COMP2013
Systems Engineering I

Module Overview

Module Goals

- Establish a relationship with your client and work through the first major phase of your project.
  - Gather requirements, model user interface
- Create a Proof of Concept (PoC) design
- Learn about and use:
  - Virtual Machines, Cloud Services
    - Linux, Windows, Azure
  - Version Control and other Open Source Tools
    - Github, Bitbucket, Jenkins
  - Creating user interfaces
    - Graphical and physical
  - A good range of development software + hardware

Structure Overview

- Weeks 1-5
  - Group activities
    - Start gathering requirements and UI ideas
    - Start research and experimentation
  - Individual activities (core skills)
    - Work through 3 courseworks covering VM's, cloud, version control and UI modeling
- Reading week
- Weeks 6-10 (all group activities)
  - Develop Proof of Concept design
  - Continue research
  - Produce group report and video presentation

Assessment

- Individual
  - 3 graded courseworks, each worth 5% (15% total)
  - Report providing evaluation and assessment of project work done, 15%
  - Your overall project contribution, including your blog entries, 15%
- Group
  - Group report documenting research, chosen UI and PoC design, 40%
  - Group video presentation of PoC, 15%
    - More information in other videos, guideline documents.
- No exam.

Induction Week + Week 1

- You will be allocated to a group.
  - A group manager will be assigned.
- You will be given your client details and should contact your client.
  - Arrange first meeting as soon as practical.
- Begin gathering requirements.
  - Use what you are learning in COMP2009 to help.
- Start individual coursework assignments.
  - You will be given an individual Azure account.
- Go through all the Moodle material.
  - More will be added during the term.

Labs

- You must attend your timetabled labs every week.
- Report on your progress.
- Get help and feedback.

Research

- Start investigating solutions
  - Research problem area
    - What has already been done, or is already known?
    - Use the UCL Science Library online services.
    - Find books, papers, websites, blogs, etc.
  - Platforms and operating systems.
  - Tools, programming languages, libraries.
    - Especially open source.
    - Also access to MS Windows resources.
  - Hardware, e.g., Gadgeteer, Arduino, Kinect, Raspberry Pi, PC hardware, etc.

Who are you? Tell your group

- Write a one page description of yourself:
  - Who are you, where are you? Where are you from?
  - What are your strengths and weaknesses?
  - What relevant skills and experience do you have?
  - What do you want to learn during the project?
  - What roles do you want?
- Submit this on Moodle.
- At the first group meeting exchange your descriptions and get to know each other.

Blogs

- Use wordpress.com
- Create a group blog, that all group members can edit.
  - Use your project name as the blog title.
- Create a *private* individual blog for yourself.
- Invite me to all your blogs:
  - uclgraham.wordpress.com
- All blogs must be updated at least once per week.
- The same blogs will be used for both COMP2013 and COMP2014.

Blog Content

- Group blog
  - Post information about the progress of your project.
    - What has been done in the last week.
    - Project information, meeting minutes.
    - Key decisions, results, etc.
    - Screen shots, videos.
- Private individual blog
  - Report on your individual progress.
  - What you have achieved.
  - Your thoughts and opinions.
  - It will be read by the course lecturers but not by anyone else (unless you invite other people).

Questions?

- Please post to the Moodle discussion forum.
  - See Home Tab of the Moodle page.
  - Please post to forum, don't email me directly.
    - So everyone can see the questions and answers.