Module: COM601 / crn: 68818 and 71663

Rich Internet Application Development Dr Peter Nicholl

Final Year - Assignment 2

BSc (Hons) Interactive Multimedia Design
BSc (Hons) Information Communication Technology

Date set: Mon. 28th October Online submission: Noon on Friday. 13th December
(Note: No paper-based materials will be required – all materials and administration will be electronic.)

Contribution towards coursework marks: 65% (and scored out of 65 marks)
Approximate time to be spent: 65 hours (over and above textbook reading time)

Keep a copy of all submitted coursework – i.e. your computer files.

Learning Outcomes: To develop expertise in using jQuery/jQueryUI, Ajax and usability testing.

Rich Internet Application – Feedback and Notification System (FAN)

Develop a RIA (i.e. a single page web application, where possible, for each of the user views: staff and students) to act as the repository for all student feedback. The system should be secure and allow lecturing staff to select the cohort of students to give feedback, upload PDF files named by the student email address and option include the brief.pdf and solution.pdf and notify students when new feedback for an assignment is available. The system will act as a single repository for all coursework for every module taken by a student on their degree. Email can be used as the notification method when coursework is uploaded or commented on. For example, when a student collects their feedback they can decide to share reflection with the academic. (The student is creating a 'note to self' for their own reflection between assignments and across modules and years, but by default they would not share it with the academic.) The member of staff can view the collection time of assignments and number of notes made and read the shared comments on the coursework by each student from the original cohort list.
It is expected that there will be separate views for staff and students, created using jQuery/jQueryUI, and that Ajax technology is incorporated as necessary. The detailed set of requirements is set out below. Additionally, user testing of the RIA will be undertaken. Guidance notes for this will be provided about 2 weeks before the submission date.

Requirements

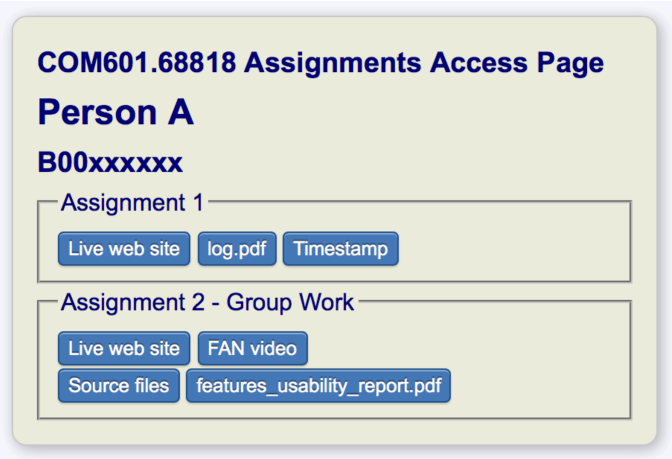
Learners	Staff	Support/A.N. Others
Direct and personal to each student	Saving time	Combining existing tools that are available within current systems
Getting the feedback at same time as others	Helping to meet the deadlines	Creation of a trail/timeline of notification
Repository – with many assignment returns	Repository to house all feedback	External Examiners so they can view all student work
Timely feedback	Confirmation that students gets the feedback	Additional markers and how they would be involved in the process
Opportunity to reflect and share thoughts		Moderators of feedback (before feedback is allowed to be given or for later review ?)

Each team has to:
Create an infrastructure to map the end-to-end process that should be a mechanism to give feedback and monitor when Coursework was collected and if a student stored any reflection. The system is based around a shared, but secure repository (dB).

Before starting this assignment you should limit the time on this assignment to the 65 hours indicated for each member of your team, the main focus of your work should be on functionality and clarity of flow for the solution. This corresponds to the balance of marks available (see final part of this document).

Develop a RIA in your SCM team web space (COM601_Xn) and store the video and working system there. The 'access.html' you had prepared for assignment 1 should be updated to also be the landing page for 'Assignment 2 – Groupwork'. It remains stored individually in your PERSONAL SCM Workspace for COM601. You are updating the links to include assignment 2 (but it is essential to leave the assignment 1 work accessible via the links you have already made.) The first button should be titled 'Live web site' should link to your main page called 'index.php' on

your SCM Groupspace. The second button, labelled 'FAN video' should point to the 'fan.mov' walkthrough (screencast) of all of you explaining your system in action and the code that created the key features. It cannot be longer than 6 minutes in duration. (A third button should point to a set of source file and folders containing the jQuery code, CSS, xml/JSON files, server-side scripting such as PHP. You should include database initialisation (sql) scripts in case the marking team wish to install your database. All this code should be linked to a button labelled 'Source files'.) The forth button should be titled 'features_usability_report.pdf' and linked to the file of that name. There is to be one common 'features_usability_report.pdf' to represent each group. (You do not need to create individual reports, just link to the group report.)

