# Final Project Specifications

## (due June 14th 11:59pm)

This is an **individual** project.

## Instructions on Implementation

1. Data Preprocessing: If the dataset you chose is not uniform/workable (has missing values,etc.) , you can use any programming languages of your choice before reading the data into d3.js. You can clean it with javascript too (and of course that's the ideal workflow). Once the data is cleaned, it is mandatory to use d3.js to read the data and visualize the plots for all the tasks given below.

   **Note)** You are not allowed to generate outputs from d3's generators during the preprocessing stage. You still have to use d3's generators (path generators, scale generators, etc.).

2. Written Report: It can be identical to your project progress report 2. However if you have made any change on your responses to the questions (except for the prototype itself, since you are building a real product this time anyways), indicate it on this report in **red** font, so that we can identify what has changed since your progress report 2.

3. The resulting html should deliver the story clearly and follow the narrative genre/structure of your choice. (e.g. proper headline, texts, placement of plots, not-so-crammed around a specific spot on the html).

4. Minimum 3 visualizations - table-based, network-based (i.e. a vis with a link data), and geometry-based (i.e. a vis with a position data) - should be included.

   a. Include interactivity in at least two visualizations. Refer to the Interactivity lecture slides for types of interactivity and examples. Your visual should match the interactive intention (e.g. correct element should be highlighted, tooltip should be positioned correctly).

   b. All the plots will be considered complete if they have the following:
      i. Axes (if required)
      ii. Appropriate dynamic scale
      iii. Legend (if required)

iv. Title
v. Axis Labels (if required)

## What to Submit on Gradescope

You **must submit all the files** listed below to get credit.

1. Your project progress report II (in pdf). If your final project has deviated from the latest/approved proposal, indicate so in **red** font on this pdf.
2. PDF-printed version of your resulting html page.
3. All your files (dataset, javascript, html, css, etc.) in a single zip file. When unzipped, the graders should be able to change directory into the root of that directory, run live-server, and everything should work without any modification on your zip file. If any file is missing and/or we cannot replicate what we see on your PDF, you will get 0pt.

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## Part 1 - Story and Narrative

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| Link to the dataset | **Dataset 1** (link) and **Dataset 2** (attribute)<br>https://docs.google.com/spreadsheets/d/1fevEwAgjnnqSIm7QrM4pG4VjpPL2WrJoyOWa8d2e7c8/edit?usp=sharing<br><br>**Dataset 3** (position)<br>https://www.kaggle.com/datasets/shivamb/hm-stores-dataset<br><br>**Dataset 4** - not planning to make a visualization using this dataset anymore<br>https://docs.google.com/spreadsheets/d/1U5RUHrk8ISfRrXQFaZ82RxLUq0yp79HGY6YpkiNQP5E/edit?usp=sharing |
| Example item from the dataset | **Dataset 1**: Literature Review Attributes<br>- Variables: ID, Reference, Cited By, Focus on Social Media, Year, Marketing Strategy, Political Consumerism, Environmental Sustainability, Labor Practice Ethics, Consumer Perception, Survey/ Questionnaire, Data Mining Focus Groups, Interview, Netnography, Predictive |

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| | Modeling<br>- Example row: [16, Slow fashion movement: Understanding consumer perceptions - An exploratory study, 10, 1, 2013, 0, 0, 1, 1, 1, 0, 0, 1, 0, 0, 0]<br><br>**Dataset 2**: Publications per Year<br>- Variables: Year, # publications in Google Scholar<br>- Example row: [2013, 200]<br><br>**Dataset 3**: H&M Stores<br>- Variables: storeCode, storeClass, name, phone, city, country, countryCode, longitude, latitude, timeZoneIndex<br>- Example row: [AE0122, Red, Mirdiff city center, +971-42316646, Dubai, United Arab Emirates, AE, 55.42484, 25.22628, 165.0] |
| Story you want to deliver | (a story should be in a form of a list of facts, insights, and messages - refer to the lecture slide)<br><br>- I am doing research on the following questions:<br>What is the relationship between social media usage and perception of fast fashion brands?<br>How does social media usage relate to green purchase intention, and political consumerism?<br>What types of social media activities are related to each?<br>- Fast fashion is characterized by its accessibility, labor ethics issues, and environmental effect.<br>- Social media helps top fast fashion brands gain market share.<br>- Google Scholar publications increasingly contain “fast fashion” and “social media”.<br>- Fast fashion is all around us; there were more than 500 H&M stores in the US in 2022.<br>- With fast fashion brands’ use of marketing strategies on social media, the appeal of cheap, accessible clothing that stays up to date with the rapidly changing fashion trends, and the growing conversation on fair labor practices and sustainable fashion, I am interested to know how consumers of clothing and fashion products end up making purchase decisions and their involvement in political consumerism.<br>- Prior related research contains a set of topics and methodologies. The ones I read for this project can be visualized by citation.<br>- My project builds on suggested research from the prior papers. Relevant links are available. |

