Written Document 1: Graphics Proposal

“A picture is worth 1000 words. An interface is worth 1000 pictures.”
Ben Shneiderman

Due: Friday, February 17, 6 pm
Value: 10% of final grade

Purpose: To convince the reader (CI) that your team can develop a usable and responsive graphics interface for your Geographic Information System (GIS). You must show that you are familiar with the relevant state of the art and that you have a feasible plan.

1. Introduction: Inform your reader of the document’s purpose and provide an overview of the main points you will discuss. Be sure to mention the key features of your graphics: what makes them usable and responsive?

2. State of the Art Review (SAR): GIS’s are used in a wide variety of fields. Find three examples of GIS software and describe the graphical interface of each, providing at least one screenshot of each. Be sure to choose systems that perform different functions from one another (e.g., do not include three versions of a city mapping software). When conducting your survey, try to answer the following question: What features make each design usable for its intended purpose?

A key problem in your design will be to visualize all the data in a city without overwhelming the user and without compromising responsiveness. Your SAR should not only discuss commercial products and websites but also refer to at least two scholarly papers that discuss responsiveness and usability.

3. Proposal: Explain your plan to make a usable GIS and support the plan with reference to your SAR. Remember that your reader (your CI) is most interested in human factors (usability) and responsiveness, along with a level of technical detail that makes your plan credible without overwhelming the reader. Write with your intended reader in mind.

• What best practices from your SAR have you chosen to use and why? Provide one or more screenshots of your interface and comment on the design strategy behind these graphics. How do the features shown in the graphics enhance the usability of your map? How quickly should your program respond to user input, and how will you achieve that? Screenshots from your prototype are ideal, but hand-drawn figures are also acceptable.

4. Testing: Explain how you will test for response time and usability. How will you know your design works well? What metrics will verify success?

5. Conclusion: Provide a concise take-away message that summarizes your key points.

List of References: Use IEEE formatting for your references.
**Attribution Table:** Please indicate which team member or team members were responsible for writing the different sections of this document. You should specify whether a team member was responsible for writing, revision, research, or editing.

**Length:** 1200-1600 words, not including figures, their captions, the List of References, and the Attribution Table. No appendices for this assignment, please.

**Submission:** One member of your team should submit the document in .pdf format to Turnitin.com.