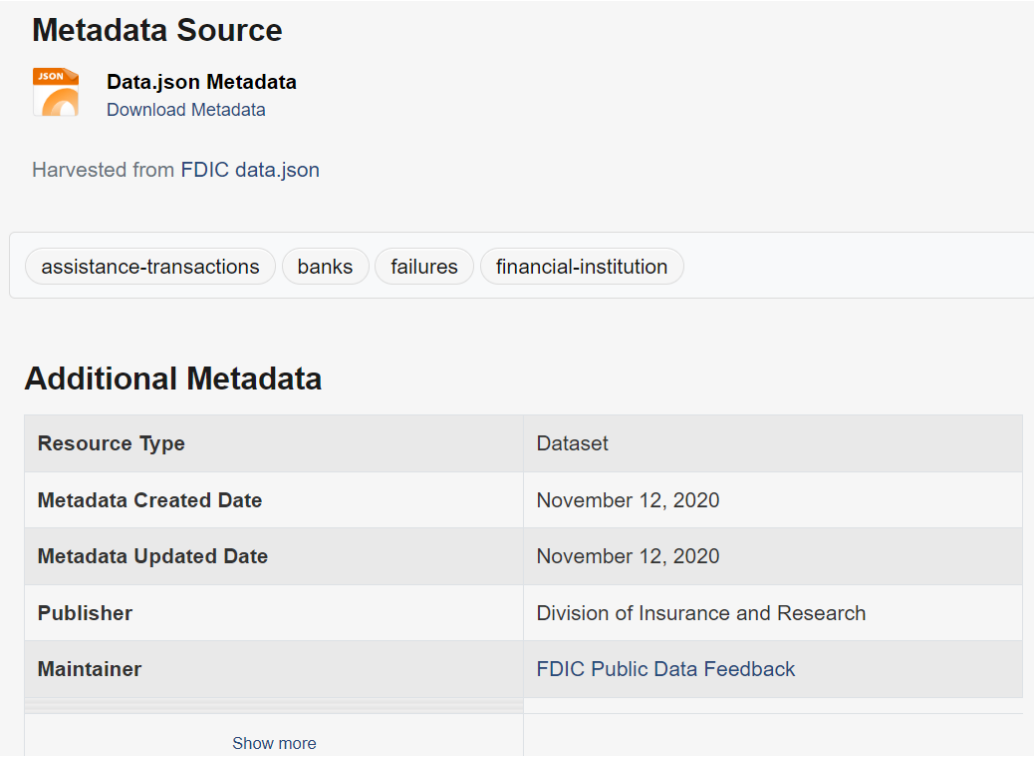
Analysis of Failed Banks

The industry selected by the analysis team was finance. On the data.gov website the team came across a data source that is entitled “FDIC Failed Bank List” which includes banks which have failed since October 1, 2000. A secondary data source that included some additional information was also identified.

Public data regarding bank failure exist and are readily accessible. The source the team identified was from the FDIC. Most of the data that is represented is tabular and the team is interested in creating visualizations of different aspects of the information to make it easier to analyze and understand patterns.

Data Sources

1st data set: FDIC Failed Bank List - Catalog
metadata link: https://catalog.data.gov/harvest/object/cb22fea9-0c90-43e9-94bf-903eacd37c92
metadata screenshot:



2nd data set: BankFind Suite: Bank Failures & Assistance Data

Questions (and associated graphics)

1. For the years covered in the data how many closures were there per year? Is there a pattern of closures in terms of cluster of years or are there certain months that have more closures?
    - bar chart for the past years (number to be determined) with drop down

2. What was the distribution of the closures amongst the states and where in the states were the closures (over a certain timeframe)? Were certain states, or cities within states more affected by closures?
    - map with markers and toggle info

3. What banks took over the smaller banks (and how many just went belly up)? Are there certain banks that are more involved in buying out failed banks than others? What percentage of banks just close and are not bought out by another?
    - pie chart
    - pop out slices for the top?

Output

A dashboard page with multiple charts (as described) that update from two datasets inspired by Module 14 Challenge.

