Introduction

The goal of this assignment is to study and then present a pet language. Presentations are only five minutes, so organize your material well and consider practicing on your cat/mirror/SO. The goal of your presentation is to communicate to us why the universe demanded the creation of yet another programming language. You must also produce an assignment to be done in your pet language. The assignment should highlight some key (preferably unique) aspects of your pet language. It should take no more than a page or two of code to solve and you should handout about half of this code. The goal is to learn language features not get bogged down in syntax. Classmates doing this assignment will send their answers to you for grading. You will then forward the graded version to me. Your grade for Assignment 8 depends on a successful demo, the write-ups, the assignment you create, and your presentation.

What to hand in [points]

(1) [10] (by 10/12) A draft presentation including a demonstration of a program written using your pet language that runs on one of the peanuts, a mac, or a windoz box. If you need installation help from our sysadmin please given him at least two weeks notice.

(2) [10] (by 11/2) Draft write up (see below) describing your pet and why it exists.

(3) [25] (by 11/2) An assignment that uses your pet (emailed to me). Include your solution to your assignment.

(4) [25] (by 12/02) A five minuet presentation. Your presentation should focus on why and not how and provide language-centric points of interest. Include a brief tutorial both on paper and online. Email your slides and the tutorial to me before class.

(5) [30] (by 12/02) A final write-up of no more than two pages describing your pet and why it exists. Include some discussion of what your assignment is designed to highlight. Shoot for a technical summary rather than a high-level executive summary or advertising hype. Small code examples often help illustrate key features. Your words please. I don’t need stuff cut and pasted from the web.

(6) [200] (by 12/12) Assignments 9 and 10: two pet assignments of your choice. The first line of each solution should be a comment saying why you picked the one you did. The graded version needs to be handed to me at or before the final on 12/13.

Notes

(1) If you want to produce a tutorial handout for your talk, cool, but limit it to two pages.

(2) In your talk, focus on why the language exists and what makes it special rather than its syntax.

(3) Please include instructions on how to run the compiler (or interpreter). (For linux just install in your account, for mac and windows install it on one of the public machines in the department.)

(4) There is no mercy for those who can’t run there pet! So install it now!

(5) Pet’s come is two flavors: (1) ‘cool’ research languages that are fun to play with, and (2) languages that you are likely to use post graduation. The choice is yours.

(6) Trending — F#, ocaml, umpl, golang. Worth consideration — postscript, white space, brainf.