INFO 151: Individual Assignment #2
Web Site Development and Construction
Assignment specification

In Individual Assignment #1 you submitted a design for a technology-based company that provides comprehensive services to the public and commercial organisations. You must refer to the Individual Assignment #1 specification document for the details and requirements.

In this assignment you are required to develop your design and build the website. In this assignment you will:

- Review your design as submitted for the Individual Assignment #1 including the overall site plan and navigation to ensure that the final design complies with good web design practice.
- Implement the web site design (submitted in the Individual Assignment #1) using the appropriate HTML elements introduced in this course including cascading style sheets (CSS) float and CSS flexbox layout managers with all style to be created using external CSS.
- Ensure that the navigation functions correctly properly (all pages can be reached by links in the navigation area).
- Apply CSS to create divisions, paragraphs/texts, links, headings, images, etc. for controlling border, width, height, colour, background-colour, font style, font size, etc.
- Test, evaluate, and validate the HTML and CSS for your web site and all your web pages.
- Create a new project using the NetBeans IDE with a folder for assignment #2 in the 'htdocs' folder in the XAMPP server.
- Within the assignment #2 folder (in the XAMPP htdocs) you must copy all the files and sub-folders and documents used in you web site.

Assignment Submission

In this assignment you are required to prepare and submit a report in English. *The specification for the report is set out in the following Report Specification*. The report must provide (but is not limited to):

- A user manual showing brief user instructions (how to access and use your web site - you may use screenshots with text details in a Word document).
- The HTML and CSS program code listing in a text document.
- How you addressed all the requirements and functions shown in the specification including full details showing how the website design submitted in Assignment #1 was developed and implemented including details of how the website and web pages were created.
- Full details of how the website has been evaluated, validated, and tested.
- Provide screenshots of the NetBeans IDE project and your HTML / CSS project program code and the resulting output in a web browser.

The report will be submitted as set out in the following *report specification* and will include the screen shots and descriptive text. The report must be correctly formatted and presented; this will form part of the grading criteria.

The assignment must be submitted in a zip archive by email to the teachers for grading and evaluation. The zip archive submitted must contain: (a) the assignment report, and (b) your NetBeans project files. The report and working NetBeans website files are required for evaluation, validation, and grading.

Full details of the assignment along with the dates and submission process will be made available on the INFO 151 *Moodle* course website.

In this assignment all work must be carried out using the NetBeans IDE with the XAMPP server. **Tools that automatically generate HTML and XHTML must NOT BE USED**

Learning outcomes

For this assignment the learning outcomes are:

- To understand how web pages are created and programmed using CSS to achieve a common uniform style.
- Understand the use of reusable files (i.e., the CSS files used to provide a consistent style and appearance).
- To understand the implementation of CSS in web site development and creation.
- To understand the use of CSS float and CSS flexbox with semantic elements
- To understand how HTML and CSS are written and documented in a good programming style.
- To understand how to write a report and provide user instructions.
- To understand how to format a Word document in the correct report style.
- To understand how to format a Word document in the correct report style and save the Word document as a pdf file for printing.

Assessment criteria

For this assignment marks will be awarded based on the following criteria:

Task A – **25%**: The written report.

Task B – **50%**: The web site created with the HTML elements included.

Task C – **25%**: The HTML program code with the programming style and documentation

Assignment weighting

This assignment will contribute **20%** to your overall grade.

Assignment management advice

You should commence work on the assignment immediately as it will take time to complete the design and implementation of you web site, test it for submission, and prepare the written report in English using correct English grammar.

Anticipated work effort

This course assumes no prior knowledge of the topics covered in the course. The average student will be expected to spend about 5 hours per week to complete and submit this assignment

Important notice

You are reminded of the Lanzhou University Regulations and Disciplinary procedures relating to cheating details of which are set out in the Lanzhou University Regulations and Policies.

Except where the assignment is a team-based, all individual assignments, preparation and submission of the final piece of work must be all your own work. Close similarity between assignments will result in an investigation into cheating. It is not advisable to show your work to your colleagues or to share information relating to your assignments.

If you have any doubts about the extent to which you are allowed to collaborate with your colleagues, or the conventions or the conventions for acknowledging the sources you have used consult the course documentation and, if you are still unclear, your course tutor.

You must ensure that you acknowledge all sources of information used in the assignments. Work discovered to be the result of collusion or plagiarism will be dealt

with under Lanzhou University Disciplinary procedures with penalties as set out in the Lanzhou University Regulations and Disciplinary procedures

Report Specification

An essential part of this assignment is the submission of a report which documents the assignment written report written in English. The report must be written in a good standard of English grammar and syntax:

- English grammar: the way in which meanings are worded. Eight word classes (or *parts of speech*)" are commonly used in English: nouns, determiners, pronouns, verbs, adjectives, adverbs, prepositions, and conjunctions.
- **E**nglish syntax: the set of rules, principles, and processes that govern the structure of sentences (the sentence structure)including word order.

In the course resources (available from the *Moodle* course website) I have provided two reference books addressing the use of English grammar and syntax.

- *The Project Gutenberg EBook of An Advanced English Grammar with Exercises, Kittredge and Farley*.
- *Verbal Behaviour, Skinner*.

The report must not exceed 2000 words (excluding the program code listing – there is no page limit) and must clearly and comprehensively document how you addressed all the requirements and processes set out in the assignment specification.

The report will be submitted in a Word document which will include the screen shots and descriptive text. The report must be correctly formatted and presented; this will form part of the grading criteria. The submission must include:

- The report submitted in a Word document
- The report submitted in a PDF document
- The documents included in the website design documentation

The report structure must be as follows:
1. A front page showing the following information:
    - The degree.
    - The course.
    - The assignment title.
    - The tutor names.
    - Your name (in English and Chinese).
    - Your student id number.
    - The date (dd / mm / yyyy).
2. The report will use at least the following sections:
    - *Introduction*:
        o Set out how your design as submitted for the Individual Assignment #1 has been reviewed and developed for the actual implementation
        o Include the overall site plan and navigation with compliance with good website design principles
    - *Methods*:
        o Describe and discuss the method applied to implement the website design.
    - *Requirements*:
        o Setting out the requirements specification used in the website build and how the data for the requirements has been identified and collected.
    - *Implementation*:
        o Discuss how the web site is hosted and why the proposed method is used in the final design. Note: in this assignment you will use the localhost – but you

must discuss how the website would be hosted in a 'real-world' implementation.

- *Conclusion*: y
  - You may add any comments regarding how you built the web site including any problems encountered in the build process along with any documents used in the design and build of your web site.
- *Appendix*:
- This is where additional documents (including the full code listing) are listed and attached

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