Course Project - A Data Story

Data, CDAD-UH 1001Q, Spring 2022

Proposal (1-2 Pages)	February 25, 2022
Sketch & Writeup (1-2 Pages)	March 9, 2022
Prototype & Writeup (1-2 Pages)	March 23, 2022
Hosted Interactive Data Story, Video & Class Presentation, and Writeup	April 27, 2022

1   A Data Story

The final project will provide hands-on experience on the entire data pipeline. Through the project you will:

1. Identify a passion area/project. You will use data to answer a core question or explore and understand a specific issue.

2. You will find an appropriate data set to help you with this mission. You will engage in wrangling, cleaning and analyzing this data set.

3. At times, you will revise and revisit your questions/issues in response to what data sets are available, find alternative data sets, augment existing ones, or collect new data to help you with your mission.

4. You will present your findings in an engaging and interactive **online** narrative piece that helps readers understand your motivations, your questions, your findings as well as understand the limitations of your process and what can and cannot be inferred from your data-driven piece.

Project teams should consist of 4 people.

In addition to your web page, you will be responsible for presenting your final results to the class and you will create a video that we will showcase through the course book.

1.1   Good Projects

Good projects are ***not just***:

- A visualization of a given data set or collected data set, or

- Some descriptive analysis of a data set, or

- Statistical comparisons across groups or dimensions within the data.

Good projects combine the above to form a cohesive and strong narrative around the data. The narrative allows your reader to care about your project, engage in it. It should influence your readers decision-making or make them self-reflect. Additionally and quite importantly, it should help them thoroughly understand what you did and the limitations of your entire process.

Here are examples of data stories that you can use as inspirations. Don't be intimidated by how advanced they may seem; they are inspirations.

- **Close Votes** is an interactive piece that helps voters in the Netherlands understand which cities have voting patterns most similar to their own city: http://tulpinteractive.com/close-votes/. The visualization is quite engaging and the piece involves non-trivial analysis to find similar cities to a given one. It is missing aspects that you are to include in your project such as clear descriptions of how they produced this final artifact and limitations of that process or data set.

- **How much is a limb worth?** is a pro-publica piece analyzing data on workers compensation benefits in the U.S. It is quite engaging to explore. That said, it can be simplified to focus on a more central findings. https://projects.propublica.org/graphics/workers-compensation-benefits-by-limb.

- **The Case for a New Type of Minimum Wage** is a detailed interactive piece on minimum wage in the US generated with Tableau Dashboards. It has a clear message and effectively uses different visualizations. It relies on straightforward data analysis. https://public.tableau.com/views/MinimumWage_3/MinimumWage-StoryPointsEdition?:showVizHome=no

1.2 Bad Projects

Here are things that will lead to deductions or a poor project grade:

- Poorly formulated theses about what should we derive from your piece.

- Statements or claims that are not backed by your data or analysis.

- Hyped or misleading visualizations.

2 Milestones

Proposal. Due Feb 25, 2022. The project proposal will declare your topic, dataset(s), and team members. It will provide an abstract that describes the project, its scope and lists some of the outcomes you hope to achieve within the project timeline. [5%]

Sketch & Write-up. Due March 9, 2022. The first project sketch and write-up will describe the preliminary analysis you have conducted towards achieving your goal. It will also include rough sketches of how you will present your findings and how you expect the reader to engage with your piece. These can be rough hand-drawn sketches or a series of tableau or other visualizations that you hope to connect together to form your story. Think about how your will present your main message, e.g. how will readers zoom into more detail or roll-up to less detail when exploring your visualizations. Additionally, discuss any missing analysis you wish to conduct and what you expect the results will be. Finally, discuss the challenges you are currently facing in materializing this project. [15%]

Prototype & Write-up. Due March 23, 2022. The project prototype and write-up moves your work from rough sketches and ideas to a more concrete, online presentation. The purpose of this submission is help me better advise you on how to proceed or where to focus your efforts on for the final project submission. [20%]

Final Deliverable. Due April 27, 2022.   The final submission will include the link to your online data story, a 10 minute video describing your project and a 15-20 minute in-class presentation that not only goes over the final project outcome but also the details of your process, the challenges you faced and how you overcame them and the limitations of your final piece. [60%]