**Houston Census Data Visualization**



**The Better Census Bureau**

**Team Members**

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| **Name** | **Email** | **Phone Number** |
| Sandy Medrano | [sandymdrno@gmail.com](mailto:sandymdrno@gmail.com) | [832.682.7515](tel:8326827515) |
| John Burke | [86burke@gmail.com](mailto:86burke@gmail.com) | [713.294.5721](tel:7132945721) |
| Henry Wycislo | [wycislo@yahoo.com](mailto:wycislo@yahoo.com) | [832-331-5308](tel:8323315308) |
| Sam Robinson | srobinson0226@gmail.com | 832 - 981 - 0006 |

**Background**

* Provide data visualization dashboard of Houston’s various census metrics and how they relate to geographic location

**Motivation**

We are interested in looking at various census metrics for Houston and understanding how they compare to the United States as a whole. An additional point is to understand how this data is collected, where biases may be present, and if there are any other data sets which provide a different view.

**Questions to answer**

* How is the population split geographically in terms of education, social vulnerability and income, and how does this compare to the national data?
* What are the data collection methods and any inherent biases for how the data is collected?
* What are the richest and poorest areas, the highest educated and least educated areas, and the highest social vulnerability and lowest social vulnerability areas in Houston?

**Tools/Modules to use**

* Python
* Pandas
* Matplotlib
* NumPy
* SciPy
* Plotly
* GeoJSON
* JavaScript

**Data sets to use**

* <https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html>
* <https://www.census.gov/quickfacts/fact/table/houstoncitytexas/PST045219>

**Tasks Breakdown**

* Henry: data collection methodology, alternate data set search, inherent biases research
* Sam: Collect/Clean the data
* All: Dashboard and Visualization
  + All team members will contribute and this task will be broken into parts after establishing the overall dashboard layout together
* All: Presentation
  + All team members will have a portion of the presentation to prepare and present

**Tasks and timeline**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Date** | **Task** | **Notes** |
| **1** | **10/27** | Project Proposal |  |
| **2** | **10/28** | Proposal Approval | Thurs Class day |
| **3** | **10/29 – 10/31** | Data collection and cleaning | 10/30 Sat Class |
| **4** | **10/29 – 10/30** | Collection methodology research |  |
| **5** | **10/31 – 11/1** | Inherent biases research |  |
| **6** | **10/28** | Dashboard layout agreement |  |
| **7** | **10/29 – 11/8** | Dashboard development | 11/2 Tues Class |
| **8** | **11/4 – 11/8** | Presentation development | 11/4 Thur Class |
| **9** | **11/6** | Presentation practice 1 | During class, Sat |
| **10** | **11/8** | Presentation practice 2 | Monday |
| **11** | **11/8** | Presentation finalized | Monday |
| **17** | **11/9** | **Project Presentation** | Tuesday |

**Presentation**

Divide your presentation steps to tasks and assign it to members.

Sandy: Introduction and Overview

John: Visualization 1

Sam: Visualization 2

Henry: Visualization 3, Data Collection, and Biases Considerations

Sandy: Visualization 4 and Conclusion

Suggested by:  
Sam Robinson