Useful software for Higher Computing Science

Information systems design and development

Software	Download from	Notes
XAMPP	http://www.apachefriends.org	All-in-one Apache web server, PHP, SQL and PHPmyAdmin software package. Can run off USB flash drive.
EasyPHP	http://www.easyphp.org	All-in-one web server, PHP & SQL software package. Has been successfully packaged for RM systems. More info: http://wp.me/p1PkAT-2du
WAMP Server	http://www.wampserver.com	All-in-one Apache web server, PHP, SQL and PHPmyAdmin software package.
MAMP Server	http://www.mamp.info	Similar to WAMP and XAMPP, but specifically for the Apple Mac platform.
Mono	http://www.mono-project.com/ASP.NET	Open source package that allows you to run Microsoft ASP.NET pages on an apache server.
Instant WordPress	http://www.instantwp.com	Possibly useful for those with a WP background, locally running server with Wordpress pre-configured. Useful for PHP & SQL activities?
Netbeans IDE	http://netbeans.org	Useful IDE for PHP, HTML and several other languages. Available to download in different 'versions' depending on the language(s) you are using.
Notepad++	http://notepad-plus-plus.org/	Simple text editor with syntax highlighting for a number of languages including HTML, CSS, JavaScript, PHP. Tabbed documents.
Microsoft Expression Web 4	http://www.microsoft.com/en-gb/download/details.aspx?id=36179	Free web development software, similar to Dreamweaver. Supports HTML5 and CSS3. Split screen views, code snippets.
Brackets	http://brackets.io	Lightweight HTML and CSS editor. Integrates well with Chrome to give 'real-time' updates as you edit the code

Google chrome	http://chrome.google.com	Fully HTML5 compliant browser, network .msi install available for remote deployment.
G.I.M.P.	http://www.gimp.org	Free, open-source graphics program with similar features to photoshop. Unfortunate name!
Libreoffice Draw Openoffice Draw	http://www.libreoffice.org http://www.openoffice.org	Vector drawing program, part of a larger, open-source office suite.
InkScape	http://www.inkscape.org	Vector drawing program, very powerful & can save in SVG
Audacity	http://audacity.sourceforge.net	Sampled Sound editing software that can also compress using MP3 and OGG codecs
Microsoft movie maker 2012	http://windows.microsoft.com/en-GB/windows/get-movie-maker-download	Basic Movie Editing Software (Windows only), various predefined settings to illustrate compression and standard
Mozilla webmaker	http://webmaker.org/	Series of online-based software and tutorials for learning HTML, CSS and JavaScript. Needs HTML5 browser.
Ubuntu Linux / Linux Mint / Debian / Fedora	http://www.ubuntu.com http://www.linuxmint.com http://www.debian.org http://www.fedoraproject.org http://www.pendrivelinux.com	Most popular versions of Linux OS. Can be installed on old machines, booted from USB flash drives or installed in a Virtual Machine (see below) to demonstrate different OSs
Libreoffice Base OpenOffice Base	http://www.libreoffice.org http://www.openoffice.org	Database Management Software, broadly similar to MS Access. Part of the free office suite.

Software Design and Development

Software	Download from	Notes
Python	http://www.python.org	Highly popular free scripting language. Lots of educational resources available. Available in v2.7 or v3.4 – some changes in the language means program examples in a resource may not work, so check the intended version carefully.
Visual Studio Express	http://www.visualstudio.com/en-us/products/visual-studio-express-vs.aspx	Microsoft's visual languages are available free to download in 'express' versions. Visual BASIC has been used for some time in

		schools, so lots of resources are available. Visual C++ & C# are also very modern Object Oriented languages.
LiveCode	http://www.livecode.com	Free edition available for use in schools. Becoming increasingly popular due to the syntax moving closer to natural language style. School resources available on the Livecode website.
PHP	*See above for web servers running PHP.*	It is possible to deliver aspects of the SDD unit in PHP – practitioners may wish to consider this using some of the software listed in the above table.
Java	http://www.java.com	Object oriented language popular with web and android developers. Available on all platforms.
Eclipse	http://www.eclipse.org	IDE popular for a variety of languages, especially Java. Software Development Kits available for a variety of purposes including android development.
SWI Prolog	http://www.swi-prolog.org/	Free implementation of Edinburgh-syntax prolog, a popular declarative language. (Technically, a logic language, which is a subparadigm of the broader 'declarative' paradigm which also includes functional languages).
Oracle Virtualbox VM	http://www.virtualbox.org	Program for creating and managing Virtual Machines. (Could also be useful for teaching OS design in ISDD)

Both/generic software to support course

Software	Download from	Notes
Microsoft OneNote	http://www.onenote.com	Free note-taking application that can organise digital content into sections and pages. Mobile apps available and will sync via OneDrive built into Glow.
myBalsamiq	http://www.mybalsamiq.com	Online wireframing tool. Free trial for 30 days, but teachers

		can email and get a free school use licence for the online version. A standalone application is available for a fee. Students can collaborate on designs using the online tools.
Pencil	http://pencil.evolus.vn	Free Wireframing application. Extensive range of interface elements for desktop, mobile and flow charts.
Google Apps for Education	http://www.google.co.uk/enterprise/apps/education/	Schools can claim free access to Google Apps for Education. Students may already have personal access if they have a Gmail or YouTube account.
Microsoft office 365	https://portal.glowscotland.org.uk http://www.office.com	Office 365 is built into Glow. Ideal for demonstrating cloud-based services. OneDrive for Business Apps can connect to your Office 365 space in Glow, and the online versions of Word, Excel, PowerPoint and OneNote can be used in any web browser. Video intro here: http://youtu.be/xBK8N8Q-PEQ
Raspberry Pi	http://www.raspberrypi.org http://www.casscotland.org.uk	Although this is primarily a software list, the Pi is worth mentioning as an excellent piece of hardware capable of running a custom linux OS 'Raspbian'. Although the Pi costs around £25 (and perhaps a bit more for peripherals) it opens up a whole world of free, linux-based software including much of the software mentioned above. Your Local CAS Scotland hub can loan out sets of Pis to try.