Independent Language Exploration
CS 330 - Spring 2017 - Ms. Katz

Goals of Independent Language Exploration Assignment
- to practice writing technical material in the Computer Science field
- to use (roughly) a standard format
- to practice using correct English sentence structure
- to explore resources and find answers on your own
- to prepare an informative presentation about technical material
- to present technical information to your peers

Language Choice and What to Write About

Choose a language that you do not know and learn about it. The language should not be covered in our textbook with more than four pages. You should not already know it or be using it extensively in another class. I reserve the right to ask you to choose a different language.

Learn about how your language addresses the concepts we are considering in class. For example, how does it support programmer-defined types? How are parameters passed? How are its syntax and semantics defined? What scoping does it use? What kinds of problems is it designed to handle best? What makes it unique? Why would you use it? You do not need to include all the above topics in your paper. They are examples of the kinds of topic you should discuss.

While history of your language should be included, that should not be the focus of the paper. Focus on technical details. A reader without a computer science background should be left wondering about some aspects of your paper because they are not familiar with computer science concepts.

Detailed Expectations for the Paper

- The paper should contain technical details related to the concepts in this course.
- The paper will be 5 double spaced pages with a 12 point font and 1 inch margins.
- It must include a title with your name and course information.
- It must include an abstract: a short summary of the paper that precedes the main text.
- It must include a reference list at the end of the paper to sources that support the paper. These should be referenced in the body by bracketed numbers [3] or bracketed author last name notation [author].
- It must have a conclusions section.
- It may, and probably should, include examples of code which should be single spaced. But no more than 30% of the 5 pages should be code.
- Include how to translate and execute a program.
- An example of writing the lines program or the dot product program in your language would be good although that listing could be extra pages beyond the 5 pages.
- If the language is mentioned in our textbook, include a reference to that page.

Detailed Expectations for the Presentation

- The presentation will be about the language you have chosen and written about.
- It will use appropriate presentation media of your choosing - Powerpoint, Prezi, chalkboard.
- It should be 5 - 7 minutes long.
- You must hand me an outline of your presentation before you start.
- You should speak clearly and be organized.
- You may not include a demonstration of code executing. But you may have pictures of it executing.
- Include how to translate and execute a program.
- Your audience is your classmates.

Readings
- ACM XRDS one-page for students
- informIT multiple answers
- Example SNOBOL paper

Due Dates
- Topic choice by March 21 - two sentences by email to Ms. Katz
- Paper due April 25 before class
- Presentations May 2 and 4

Rubrics and Resources
- Paper rubric
- Presentation rubric
- Millersville University has a free Writing Center, but it is not a proofreading service