Readings

Please read the following papers prior to lecture. Some general though questions are below.

R1. "Growing a Language"

Read the short paper entitled “Growing a Language” from the auxiliary reading page. The author, Guy Steele, is one of the designers of Java.

This paper should illustrate why the designers of Java chose to leave generic types out of Java when they designed the language. It also gives some insight into programming language design in general. The following questions will guide you through the paper:

(a) What is wrong with designing/using a small language like Lisp?
(b) What is wrong with designing/using a huge language (C++)?
(c) What was Steele's goal in designing Java?

We will spend some time discussing these points at the beginning of class.

R2. Smalltalk

Read “Design Principles Behind Smalltalk” by Dan Ingalls.

Think about the Principles set forth. Which are new? Which have we seen before? What principles are remniscent of Lisp? What is the scope of the language (ie, what is included in its definition)? A few sentences on each item is sufficient— clarity is more important than length of answer.