# **Data Lab Release Notes**

## 12/16/2019

• Updated writeup and grade directory to match the default puzzle set. *Thanks to Chen Su* 

## 11/1/2018

• Corrected a header comment in the satAdd puzzle. *Thanks to Prof. Hugh Lauer, Justin Aquilante, and Nick Krichevsky, WPI.* 

## 10/24/2018

• Fixed a build bug in the BDD checker.

# 10/23/2018

• Added some new puzzles, fixed a typo in the comment for the rotateRight puzzle, and fixed a build bug in an earlier version. *Thanks to Prof. Hugh Lauer, WPI, for identifying the build bug. Thanks to Prof. Bryan Dixon, Cal State Chico, for identifying the rotateRight typo.* 

## 5/4/2016

• Added the -std=gnu89 flag to the dlc Makefile so that gcc 5 will correctly compile dlc (addresses a constraint on inline functions introduced in gcc 5). *Thanks to Prof. Branch Archer, West Texas A&M University*.

## 2/17/2016

• Added a note to the README that bison and flex must be installed in order to rebuild dlc. *Thanks to Prof. Michael Ross, Portland Community College*.

## 9/16/2014

- Applied patch to the ANSI C grammar for dlc to accomodate stricter type rules in more recent versions of bison.
- Eliminated unneccessary calls to bison and flex in the dlc Makefile. *Thanks to Prof. Robert Marmorstein, Longwood University.*

## 9/2/2014

• Fixed bug in grade/grade-datalab.pl autograding script.

# 1/30/2014

• Fixed comment in code for logicalShift to indicate that '!' is an allowed operator. *Thanks to Prof. Aran Clauson of Western Washington University* 

## 9/19/2012

• Fixed bug in line 147, btest.c: incorrect initial value for NaN. *Thanks to Prof. Cary Gray, Wheaton College* 

## 4/26/2012

• Added a clarifying note to the main README file reminding instructors that, because there are different versions of dynamic libraries. Linux binaries such as dlc are not necessarily portable across

- different Linux platforms. Thanks to Prof. Hugh Lauer, Worcester Polytechnic Institute
- Cleaned up some compiler warnings in the isLessOrEqual.c and isPositive.c puzzle solutions

## 8/22/2011

• Modified the "start" rule in Makefile to touch the log.txt file before starting up the lab daemons, so that an empty scoreboard is created initially. *Thanks to Prof. Godmar Back, Virginia Tech.* 

# 5/31/2011

- For fun, we've added an optional user-level HTTP-based "Beat the Prof" contest that replaces the old email-based version. The new contest is very simple to run, is completely self-contained, and does not require root password. The only requirement is that you have a user account on a Linux machine with an IP address.
- Corrected a few minor typos in various README files.

## 1/2/2011

## This is a major update of the Data Lab:

- Introduced floating-point puzzles.
- Added many new integer puzzles (There are now 73 puzzles total).
- Made significant improvements to btest. It now does millions of tests for each puzzle, checking wide swaths around Tmin, 0, denorm-normalized boundary, and inf. Also added support for floating-point puzzles.
- Added support for floating-point puzzles to dlc.
- Added a new autograder called driver.pl that uses dlc and btest to check for correctness and conformance to the coding guidelines.
- Top-level directory now conforms to the CS:APP convention of putting all source files in the ./src directory.
- In driver.pl, replaced "the cp {f1,f2,..,fn} target" notation, which some shells don't handle, with the more portable "cp f1 f2 ... fn target" form.
- The lab writeup is longer included in the datalab-handout directory, to allow instructors greater flexibility in distributing and updating the writeup while the lab is being offered.

## 8/29/2003

• Fixed a minor bug that caused btest to test the tc2sm puzzle with an input of Tmin, which isn't defined in sign-magnitude.

## 1/27/2003

- More operator-efficient solution to the isPower2.c puzzle. Thanks to Al Davis, Univ of Utah.
- The selections-all.c file now lists all 41 puzzles.

## 9/26/2002

- Now includes a prebuilt Linux/IA32 binary for the dlc compiler.
- Fixes a bug (an uninitialized stack variable) that caused "dlc -z" to crash on some systems.
- Contains some new scripts for running an interactive <u>"Beat the Prof" contest</u>, where students try to outperform the instructor's (intentionally non-optimal) solution.

## 6/3/2002

• Initial release.