**­­Rich Internet Application Development**

COM601 – CRN83654

**Final Year - Assignment 1  
BSc (Hons) Interactive Multimedia Design**

**Plagiarism**

By submitting work for assessment, you are confirming that you have read, understood and abided by Ulster University regulations relating to plagiarism, as set out in the Student Handbook. If you have any plagiarism concerns regarding this module, then please contact the Module Coordinator. A link to the plagiarism policy, procedures and guidelines can also be found here

<https://www.ulster.ac.uk/__data/assets/word_doc/0004/251455/PlagiarismPolicy.docx>

**Health & Safety**

Students are expected to take all reasonable precautions to protect their own health and safety and to follow all relevant guidelines at all times. If you have any health and safety concerns or queries regarding this module then please contact the Module Coordinator.

Assignment 1 – Single Page Application

35% of the module mark

Release Date: 28th September 2020

Electronic submission to BBL by Noon on Thursday 22nd October (Note: No paper-based materials will be required – all materials and administration will be electronic.)

Feedback: within 15 working days

Approximate time to be spent: 35 hours (over and above textbook reading time)

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

To develop expertise in using HTML5, CSS and jQuery to develop a context specific rich internet application with a range of interactive features.

**Code files and log showing use and understanding of jQuery / jQuery UI**

This assignment is focused on learning jQuery (including plugins, but not frameworks such as Bootstrap, Foundation or Gumby) and building demonstrator components into a rich internet application (i.e. a single web page application) to demonstrate a range of jQuery features.

Over the 4 weeks of this assignment it is assumed that your main web page (jquery\_demos.html) will evolve from a simple starting point to a page with an impressive set of features demonstrating a range of capabilities of jQuery. The aim is to demonstrate your learning of jQuery and build up your knowledge of what is possible using this client-side technology. Each week you should be able to incorporate a few additional jQuery features (using plugins where appropriate – normally from jQuery UI) into your website, in line with your directed reading of Head First jQuery. As the weeks progress, retain the features you have developed in earlier weeks, so the final web page is your cumulative work.

As mentioned above, you will guidance for the Head First jQuery text, so that your independent study, assignment work, practical work and the lectures will be closely bound to one another.

You should incorporate jQuery / jQuery UI (etc.) components that as clearly, imaginatively and attractively as possible demonstrate the following:

* Use of HTML5 elements
* Use of jQuery selectors to add and remove classes
* Adding elements directly into the DOM
* Adding css
* Tabs
* Accordions
* Hide/Show/Fade/Toggle capabilities
* Event Handling
* Tooltips
* Image and slideshow presentation

You are encouraged to go beyond this set of features/capabilities to develop and demonstrate in your assignment as extensive a practical knowledge of jQuery /jQuery UI as you can.

**assignment\_1\_starter.html** is provided on the assignment page to provide you with a possible starting point for your own ‘**jquery\_demos.html**’ file (see below). Use of this is completely optional and you are free to copy, modify and change the design or all of the code in assignment\_1\_starter.html.

If all the required code features are clearly present (see list above and the template feedback sheet at the end of this document), you will achieve at least a pass mark. However, to achieve a higher mark, you should demonstrate the depth of your understanding by making your web site more interesting and distinctive. You are required to give it a context, such as information about a hobby, a sports club, famous people or locations known to you. Please keep the amount of text in descriptions fairly brief – the marker is mainly interested in your jQuery/plugin/CSS usage. If you can incorporate a little fun element, e.g. an amusing animation or basic game, that will stretch your use of jQuery / jQuery UI (etc.) this will be reflected in higher marks.

In addition to coding the rich internet application (RIA), a written document is also required. At least once each week (but more frequently is advised) you should add clearly dated material to a technical log file (just use Word or similar to write it) in which you describe the specific features you have added to your RIA, their location in your code (just enough to help the marker navigate your html, js and css files), and explain in general terms how the features work (i.e. explain in English how the jQuery / jQuery UI works – only copy in key (short!) pieces of code to help make your explanation clear) and note any other major changes to your webpage.

The length requirement for the technical log entry for each week is about 2 – 3 pages, so the total length of the log by the submission date will be between 7 and 11 pages. It is ok to include screenshots where they clarify your written text. (Please use a 12 pt font at 1.5 line spacing, and avoid large empty areas on a page.)

**Submission Arrangements**

Submission Date – 22nd October 2020 by 12:00

All source code and assets should be organised into a single folder containing sub folders that adhere to good practice for any web application. A zip file should be uploaded to Blackboard Learn and follow the naming convention:

Surname-Firstname-B00XXXXXX-Assignment1.zip

In addition to the code submission in the zip file there should be a Word document of all the code.

When inserting code snippets into the Word document please use the service at [http://hilite.me](http://hilite.me/) in order to format the code.

The report should be submitted to Blackboard Learn and adhere to the following naming convention.

Surname-Firstname-B00XXXXXX-Assignment1.docx

**Assessment Criteria**

The final page of this document is an annotated version of the feedback will be completed and returned to you via your University email account. The top part will be used as a basic checklist to note the presence or absence of the requested jQuery features. The marks will be allocated as shown in the centre of the page, and comments specific to your work will be added in the lower third of the page. Please read the text currently under the feedback comments section. It is there to give you further guidance about what is being looked for in this assignment.

**Feedback/Marking Scheme**

Feedback will normally be provided electronically within 15 working days after your submission.

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

**Student Name:** Name

**Presence of code features**

|  |  |
| --- | --- |
| Use of HTML5 elements | Present/Absent |
| Use of jQuery selectors to add and remove classes | Present/Absent |
| Adding elements directly into the DOM | Present/Absent |
| Adding css | Present/Absent |
| jQuery UI Tabs | Present/Absent |
| jQuery UI Accordions | Present/Absent |
| Hide/Show/Fade/Toggle capabilities | Present/Absent |
| Event Handling | Present/Absent |
| Tooltips | Present/Absent |
| Image and slideshow presentation | Present/Absent |
|  |  |

**Code**  
Range / use and quality of jQuery / High …………………………….. Low / 20

jQuery UI

**Weekly technical\_log comments**

Range of jQuery items and

Evidence of understanding High …………………………….. Low / 10

Quality/completeness of CSS High …………………………….. Low / 5

Total Marks: xx out of a possible 35

**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 impressive or otherwise is the set of jQuery / jQuery UI features (inc. css) included? Note any omissions from the set of required features and/or features beyond the ones explicitly mentioned in the assignment spec. Is the code well laid out, elegantly structured and with appropriate naming, suitably indented and with helpful comments?

Is the log clearly presented, well written, of suitable length with a good level of detail and showing a good understanding of the code features (and css where relevant)? Does the log show enthusiasm and interest or does it convey limited interest and/or minimal effort? Any other relevant comments.