

**CS 451**  
**Programming Assignment #8,9,10**  
**Pet**

Due 11/2,12/9/09, by 6:00am sharp!

**Introduction**

The goal of this assignment is to study and then present a pet language. Presentations are only 15 minutes, so organize your material well and consider practicing on your cat/mirror/SO. Tell us *why* your language is special. You must also produce an assignment to be done in your pet language. The assignment should highlight *why* the language was created. It should take no more than one page 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**

- (1) [10] (by 11/2) A demonstration of a program written using your pet language that runs on one of the peanuts or a windoz box in DS 127.
- (2) [30] (by 12/7) An assignment that uses your pet (emailed to me). Include your solution to your assignment.
- (3) [30] (by 12/7) A 15 minuet presentation. Your presentation should focus on *why* and **not** *how*. Include a brief tutorial both on paper and online.
- (4) [30] (by 12/9) 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.
- (5) [200] (by 12/15) Assignments 9 and 10: the two pet assignments you chose to do. The first line of each solution should be a comment saying why you picked the language you did. The graded version needs to be handed to me at or before the final on 12/17.

**Notes**

- (1) If you want to produce a tutorial handout for your talk, cool, but limit it to 2 pages.
- (2) In your talk, focus on why the language exists and what makes it special rather than its syntax.
- (3) Finally, please include instructions on how to run the compiler (or interpreter). (For linux just install to you account, for windows install it on one of the flat panel dells in DS 127.)
- (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 like to use post graduation. The choice is yours.
- (6) Postscript is a fun pet.

add to list the patch language [http://en.wikipedia.org/wiki/Pure\\_data](http://en.wikipedia.org/wiki/Pure_data)

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mython  
pi-pattern-language.pdf (possible pet if \xists compiler? from ooplsa)  
flapjack (see 451/handouts/papers directory)

<http://golang.org/> - Google has a go at languages ; people say, a "python meets C++" programming