DESKTOP DATA HANDLING PROGRAMS

Programs which allow you to manage a database of information via a graphical user interface. Such as a student's records system, a car dealership database or theatre booking program. These can often have limited coding elements, however there is lots of scope to add validation checks and discuss data structures.

Suggested languages: VB, Python, C#, C++, C, Delphi

WEB BASED DATA HANDLING PROGRAMS

These are often similar problems to the desktop ones except that interface is constructed to run in a Web-Brower. Although this is a much more common and modern approach in our online connected world it does come with its problems. Web standards are constantly changing. You will often need to know more than more language e.g. Javascript for the client-side and PHP/ASP for the server side, and possible some HTML / CSS for the web based interface! You will also need to think about how your system will be hosted. If you are not using a paid online hosting provider you will need to get your schools IT technicians to host it for you.

Suggested languages: HTML5, JavaScript, SQL, Java, jquery, VB/ASP.net

DESKTOP GAMES

These types of problems typically allow for plenty of computationally complexity but can be really fun to do. The major problem here is biting off more than you can chew! Keep it simple. If you get completed before the deadline you can easily add extra functionality like new levels, high score tables, power-ups etc.

Suggested languages: ActionScript, C#, C++, XNA, pygame, Java, Monkey-X (**fully supported at craigndave.org**)

MOBILE GAMES / APPS

Any game you want to design for a desktop system can easily be adapted and made for a modern touch screen mobile phone in the form of an APP. On the plus side the sort of IDE's that assist with mobile app development usually require less computational complexity but you often end up having to learn how to use a new IDE from the one you have been used to using.

Suggested languages: Objective-C (IOS), Java, Python (via SL4A) for Andriod, Java for Blackberry, HTML for Windows Phones, Django (based on Python), Monkey-X (**fully supported at craigndave.org**)

WEB BASED GAMES

Similar to other games, except they are designed to run entirely through a web-browser.

Suggested languages: HTML5, ActionScript Visual Studio (using Silverlight), Monkey-X (**fully supported at craigndave.org**)