Setup

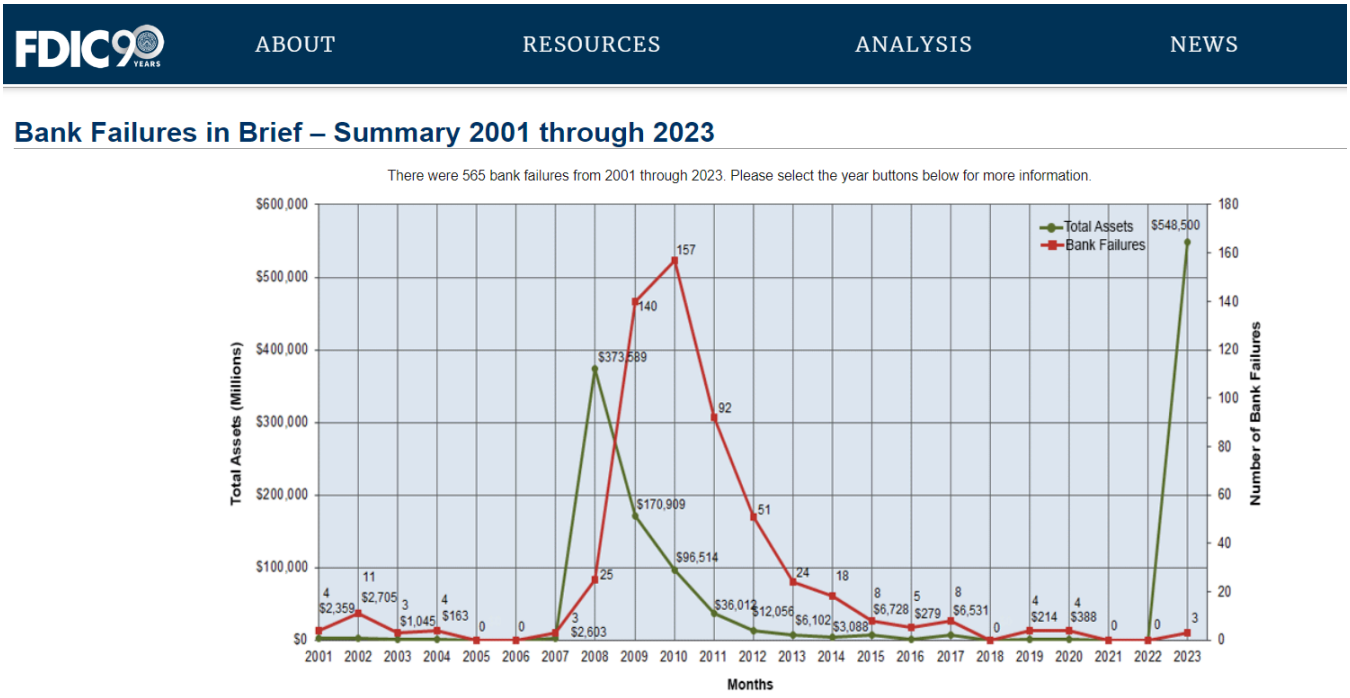
- SQL to create database
- Infoviz - JS library that has not previously been used (https://infoviz.org/) - yearly closures
- Plotly - static bar chart
- Leaflet - create interactive map of bank closure locations city and state
- HTML/CSS - to create the dashboard which will be pushed to GitHub (Module 14 hw html as the starter)

To Do

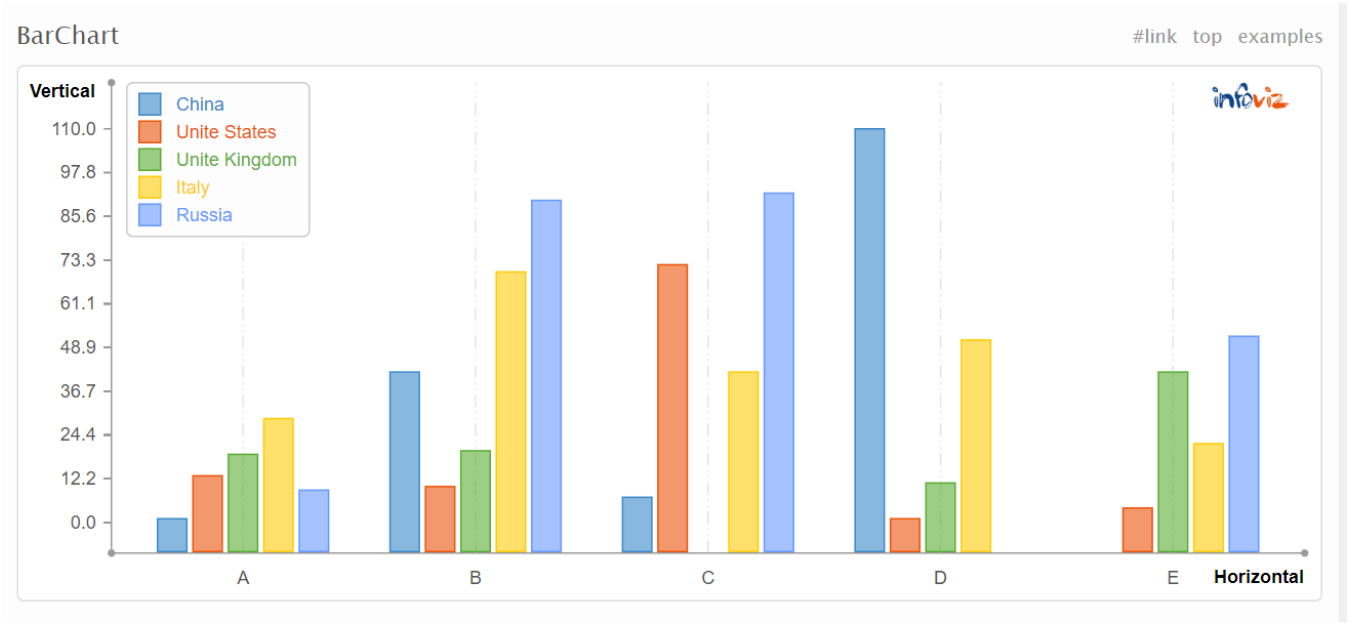
1) Data into database
2) Create API with Flask
3) Build html page
4) Pull data into java script for visualizations
    a) interactive bar chart (infoviz)
    b) interactive map (leaflet)
    c) pie plot for top 5 takeover banks
5) Testing
6) Create and update .README
7) Presentation

