

**EN 605.462: Data Visualization**

## Final Project

Due: Last Day of Module #14

**I. Overview:**

The final project is a significant part of the course, it allows students to synthesize the concepts learned throughout the semester and apply them to their own datasets and/or to their particular area of interest. The final project grades will be based on the following components:

- Draft Proposal (10%)
- Revised Proposal (10%)
- Literature survey (20%)
- Final paper (40%)
- Final project (20%)

**II. Project topics:**

Your first task is to pick a project topic. To come-up with project ideas we suggest for students to:

- Consider extending any of the project assignments to include new features that leverage state-of-the-art visualization techniques
- Think about research topics that are of personal interest
- Review some papers in Data Visualization, Visual Analytics, and Scientific Visualization
- Think about research ideas that are relevant to your work
- Consider extending any of the examples presented in the reading material distributed through out the semester

**III. Project Proposals: (Draft 10% + Revised 10%)**

Proposals should be about 1-2 pages long. They should include:

- A description of your topic
- A detailed plan of how the project will get done
- A detailed timeline.

Proposals must be submitted online in a file named <last\_name>\_proposal.pdf. Instructor will provide comments and students must submit a revised proposal with updated project plan and timeline.

**IV. Literature survey (20%):**

Students are required to submit an annotated bibliography.

- Create an annotated bibliography containing at least 4 references related to your chosen topic.
- Write a short (e.g., 3-5 sentence) description of each reference, giving its focus and major contribution. Include a complete citation for each reference.
- Write a brief introduction to your bibliography to define the topic and scope of your bibliography.

Literature surveys must be submitted online in a file named <last\_name>\_bibliography.

**V. Final Paper (40%):**

The final paper must be submitted by the due date. The final paper should include the following sections:

- Abstract: paragraph summarizing of the paper
- Introduction: section introducing the research problem
- Background: discussing some of the previous work
- Approach: describes what was accomplished
- Results: describes the results
- Conclusion: concludes the paper

The length of the final paper should be between 4-10 pages at double-spaced plus references. Additional supporting material of any length can be put in appendices. Use of figures is strongly encouraged.

The final paper must be submitted online in a file named <last\_name>\_final\_paper.

**VI. Final Project (20%):**

Students must submit the application, code, and tools that were developed to create the project. The submission should include:

- Source Code
- Documentation about how to run the code
- Sample dataset(s) that were used to test the system.
- The final project must be submitted online as a .zip file named <last\_name>\_final\_project.zip.