Seminar chuyên đề

Seminar 1

Title: Choosing a programming language

Abstract:

Determining what programming language to use for a programming project could very well be the most important decision for the project, in that it might make a huge difference to the final cost of the project.

If all programming languages were roughly the same in terms of productivity and available libraries, tools, and competent programmers, then the choice would not make a big difference. It is particularly difficult to estimate the impact on programmer productivity of different languages. We present some (not so recent) research by members of the functional-programming community that suggests that the difference in productivity may be very high, even though this factor is routinely ignored by industry.

It is well known that domain-specific languages (DSL) can increase programmer productivity greatly. We examine this alternative from the point of view of productivity versus cost of creating such a language, and maintaining its implementation.

Seminar 2

Title: The Common Lisp programming language

Abstract:

Common Lisp is a modern multi-paradigm programming language. We present the main features of this language that contribute to improved programmer productivity, and to making it an excellent host language for domain-specific languages (DSL). In fact, good Lisp programmers routinely create several, often very small, DSLs as part of every programming project.

The purpose of the seminar is not to be an introduction to the Common Lisp language for future Lisp programmers, but instead to show the unique features of the language that should influence decisions about the choice of a programming language for a
particular project.

We hope that this presentation will trigger an interest among students to study this language, among current and future decision makers to consider it for programming projects, and among teachers to suggest courses that discuss the unique programming techniques that this language allows.