**1. The Big Idea:**

The main idea for our project is to create a visualization of available data (available data being either connected to sexual assault or Olin majors and course offerings). We plan to explore the topics of map generation, connections between data and how to visualize them. Our minimum viable product is an interactive map of some sort, whether that is of the united states or olin major routes. The stretch goal would be to produce an interactive website that visualizes the data in a way that is helpful or informative.

**2. Learning Goals:**

**Celina**: I am new to coding in such a large group, so I feel like there is a lot to learn about how best to balance between splitting up and pair-programming. Does Pair-programming work with more than two people at the computer? Are there platforms for editing code at the same time in a way similar to Google Docs, so we can see each others’ edits in real time? Anyway. I also want to continue working on the elegance of my code, and I’m excited to work more on data visualization. Also, I’m really excited about the prospect of learning to build a website, if we make it to our stretch goal.

**Katie**: I want to learn how to code well in a large group. I haven’t done much with mapping and data visualization before so I want to really improve technically as well

**Emily**: My individual learning goal is to learn to work well in a group, since I have very little experience with group coding and working with groups that are larger than four people. I would also like to learn more about interactive data visualization.

**Linnea**: To learn about the process of doing a software project in a larger group, and to nail this whole project-scoping thing.

**3. Implementation Plan:**

We plan to use pygame because some of us have been burned by other modules before. We want to explore varying types of data visualization, including maps, charts, and more abstract visuals. To really make a plan for implementation, we need to decide exactly which visuals we want to make as a group. The first steps of the project will involve acquiring data and cleaning that data, and acquiring general knowledge on what is possible. After that, we will implement our selected visualizations.

**4. Project schedule:**

The first week of this project looks like it will be primarily concerned with deciding what we plan to do with the project. I anticipate that the second week will be a data gathering and learning phase, and then after that will be four weeks of implementation. And the possibility of using the last week to make a website with our visualizations.

**5. Collaboration plan:**

Depending on what we decide to do, it’s likely that we will want to break into subteams and work on separate parts of the implementation, or even separate visualizations. We’re all pretty busy, so meeting as a group of four all the time will likely be very difficult. Specialization of different team members in different areas might be a good thing, especially if the project gets to the point of being a website. A weekly meeting will almost definitely be useful for checking in and reevaluating what everyone should be doing.

**6. Risks:**

I think the biggest risk to the success of this project is the tool we use and its limitations (either in limited online documentation or in limited choice of implementations). Also the extent of useable data is a potential risk, because without enough data the project will be limited in its scope.

Another risk, not directly related to coding, might be individual group members becoming overwhelmed with other work. Or the potential for group controversies in the unlikely event our group dynamic isn't good.

**7. Additional Course Content:**

Topics that would be very helpful for the success of our project would be where to find information on different data visualization softwares, how to create a website using python code, and examples of create data visualizations.