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        <fieldset>

          <legend>Assignment 2 - Group Work</legend>

                <a
href="https://scm.ulster.ac.uk/~COM601_Xn/workspace/assignment_2/index.php"
class="button-link" target="_blank">Live web site</a>
          <a
href="https://scm.ulster.ac.uk/~COM601_Xn/workspace/assignment_2/fan.mov"
class="button-link" target="_blank">FAN video</a>
<br />
          <a
href="https://scm.ulster.ac.uk/~COM601_Xn/workspace/assignment_2/source.zip"
class="button-link" target="_blank">Source files</a>

          <a
href="https://scm.ulster.ac.uk/~COM601_Xn/workspace/assignment_2/features_usabi
lity_report.pdf" class="button-link"
target="_blank">features_usability_report.pdf</a>

        </fieldset>
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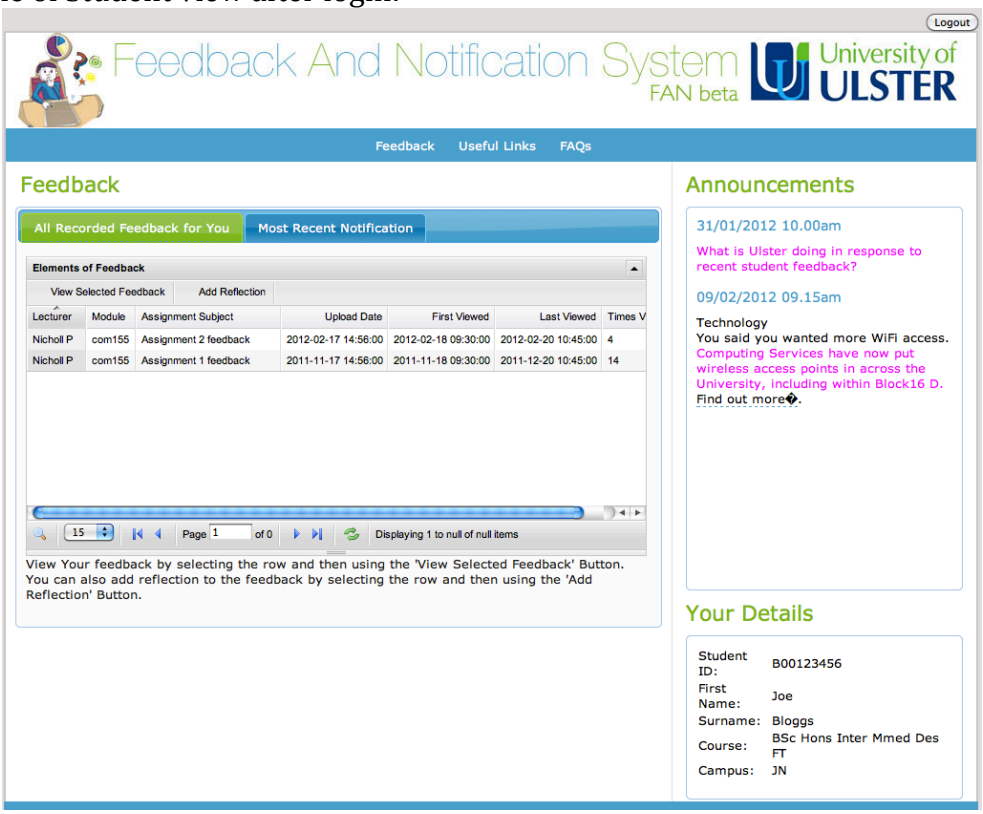
You are allowed to use GitHub to add components that can form elements of the system, but they have to have a suitable copyright policy to allow non-commercial use in the academic context. You should be able to draw on modules from Year 2 of your degree programme in setting up the server scripting and database as well as the online Resources of: http://scm.ulster.ac.uk/technicalsupport.php and specifically the link: View a video on how to configure your personal webspace for PHP and MySQL

It is also assumed that the displayed details, extracted by your jQuery code and jQuery/jQuery UI, are used to generate and display the bulk of the web page contents and where necessary server-side code in the likes of PHP and a dB such as MySQL will be developed.