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| | - Further research can be done.<br>- This may draw attention to social media's influence on individual's engagement with fast fashion and the potential need for more systemic regulations on fast fashion. |
| Describe your target audience. | (using the questions the lecture slide listed)<br><br>The intended audience is my SOCI 108 class.<br><br>Familiarity with your topic? If not, how do we catch them up?<br>- They are familiar with the topic, but the descriptions and definitions provide enough context just in case.<br><br>Do they care? Why? Why not?<br>- Yes; the descriptions express a prevalent issue and the students are interested to see how surveys can be used to address these issues.<br><br>What do you want them to take away? Key points?<br>- The research is relevant to our lives and is being actively studied.<br><br>What do they know about visualization? Are your techniques standard?<br>- They know how to interpret connected scatterplots, point maps, and node link charts. My techniques are standard.<br><br>How do they encounter your visualization?<br>- I project my computer during my presentation and scroll through as I explain each part.<br><br>Mathematical background? Are you assuming too much? Too little?<br>- There is little mathematical background required to interpret the graphs, however, the SOCI students are used to reading graphs with more mathematical interpretation required.<br><br>Device? Mobile phone, computer, print media…<br>- Computer |

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| The goal of your project outcome. And why? | (exploratory vs. explanatory)<br>The outcome of this project will be exploratory because it will give context to the established research and briefly present the data collected, rather than analyze it to answer the research questions. |
| Narrative structure you plan to use | I plan to use an interactive slideshow where there is an overall structure (author driven) with the opportunity for local exploration by the reader. |
| Elaborate your choice of narrative structure. | I am choosing to do an interactive slideshow because the best way to convey the context and data of my research project would be through a linear structure (overview→context→literature review→survey results), where the reader can interact with each section as they go along. |
| Narrative genre you plan to use | I plan to use a partitioned poster. |
| Elaborate your choice of narrative genre. | I am choosing to use a partitioned poster because it allows me to have a linear structure, where each section contains partitions for a graph, annotations, and a description. |

## Part 2 - Outline

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| Story you want to deliver | (you can copy/paste from Part 1)<br><br>I am doing research on the following two questions: What is the relationship between social media usage and perception of fast fashion brands? What types of social media and social media activity are related to green purchase intention and political consumerism with regard to fashion? I aim to show what prior research has been done on the topic, and the results of my findings. This will be part of my SOCI 108 presentation in which I draw attention to social media's influence on individual's engagement with fast fashion and the potential need for more systemic regulations on fast fashion. |

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| Specifications on each plot **in the order of how you lay out on your project** | (for each plot, include 1) clear task abstraction, 2) attributes used, 3) marks, 4) channels, and 5) how this plot adds to the story)<br><br>1. Number of Publications vs. Year (scatterplot)<br>a. Task: This chart analyzes the trend between the number of Google Scholar publications containing the keywords “fast fashion” and “social media” and the year of publication. The reader can also hover over each point to see the exact number of publications.<br>b. Attributes: year, number of publications<br>c. Marks: point mark, line mark<br>d. Channels: position<br>e. How this plot adds to the story: This plot will show that the research topic is becoming increasingly more relevant.<br>2. H&M store locations (point map)<br>a. Task: This chart allows the reader to discover the location of H&M stores around the US. You can also zoom or pan.<br>b. Attributes: store ID, longitude, latitude<br>c. Marks: point mark<br>d. Channels: position<br>e. How this plot adds to the story: This plot will show the location of H&M stores in 2022. It aims to show the prevalence/prominence of fast fashion today.<br>3. Literature review (node-link diagram)<br>a. Task: This chart allows the reader to discover how prior research papers connect with each other through citation as well as hover over each paper to see more details about it.<br>b. Attributes: paper, cited by<br>c. Marks: point mark, line mark<br>d. Channels: position<br>e. How this plot adds to the story: This plot will show which research papers in my literature review are cited by other research papers. When you hover over one node, a description of the paper and a link to it will appear. |
| Elaborate the choice of their marks and channels for each vis | 1. The connected scatter plot is composed of points connected by lines.<br>2. The point map is composed of points corresponding to longitude and latitude on top of a US map.<br>3. The node-link diagram is composed of nodes representing papers, connected by lines indicating whether one paper is cited by the other. |

# Part 3 - Prototype

*added zoom feature to plot 2
*added vis descriptions