**CA 2 - Client-Side Web Development (GD1 November 2023)**

An enhanced gaming website

### **Objectives**

You need to provide a three to five page website that ***enhances your CA1 gaming website*** and i*ncludes appropriate JavaScript code* to provide some user interaction (<script> </script>) on at least one page, such as: -

* a booking or submission form/form and / or
* user input / interaction such as a voting, user feedback or comments and / or
* enhanced control of some aspect of the page functionality such as a visual slideshow or content element list and / or
* style and/or content modification (*document.getElementById('element\_A1').innerHTML, document.getElementById('passwd\_err').style* etc.)

You will code the pages using HTML and CSS from CA1 with additional and enhanced page(s), elements, content as appropriate and implement web form / user interaction with JavaScript code for input validation and / or basic interaction event handling (button press etc.).

Your CA2 submission is a *follow-on (Alpha to Beta) from your CA1 submission*, providing incremental improvements based on your CA1 user testing, our feedback and recommendations to you and your own TO DO / Known Bugs list completion / fixes.

Again, as with CA1, you can (and should try to) include as much *original* content, images and other resources. You must include (at least some) *original* HTML, CSS and JavaScript code as well as appropriately researched, sourced and referenced externally available code. Even where external code and resources are used, these will need to have been modified or enhanced by you.Your code based comments need to make this very clear.

### 

### **Deliverables**

1. An updated ***Website Design Document (WDD V2)*** which includes (1-2 pages): -
   1. *Outline* of the game, game personality or game area (CHANGES TO)
   2. Target *audience* (e.g. demographics, interest(s), needs, expectation)
   3. Website *“site map”*, page layouts, structure and main elements briefly explained, PARTICULARLY ADDITIONS / ENHANCEMENTS.
   4. *Key user requirements*: functionality, usability, readability / accessibility etc. AS WELL AS ADDITIONAL USER INTERACTION / FUNCTIONALITY.
   5. *Thematic styling* and major visual elements (e.g. colour scheme, fonts, banners, backgrounds, animations etc.) explained (CHANGES TO)
   6. Summary of main visual and *image editing techniques* (e.g. retouch work, sampling, backgrounds, colour sampling etc.) and techniques required and applied. These should be briefly explained and justified. (WHERE APPROPRIATE)
   7. Summary of any feedback or findings *user testing* PARTICULARLY OF ADDITIONAL INTERACTION / FUNCTIONALITY.
   8. Include a *simple “know bugs list”* of unresolved glitches, errors or issues with your website. These can include content issues, styling issues, glitches, errors or other technical issues (e.g. image size and scaling) and any (non-trivial) usability and / or accessibility issues AND ALSO INTERACTION / CODING ISSUES.
2. A ***three to five page website made using HTML , CSS and JavaScript*** *(either on page and / or in external “.js” code file)*. You must document your HTML and JavaScript code (in particular) and use a high standard and consistent formatting and indentation - make all HTML, CSS and JavaScript very readable, understandable and maintainable!

YOU SHOULD ALSO INCLUDE APPROPRIATE ACKNOWLEDGEMENT / PERMISSIONS / REFERENCES (IN COMMENTS) FOR ALL SOURCES OF NON-ORIGINAL CONTENT, IMAGES, STYLES, HTML ELEMENTS / CODE AND JAVASCRIPT CODE USED. FOR YOUR JAVASCRIPT CODE YOU WILL BE EXPECTED TO MAKE SOME ENHANCEMENT / CHANGES AND CLEARLY COMMENT THE CODE TO EXPLAIN ITS FUNCTION (AS YOU UNDERSTAND IT).

1. *Inclusion of* ***at least 60 HTML tags***. These will include required, default and normal tags for page structuring (e.g. heading, title, body, headings, paragraphs, images, divs, links etc.) You should also make sure you include appropriate examples of (almost) all major tags covered in the W3CSchools tutorial. YOU SHOULD CLEARLY HIGHLIGHT ADDITIONAL / ENHANCED CODE ELEMENTS.
2. Inclusion of **at least 40 custom CSS styles** contained in a linked stylesheet. You can also use in-line style attributes and internal styles (in the <head> section) as appropriate, but mostly you will define (and comment) appropriate styles in your style sheet(s). YOU SHOULD CLEARLY HIGHLIGHT ADDITIONAL / ENHANCED CODE ELEMENTS
3. Inclusion of **JavaScript to provide user interaction / form validation** (original, example based and / or externally sourced code [with appropriate modifications, explanation comments) either on page (<script> </script> and / or in an external “.js” code file).

### **Project Timeline**

### ***CA2 will be due at the end of Week 12 i.e. before the Christmas break.***

* *Enhance and improve existing and where appropriate design* *and create new page(s)* structure and layout, styles and content.
* *Code* the web pages AND JAVASCRIPT using a code editor (e.g. NotePad++) or an IDE (e.g. NetBeans)
* Enhance or add new manipulated *images* to your web pages only where necessary.
* Focus mainly on adding JavaScript based user interaction based on tutorials, examples, sample code and externally sourced code (as appropriate).
* *Refine, test and enhance* your website. You should also do a basic user test on your website.
* You should briefly *document* (make notes of) user feedback and coding issues or errors. Again, these should be included in the revised WDD (V2).
* *Upload* website files (HTML, CSS, JavaScript, image files, WDD and signed CA Cover Sheet) to Moodle in a single compressed Zip file following the naming conventions provided on the CA Upload list instructions.
* We reserve the right to have an online interview where we require you to demo and explain code, for any student project, particularly where you haven’t attended sufficiently in the lab.

### **Assessment Criteria**

Your submission will be assessed and graded against against the following criteria:

* Enhanced Website design and aesthetic (10%)
* Implementation and enhancements to HTML (10%).
* Implementation and enhancements to CSS (10%).
* JavaScript code (can include HTML 5 Regular Expressions) to provide user interaction / validate form (50%).
* Code formatting, comments (10%)
* WDD V2 (10%)