CS 378: Declarative Programming
Spring 2018

Unique Number: 51675
Time and Place: TTh 3:30–5, GDC 1.304
Instructor: Vladimir Lifschitz (vl@cs.utexas.edu)
Office Hours: W 2:30–3:30 and by appointment, GDC 3.808
Teaching Assistant: Sheena Panthaplackel (spantha@cs.utexas.edu)
TA’s Office Hours: MF 12:30–1:30 and by appointment, Station 2

Traditionally, the programmer solves a computational problem by designing an algorithm and encoding it in an implemented programming language. Research in artificial intelligence and computational logic has led to an alternative, “declarative” approach to programming, which does not involve encoding algorithms. A program in a declarative language only describes what is counted as a solution. Given such a description, a declarative programming system finds a solution by the process of automated reasoning.

In this class, you will learn to use the declarative programming tool CLINGO, which has found applications in many areas of science and technology. You will study the input language of CLINGO and the theory behind it, and you will write several programs in that language.

The notes posted at http://www.cs.utexas.edu/users/vl/teaching/ will be used in this class in place of a textbook.

Your grade will be determined by three tests (25% each) and five programming assignments (5% each). There will be no final. The tests will be given during regular class periods on or around February 15, March 29, and May 3. You will be allowed to use the lecture notes provided by the instructor and any notes that you have made during the semester, but you should not use any other notes or books.

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259.