Relevant Inspiring Screenshots

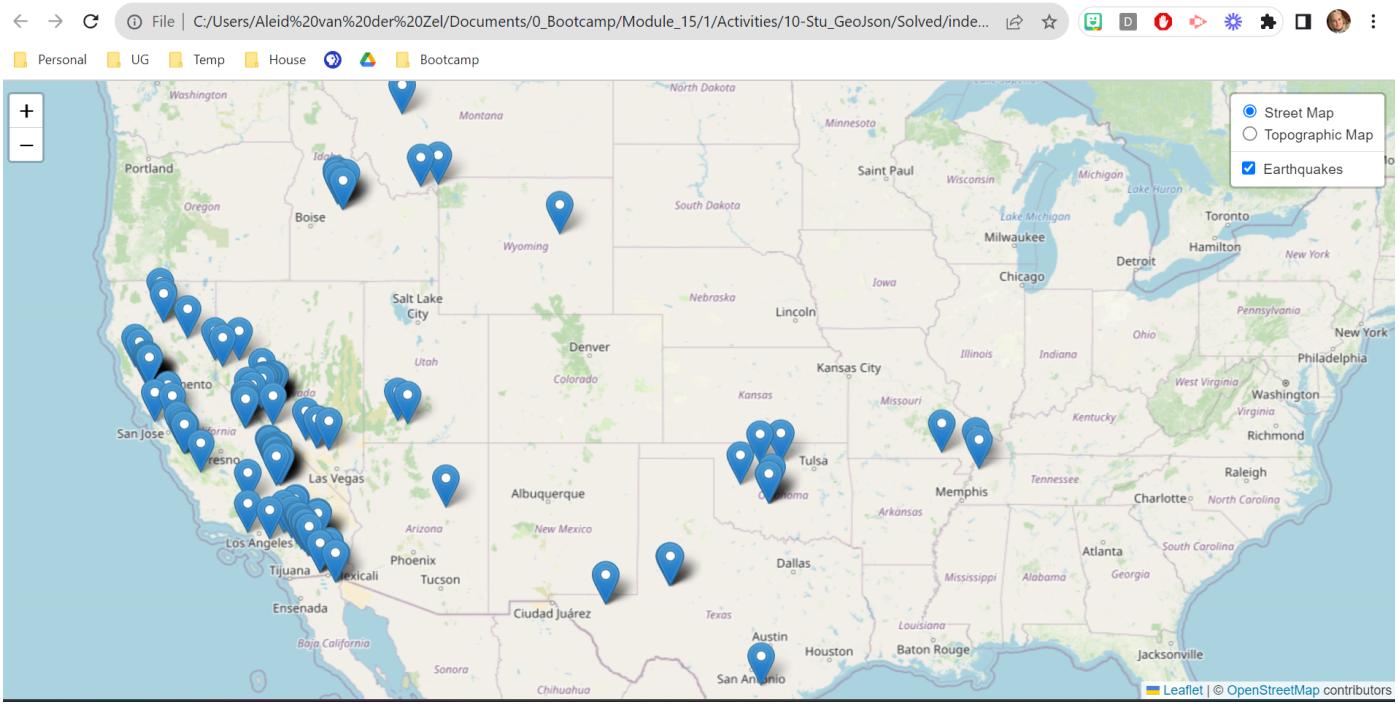
https://www.fdic.gov/bank/historical/bank/



https://infoviz.org/



Module 15: Activity 10 map



Requirements of project (from BootcampSpot):

General

- -must produce a python flask-powered api
- -use HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.)
- -use JS library not covered in class
- -dataset must have at least 100 records
- -some level of user driven interaction
- -final visualization includes at least 3 views

Falls into one of these tracks:

- combination of web scraping and leaflet or Plotly
- dashboard page with multiple charts that update from the same data
- server that performs multiple manipulations on data in database prior to visualization (approval needed)

Internal Milestones: (Powered by GitHub Pages):

- Project ideation
- Data fetching/API integration
- Data Analysis
- Testing
- Creating documentation
- Creating the presentation