

Email: derek@cassadyweb.com  
Name: Derek Cassady  
Program: Data Analysis\_2  
Class: Indiana Cohort

# County Demographics (USA)

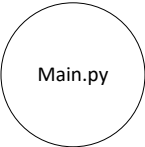
**Project Objective:**

Use data from multiple sources to provide selected demographic data for all US counties and FIPS code locations in an interactive dashboard setting.

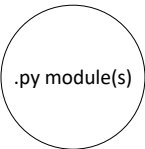


**Step 1: Determine data locations**

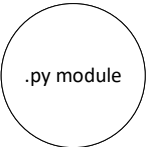
Census Bureau API (DEC): <https://api.census.gov/data/2020/dec/dhc/>  
Census Bureau API (ACS): <https://api.census.gov/data/2020/acs/acs5/>  
Bureau of Economic Analysis API: <https://apps.bea.gov/api/data/>



**Step 2: Create main.py to call multiple .py modules**

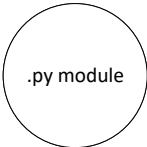


**Step 3: Create multiple .py modules to perform API calls, data analysis functions, and export functions**



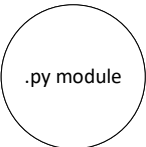
**Age, Sex, & Race**

Module performs 63 separate calls to the Census Bureau API for 2020 decennial data of selected variables. Module performs creation of data frames, data cleaning, joining of tables, and production of Excel workbooks.



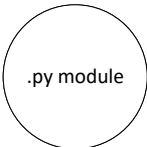
**Economic**

Module performs 5 separate calls to the Bureau of Economic Analysis for 2020 data of selected variables. Module performs creation of data frames, data cleaning, joining of tables, and production of Excel workbooks.



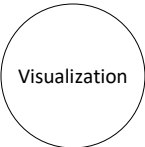
**Income & Benefits**

Module performs 15 separate calls to the Census Bureau API for 2020 American Community Survey data of selected variables. Module performs creation of data frames, data cleaning, joining of tables, and production of Excel workbooks.



**Education  
Medicare/Medicaid  
Disability  
Housing**

Data sources and availability has not been determined for these data points, their inclusion in the final product will be determined by accessibility and quality.



**Step 5: Create interactive dashboard from main.py excel products**

Use of Plotly Dash, PowerBI, or Tableau has not been determined yet. Visualizations will be based off of each data set and use a variety of chart types and interactivity features.