

CSC 415

Research Report and Presentation

Each of you will select a programming language to be the subject of your research report. Your report will be presented in both written and oral form. The first portion of your report should contain a synopsis of the syntax and semantics of the language including the primary design choices made by the language designers as well as the motivation for these choices. The topics and discussion in chapters 5 through 14 of our text should provide a general guide for you to follow. The second portion of your report should contain an evaluation of the language using the evaluation criteria discussed in Chapter 1 of our text.

The written report must be typed with a word processor. It must contain a title page and a bibliography. The style and format of the remainder of the report should follow what you learned in English Composition. You may use another style if you choose. You should be able to locate style manuals in the library or copy the style in appropriate professional journals (e.g. Communications of the ACM). Other writing support tools (spelling checkers, style checkers, grammar checkers, etc.) are highly recommended. You may also obtain assistance from the Racer Writing Center in Waterfield Library.

Schedule for Written Report Development

September 2	Language selection finalized.
September 23	Draft outline and tentative bibliography to be turned in for review and critique.
October 21	Draft written report due.
November 4	Final written report due, both hardcopy and electronic

The grade earned on your written report will be a composite of grades on intermediate submissions and your final report according to the following scheme:

Outline and Bibliography	15 points
Draft Report	15 points
Final Report Grammar/Spelling/Format	10 points
Final Report Content	60 points

Oral presentations will be given in class on November 6, 11, 13, 18, 20, 25, December 2 and 4. Your presentation and any questions and discussion should last approximately twenty minutes.

CSC 415 Term Paper

Generic Outline

- I. History of your Language
- II. Overview of your Language Design, Syntax, and Semantics
 - A. Names, Bindings, and Scopes
 - B. Data Types
 - C. Expressions and Assignment Statements
 - D. Statement-Level Control Structures
 - E. Subprograms
 - F. Abstract Data Types and Encapsulation Constructs
 - G. Support for Object-Oriented Programming
 - H. Concurrency
 - I. Exception Handling and Event Handling
 - J. Other Issues of your Language
- III. Evaluation of your Language
 - A. Readability
 - B. Writability
 - C. Reliability
 - D. Cost
- IV. Appendices
- V. Bibliography and References