Kickoff 2013 Flash Drive

Overview

As we've done for the past several years, we're providing each kickoff attendee with a flash drive, preloaded with key software packages and materials. Among other benefits, this permits a student to run the software used in the hands-on programming sessions, even if that software isn't installed on the computer being used. All of the preloaded software is configured to run with the PortableApps.com framework, and to maintain all configuration and preference settings on the flash drive itself, rather than the computer's hard drive.

Usually, we tend to err on the side of preloading more software than needed. Nonetheless, and though we make every effort to get a list of all required software from instructors ahead of time, and to configure that software to use in this fashion, there's always a possibility that some important software or other materials don't get preloaded. In addition, we generally include only open source, public domain, or otherwise freely available software on the flash drives.

In addition to the preloaded software and course materials, we include a set of installer programs and archives that can be used to install some of the selected packages (and related content) on Windows computers in the classroom and computer labs, or on the students' personal computers. This is primarily for the convenience of students and teachers, as an aid in getting started with the modeling and programming work on the projects after the kickoff. All of the included installers can also be downloaded from the Internet, and we generally recommend doing this when possible, in order to obtain the latest versions (or to obtain versions for OS X, Linux, 64-bit Windows, etc.).

Instructions

To run any of the preloaded software packages, first run the **`start.exe`** program in the root directory of the flash drive. This starts the PortableApps.com system, and displays a categorized menu of installed software. Note that the PortableApps.com menu remains accessible by clicking  (the PortableApps.com icon) in the Windows icon tray (usually located at the right end of the Windows task bar, at the bottom of the screen); in general, there's no need to execute **`start.exe`** more than once in a session.

When launching a program from the flash drive (e.g. from the PortableApps.com menu), keep in mind that *some programs start up quite slowly from a flash drive*. We no longer even attempt to use Eclipse (for example) from these drives, but we still have some fairly slow starters – in particular, StarLogo and the LibreOffice programs can take a while (sometimes 30 seconds or more). Please encourage your students to be patient, and not to launch programs multiple times when they don't see results immediately.

We recommend that students save all files that they create or modify during the programming sessions to the **`Documents`** directory (or one of its subdirectories) on the flash drive – even if the files are edited in programs not installed on the flash drives. However, note that even some of the preloaded software programs may not default to that directory when saving a file for the first time; students should be instructed to pay close attention to the destination directory when saving files.

Drive Contents

Core and Common Components

(These are not displayed in the PortableApps.com menu, but are used by other installed programs.)

- PortableApps.com Framework 11.2
- JRE 7 update 40
- JDK 1.7 update 40

Programs

(These are grouped mainly by the fixed categories used in the PortableApps.com menu; sub-groupings are used for clarity, and don't correspond to the menu structure.)

- *Development*
  - DrJava 20130901-r5756 (dependent on common JDK)
  - Notepad++ 6.5
  - PyScripter 2.5.3[1] (dependent on Python)
  - Python Shell 2.7.5[1]
- *Education*
  - Fractal Grower 2010.03 (dependent on common JRE)
  - NetLogo 5.0.4 (dependent on common JDK)
    - Hubnet
    - NetLogo
    - NetLogo 3D
  - R 3.0.2
  - StarLogo 1.5.1
  - XaoS 3.5
- *Graphics and Pictures*
  - GIMP 2.8.6 rev 3
  - Inkscape 0.48.4.1
- *Internet*
  - KiTTY 0.63.0.4

1 This installation of Python is based on the PortablePython 2.7.5.1 package, and includes PyScripter, the NumPy, SciPy, and Matplotlib libraries, and other libraries and tools. For details, see http://portablepython.com/wiki/PortablePython2.7.5.1/.

- *Music and Video*
  - VLC 2.1
- *Office*
  - Foxit Reader 6.0.6
  - LibreOffice 4.1.1 (dependent on common JRE for some features)
    - Base
    - Calc
    - Draw
    - Impress
    - Math
    - Writer
- *Security*
  - ClamWin 0.97.8
- *Utilities*
  - PeaZip 5.1.1

Documents

- *New Content*
  - Processing.js spirograph plotting materials
  - Spirit of Innovation Challenge Event video
- *Content from Previous Years*
  - Algorithms examples & exercises, Java & Python
  - Computational Science introduction
  - Heat transfer modeling introduction
  - Java language introduction
  - Linear regression exercises, Java & Python
  - Optimization survey presentation and models
  - Real-time visualization presentation and example code
  - Thinking in Parallel: Java threads example code

Installers

(Note that these are not the portable versions of these packages; they are primarily intended for installation on the hard drive of a Windows computer.)

- *Java*
  - DrJava 20130901-r5756
  - Java tutorials
  - Javadocs for JDK 1.7 update 40
  - JDK 1.7 update 40
- LibreOffice 4.1.2 w/ documentation
- NetLogo 5.0.4
- *Processing*
  - Processing 2.0.2
  - Processing.js 1.4.1
  - Processing.js 1.4.1 examples
- *Python*
  - Python 2.7.5
  - PyScripter 2.5.3
- R 3.0.2
- StarLogo 1.5.1