**OOP Christmas Assignment 2013-2014**

For this assignment, you must use Processing (which we have been using in class in the weeks leading up to Christmas) to create a "homage" to something that inspires you about computer science. You could use:

Your first computer  
Your favourite programming language  
Your first console  
Your favourite game  
A famous computer scientist

If you are stuck for inspiration Google some of these:

Alan Turing  
Dennis Richie  
Steve Jobs  
Grace Murray Hopper  
Jane McGonigal   
CES  
Bitcoins  
Havok  
The Oculus Rift  
Tunepal  
The Fast Fourier Transform  
IBM’s Watson  
HAL 9000  
The inside of a computer  
Havok  
TED  
Sinclair Spectrum  
Spectravideo SVI-728  
...  
...

UPDATE: You can do a homage to anything that inspires you. Some more possibilities:

Your favourite football team

Your favourite desert  
Your favourite member of One Direction

A club or society you are a member of  
A Valentine to someone you love

Etc etc

Also consider these Christmas themed eCards developed in Processing by my Game Development students recently:

<http://www.youtube.com/watch?v=wAEABphUJB8>

Or these eCards developed by first year DT211 students two years ago in C:

<http://www.youtube.com/watch?v=Yy5MzcFQ99s>

For some idea about what I am expecting. However don’t let these limit your imagination ☺ This is your opportunity to show me your passion for something by being creative and expressive.

The rules of the assignment:

* The assignment should be completed using Processing
* All art must be Procedural. In other words, you must use the processing drawing functions. You cannot import image files (jpg, png’s etc)
* You can use recorded audio (wav’s and MP3’s)
* You should include: drawing, animation, classes, inheritance and polymorphism
* This is an individual assignment (see the exception below)

Alternatively:

You can form a team to complete an Imagine cup project or a games fleadh project. You can continue this project into the second semester also.

If you are doing an Imagine Cup project, you must use Visual Studio. That means C#, not processing which is Java. If you want to make a game, you can use either MonoGame, XNA or Unity.

If you are doing a Games Fleadh game you can use any technology you like, including Processing so long as your game runs on some version of Windows. (It can run on other platforms too). The theme of Games Fleadh is always to reinterpret a classic game. Check out these previous games Fleadh games:

<http://www.youtube.com/watch?v=c5Q4LCkfhyw>

<http://www.youtube.com/watch?v=sOSumnVwx4s>

Both of which are previous DIT teams that won first place.

The theme of this year’s Games Fleadh is the classic text adventure “The Hitch Hikers Guide to the Galaxy”. You don’t have to make a text adventure though. You can make any kind of game on the theme:

<http://www.bbc.co.uk/radio4/hitchhikers/game_nolan.shtml>

Please take the time to read the book. It’s hilarious.

Marking Scheme:

Complexity 30%  
Visuals/Audio 30%  
Theme 20%  
Code 20%

You can learn about Processing from these sources:

<http://processing.org> – Download it here

<http://21it.files.wordpress.com/2008/09/0123736021.pdf> - The Processing Manual

<http://natureofcode.com/book/> - A fascinating book all about modelling nature in code

<https://www.dropbox.com/sh/lbqfeom6lplxra4/FV4etzP_fq/GamesOOP/Processing%20Sketches> – All the processing Sketches we wrote in class

The deadline is 3 February 2014. Demos that week in class. All code to be zipped up and submitted through webcourses