The web site must use at least one jQuery UI and/or jQWidgets feature, e.g. a set of tabs, accordion or dialogue box. Multiple jQuery UI and/or jQWidgets features may be included.

Example of Student view after login:



(52 marks)

Written material to appear in 'features_usability_report.pdf':

1) A set of screen shots that show the key features of the system

2) Inclusion of the table from page 3 of the 'COM601_assignment_2_2014_appendix_a.docx' document (provided separately on the assignments page of the web site by week 9 in both pdf and docx format) to report as briefly but clearly as possible the results from usability testing with 3 people, none of whom should be in your COM601 group on both the student and staff views of the system. You should include the summary of your findings in the 'features_usability_report.pdf'. You should also provide a one-page summary of the points that you consider to be of most importance. Note that you should freeze your design at the point when you begin the evaluation. It is important that all the participants

evaluate your web site at the same point in its development using the same set of tasks and questions.
(Note: You are free to modify your site after the evaluation phase.)

(8 marks)

2) In a final section entitled 'Response to Negative Issues' in your 'features_usability_report.pdf' file, in no less than half a page and no more than one page, respond to any negative issues / views collected in the usability testing phase, and comment on any other issues you consider noteworthy that arose when conducting the tests. (Do not include your own evaluation of your web site – 2 marks will be deducted if you do this because usability testing involves only the users actions and views.)

(5 marks)

(Here is some old but very important advice: **be careful to backup your work frequently on reliable media**.)

Assessment Criteria
The final page of this document is an annotated version of the feedback file that will be completed and returned by email to you. The marks will be allocated as shown in the top half of the page, and comments specific to your work will be added in the feedback comments section.

Submission Details – note that only electronic documents are involved
By the deadline time of Noon on Friday 13th December you must make available on your SCM Personal workspace for COM601 a revised access.html that links Assignment 2 files to the "COM601_Xn" where X and n are the Group letter and number respectively, the Feedback and Notification System (FAN) screen cast of ***no more than 6 minutes duration***, a link to the source files in zip format and the report. Failure to have this online will treated as a non-submission.

Anti-plagiarism Measure
In the interests of avoiding plagiarism, you are strongly advised not to make fan.mov, source.zip and features_usability_report.pdf files easily visible on the web.

Group Contribution
You should log into http://scmmagic.ulster.ac.uk/com601_13_1/ to complete Confidential Peer Review for yourself and everyone in your group. This will open on the 12th December and close at Noon on Monday 16th December. The scores and comments you submit will help moderate how each person does in this assignment.

Sources of Additional Clarification
As this assignment is a substantial piece of work, two sources of additional clarification will be available.

1. The questions in the usability testing questionnaire imply certain features and/or behaviour in the user interace. READ THESE BEFORE ATTEMPTING THE MAIN IMPLEMENTATION.

2. A Question/Answer Bank for Assignment 2 will be maintained as a pdf file in the assignments page on the module web site. Students are encouraged to email Dr Nicholl with requests for clarification. An announcement on the web site will be added each time the contents are updated.

This is the template file that will be used to provide you with feedback

Student Name:

Web site design, appearance and usability for staff and student views on FAN	XX / 26
Quality of RIA design/implementation	
Quality of HTML5/jQuery/jQuery UI code (inc. Ajax) and server-side scripting e.g. structure, elegance, good choice of names, helpful comments	XX / 26
Quality / thoroughness of usability testing report	X / 8
Quality of response to negative issues	X / 5

Total Marks: XX out of a possible 65

Feedback comments

(The following are considerations that will be commented on, and are set out here as additional guidance on the level of work expected.)

What level of overall effort is evident? How does the site appear, i.e. visually is it well laid out, attractive with good choices of font size and colour? Does it seem usable, e.g. does any search function correctly, are key pieces of Coursework such as a Module or Timeline view easily available. Have all functional requirements been fully or partially met and are there any omissions? (Omissions, significant limitations or faulty components will be specifically commented on.) How well written and commented is the code, i.e. is the code well laid out, elegantly structured and with appropriate naming, suitably indented and with helpful comments?

To what extent does the level of detail in the summary provide evidence that the three usability tests were carried out in a thorough manner? (Note: For the tasks (not the qualitative responses) a four-column table should be used). This should be followed by an overview of the users' qualitative responses - some of the most insightful could be quoted, subject to length restrictions. The negative points about the web site should be very clear from the summary.

In the response to the negative issues, are all these points met with a convincingly reasonable and detailed (or glib and superficial) suggestion about how, in a practical sense, to address the issue? (A vague 'wishlist' style of response will attract no marks.)