

CS4235A – Introduction to Information Security Spring 2003 Project

The intent of this project is for you to do some independent research and demonstrate an in-depth knowledge of a topic related to the class material. You were assigned to groups based on a similar interest in some topic and your project should relate to that topic.

The spring semester project is made up of a research proposal, the written project/report, and a presentation.

The project can take many forms. You may choose to write a research paper exploring your groups assigned topic, develop a programming project, create a security application program, develop a comprehensive WWW reference page your topic, or any form and substance of your choice. Topics and web sites from previous semesters can be found at these links:

http://www.cc.gatech.edu/classes/AY2002/cs4235_spring/projects.html

http://www.cc.gatech.edu/classes/AY2002/cs4803d_fall/project.html

Research Proposals

Research proposals are due no later than the beginning of class on **February 18th**. You must submit a two-page, single-spaced, hard copy (not handwritten) description of what you propose to do for your project or paper. This proposal should include at least:

- The title and description of the topic (what you intend to research).
- Who is involved in the project?
- Preliminary citations to papers, books, programs, or URLs that you have consulted in exploring or designing your project.
- A description of your project plan. (Include a description of who will do what during the course of the project).

This proposal is an important document. Write it carefully, use good grammar, and spell check the document.

The research proposal will be worth 20 points of your final project grade – 10 points for content and 10 points for form (style, looks, and mechanics).

Projects/Papers

Projects and Papers are due at the beginning of class on **March 25th**.

The total score for the projects/reports is worth 60 points – 10 for research and sources used, 20 for writing style and mechanics, and 30 points for organization and presentation of content.

The following paragraphs are guidelines for different project options.

Research Paper

Your group may write a collection of papers to be a comprehensive collection on your assigned topic. Each person in your group will develop their own paper on a portion of your assigned topic. The papers should be similar to a paper in *ACM Computing Surveys*. You should analyze the work done by others on the topic, including a summary of points yet to be addressed by research.

Each paper must include appropriate citations to appropriate literature. You should check with Mr. Tim Daniels, information consultant for College of Computing in the Georgia Tech Library, for recent and relevant publications.

Each paper should be in proper style, use proper grammar, and be carefully researched and phrased. The format will be 12-point Times New Roman type, double-spaced, with 1-inch margins. Each paper should be at least 15 pages long, not counting the reference pages or diagrams.

Research papers must be done “individually” as a team. You may consult me for ideas for the paper.

Note carefully the Georgia Tech policy on academic honesty. Your paper must be **in your own words**. If you copy text from another paper or book or have someone else write it for you, then I will view your actions as plagiarism. Plagiarism is a serious offense. It will result in a grade of zero, and you will be reported to the Dean of Students.

Programming Project

Your group may design and code a project as an individual project, or as something done by a group. Each project should represent independent design, construction, and testing. You must turn in a design document, commented source code and results of structured testing. You must also include an overview and summary document describing what you built, how it works, where it might be used, and the conditions under which it should not be sued. Indicate all references used.

Your group may code the project in any language you prefer, so long as it is on one of the College of Computing computer cluster or a GT networked computer.

All members must contribute to the project. The program proposed must be of sufficient size and complexity to allow for this.

Grading standards for programs will be established and defined by the TA.

Security Application Program

Your group may choose to demonstrate security software applications in the range of your assigned topic. Between 2 and 3 applications will be evaluated and compared to each other by the members of your group. This project may be done individually or in a group of two students. Your group must author a short document for each application (at least 10 pages) describing the background of each application, what each does, how each works, where each might be used, and what other security measures need to be considered for both applications success. The applications should be compared side-by-side and evaluated to determine which is more successful as well. Indicate all references used.

Grading standards for programs will be established by and defined by the TA.

WWW Reference Page

This type of project requires a report for grading as well as the website you design and display.

Your group may choose to research and design a WWW set of reference pages on your topic or some portion of your topic. You must do background research and investigation of literature (on-line and at the library) on your topic area.

Your WWW page should be a cover a large enough portion of your assigned topic to ensure that all members of the group will contribute.

Your pages should have at least the following sections:

Introduction and terminology

Give a brief introduction to the topic of your page(s), and include definitions (with citations, as appropriate) for important terms used.

Pointers to good articles

This should be a list of at least 10 URLs for articles or other WWW pages on the topic, along with a description of what the reference is, and why it is useful. If you find good references at the library that aren't online, then include a bibliographic entry here without a URL. Include references to any good books you locate. (You don't have to read them, but you can skim them to determine if they are appropriate).

Pointers to Expertise

Include here URLs for people or organizations that have some expertise or bearing on the situation. State why each entry is listed.

Software and archives

Include a list of pointers to online software, archives of software, or other WWW sites that may be useful to the person reading the page and wishing to do more research. Again, each entry should include a few sentences describing the entry and why you consider it important.

Other

If you think of other topics and material to add, group them logically and label them appropriately.

Project Presentations

Each team will be scheduled for a 30-minute oral project presentation at the end of the semester. The form and content of the presentation is up to the team based on the type project.

The total score for the presentation is worth 20 points. The evaluation will cover the quality of visual aids, organization and content of the presentation, plus the poise and delivery of the speaker. Fellow classmates will evaluate the presentation.

Overall Project Grading

The project is worth 30% of the final grade for this course

The class will be evaluated on one standard. Graduate and undergraduates will be judged on one scale. Some subjective consideration of quality of work within type projects will occur.

As stated above, your projects will be graded on a simple 100-point scale---

20 points – Project Proposal

60 points – Project/Papers

20 points – Project Presentation