

Economic Atlas of Rural and Small-Town America

Project 4 – Group 12 (Paris Lee, Laura Zapata, Sam Hoemann, Joy Weishan)

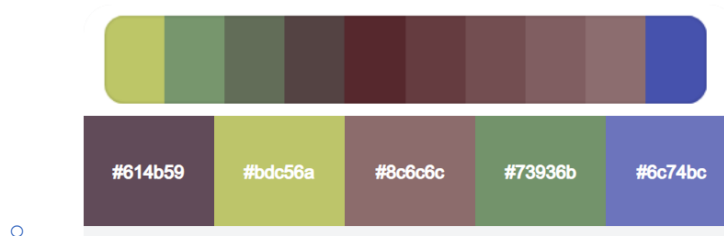
Overview

Project background and description

- This project will accomplish demonstrating data cleaning, analysis, database creation, SQL to retrieve data, flask app for SQL retrieval with separate SQL and application layers, creation of a Web application with multiple pages displaying a dashboard with data visualizations as well as project information and author descriptions. We chose this dataset as we are all interested in rural America job and income trends as rural America have been impacted with manufacturing leaving those rural areas.

Project Scope

- Jupyter notebook with data analysis, database, database import, SQL app, Flask backend with interactive API to include a minimum of 3 data visualizations and maps with easily interpretable data story and SQL calls, Web App with multiple pages utilizing HTML, Java Script, dropdowns, controls, text boxes. The project will include data visualizations from user-selected filtered data. Data Analysis, presentation and a Readme file will be included using GIT HUB as the repository for the project.
- Latitude and Longitude logic and/or database usage of latitude and longitude will be used in order to create a map visualization
- Github Link to Project: <https://github.com/weisport4/Project-3---Web-Application-Data-Analytics>
- Dataset Link: [Economic Atlas of Rural and Small-Town America \(kaggle.com\)](https://www.kaggle.com/datasets/ersda/economic-atlas-of-rural-and-small-town-america)
- Color Pallet



Questions we would like to answer

1. What have been the income trends across rural America and is it different in various states.
2. What are the job impacts over the years. Are certain job categories changing.
3. What are the unemployment and employment number trends

Inspiration Articles

- <https://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-employment-and-unemployment>
- Map inspiration: <https://iiosa.org/resources-data/eb-5-regional-center-trends/>

Visualizations

- Bubble Chart: Jobs by State and Category
- Sunburst Chart: Top State by County, with the most unemployment
- Bar Charts for employment numbers by State and overall by the US
- Map for employment trends by State

Roles and Responsibilities

All Data Cleaning, coding, visualizations, web page development will be shared across the team.

- GITHUB Setup/Database/file imports setup/initial flask app and sql_helper setup: Joy
- Standup Notes: Laura
- Organizing the write-up for Analysis: Sam
- Organizing the power point presentation: Paris