Intersections of Internet Access, Income, and Population Density

University of Oregon Data Analytics Bootcamp Capstone Group Project March 2022

Presentation Rubric Requirements

- Selected topic
- Reason why they selected their topic
- Description of their source of data
- Questions they hope to answer with the data
- Description of the data exploration phase of the project
- Description of the analysis phase of the project
- Technologies, languages, tools, and algorithms used throughout the project
- Result of analysis
- Recommendation for future analysis
- Anything the team would have done differently

Live Presentation Rubric Requirements

- All team members present in equal proportions
- The team demonstrates interactivity of dashboard in real time
- The presentation falls within any time limits provided by instructor
- Submission includes speaker notes, flashcards, or a video of the presentation rehearsal

Initial Data Exploration

Topic Selection and Data Sourcing Phase

- Selected topic
- Reason why they selected their topic
- Description of their source of data
- Questions they hope to answer with the data

Data Exploration Phase

- Questions they hope to answer with the data
- Description of the data exploration phase of the project

Data Analysis Process

Data Analysis Phase

• Description of the data analysis phase of the project

Data Analysis Phase

Database

Data Analysis Phase

Machine Learning Model

Results + Demonstration

Data Analysis Results

- Results of analysis
- Lots of visualizations / graphics
- Live interactive demonstration of dashboard

Dashboard Wireframe

- Interactive Map
 - Internet Access
 - Income
 - Population
- Map overlays for auxiliary info:
 - Type of internet (broadband / dial-up)
 - Education level
- Geo ID → County names / labels (dict)
- Additional charts + graphs
 - o Analysis results, predictive information

Wrap Up

Technologies and Tools

- Technologies, languages, tools, and algorithms used throughout the project
- Data Limitations
 - Census Data [allocation data, margin of error, confidence level]

Future Recommendations

- Recommendation for future analysis
- Additional information on existing programs / initiatives in this area
 - Pew Research
 https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/
 - USDA Rural Development / Rural Broadband Loans and Grants
 https://www.rd.usda.gov/programs-services/telecommunications-programs/rural-broadband-loans-loangrant-combinations-and-loan-guarantees
 - Map
- Anything the team would have done differently

End

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