1 Introduction

This document describes how to install the software you need to write programs on your Mac. Students in the *Introduction to Computer Science* course should follow these instructions before attempting to write programs on their machines.

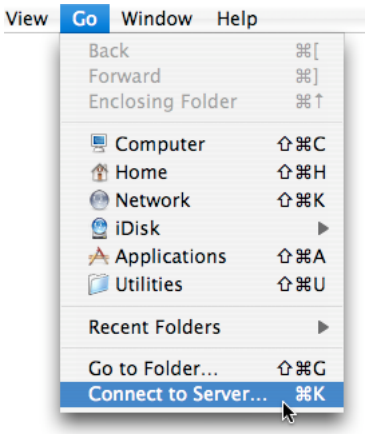
2 Requirements

Students in Computer Science are required to have a laptop with Mac OS X 10.5 (Leopard) installed. While other versions may work properly, we don't have time to track down bugs in different releases of the system. Students should **strongly consider backing their work up on the file server**, in the event that their laptop is lost or damaged. You can't go for very long in my class without a laptop, so it's good to have your work backed up so you can use a loaner if the need arises.

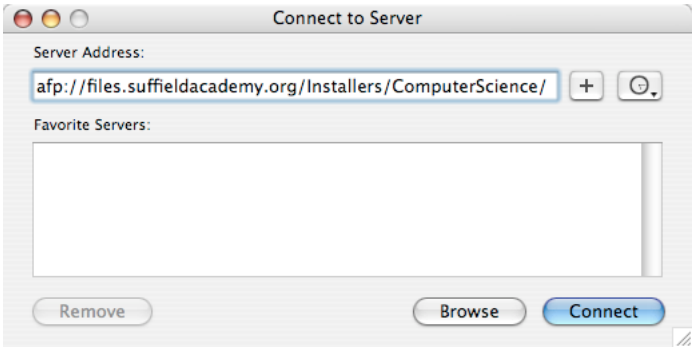
3 XCode

Apple gives away software called **XCode** that allows you to write your own software for the Mac. We're interested in the part of the software that lets us build and run Java software.
The version of XCode we're using this year is 3.14. I have made a disk image of this version available to you on our Network file server. To download and install XCode, follow these instructions:

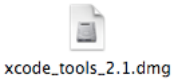
1. Make sure you are connected to the network (day students, you must be on campus for this to work). For the fastest possible download, plug in to a wired port (don't use AirPort).
2. In the Finder, click on the **Go** menu and select **Connect to Server**.



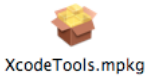
3. In the box that appears, enter the address `afp://files.suffieldacademy.org/Installers/ComputerScience/` in the **Address** box. Click **Connect**.



4. Log in with your username and password.
5. Find the disk image for XCode, and double-click it to open it.



6. Find the **XCode Tools** installer, and double-click it to open it.



7. Agree to the software license, and select your hard disk to perform the install. Click **Install** to install the software.
8. When the installer is done, you should eject the **XCode** disk image, and the **Installers** network volume.

4 Ant and JUnit

To help us build our Java programs, we use a program called **Ant**. Ant is a free program that helps eliminate some of the common repetitive tasks needed for software development.
We also use a set of software called **JUnit** for testing our programs. The version of Ant downloaded from our site includes JUnit, so you don't need to install it yourself.
To install Ant and JUnit, follow these steps:

1. Download Ant from the Suffield CS software page:

   http://web.suffieldacademy.org/cs/software/

2. Double-click the downloaded file to expand it. You should end up with a folder called `Ant`.
3. Move the `Ant` folder into `/Applications`. Don't change the name of the folder (if you do, you'll need to use the different name as you follow the rest of these instructions).
4. Open the Terminal application (in `/Applications/Utilites`) and paste in the following:

```
cat <<EOF >> ~/.bash_profile
alias ant="/Applications/Ant/bin/ant"
export EDITOR=nano
EOF
```

5. At this point, type "`logout`", and quit from the Terminal. Once you've quit, start it back up again (this is necessary to read in the changes you made).

6. On the new command line, type:

   ```
   ant -version
   ```

   You should see something like:

   ```
   Apache Ant version 1.6.5 compiled on ...
   ```

   If you do, you're set to go! If not, go back and double-check that you've followed all the steps correctly.

5 Text Editors

In order to write computer code, we normally use a **Text Editor**. Text editors are like word processing programs, only simpler. They don't allow you to make paragraphs, bold, or italics; they're only intended for writing code. Some editors have extra features to make coding easier (such as highlighting special words or sections of code for you).
You are free to use any text editor you wish during this class. If you have no idea which one to use, we have a list of them online:
http://web.suffieldacademy.org/cs/software/
Free to try out a few editors until you find the one you like best.