## Connecting to the CS Server with PuTTY

Completing Computing 1 homework assignments from Windows is actually possible, despite Windows not coming with the necessary Secure Shell (ssh) client. Linux or MacOS would be preferred for a truer experience, but installing Debian or another distribution of Linux on one's own machine may be a bit of an undertaking.

This is where PuTTY comes in...

(download from: http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html)

PuTTY is a terminal emulator that connects to a remote machine via a handful of protocols. The default environment, however, is not quite ideal for our uses, due to mismatched character encodings between the Linux environment and PuTTY. The fix is relatively easy, as we'll see.

While PuTTY isn't perfect, it does have some gems. PuTTY treats the Alt modifier key as Meta by default. This means that in the Emacs editor, you won't have to deal with the awkwardness of the Escape key to emulate Meta (this annoyance can be fixed in Linux and MacOS, too, but that is another tutorial).

## Changing the Character Set for your Connection

The terminal needs to be set to UTF-8 character encoding for legible output, so upon first running PuTTY, click the "Translation" category in the left panel. Under "Remote character set", scroll all the way to the bottom and choose UTF-8. Now click the "Session" category at the top left and enter the host name *cs.uml.edu* under "Host Name or IP Address". SSH should be the default protocol, but if it isn't, just click its associated radio button.

Now you will be ready to connect with the proper characters displayed, but this is cumbersome. If you want this to be more convenient, read on.

## Setting a Shortcut to cs.uml.edu

Before connecting, type a name for the connection under "Saved Sessions". Ex: UML-CS

Now click the Save button. You will see the name was added to the list box below.

Now every time you open PuTTY, you can just double click this shortcut and the connection will always load with your new defaults. A terminal will open and ask for your user name and password, these are your CS department login credentials.

## Other Customizations

As you will notice, there are several options for customizing the default environment. You can even change the colors! Any changes you make will have to be re-saved using the above method.

