South East Technological University

FACULTY OF LIFELONG LEARNING

ASSIGNMENT

Higher Diploma in Computing KRSIT_H

Module Title	Web and UI Design
Assignment Number	Three
Assignment Type	Project
Weighting	**20%**
Submission Date	1/5/24

Continuous Assessment Submission Guidelines

Assignments must be submitted via OneDrive. If assignments are not submitted via OneDrive, this will be regarded as a non-submission.

Extension Policy

Only in exceptional circumstances will extensions be granted.

Undergraduate and postgraduate extensions cannot be granted by your lecturer. Such extensions can only be granted by the Faculty of Lifelong Learning once a completed extension form and supporting documentation is returned online.

Students can apply for extensions at:

https://www.itcarlow.ie/study/lifelong-learning/lll-forms/extension-request-form.htm

Extensions must be sought in advance of the submission date. Extensions will not be granted retrospectively.

The circumstances under which an extension request will be considered include, but are not limited to:

- Serious personal/family/business reasons
- Where a student is representing their country or university

An extension request is **unlikely** to be considered under the following circumstances:

- Minor illnesses such as a common cold
- Holidays during the academic year

- Multiple assignments due at the one time
- Failure to plan study schedule
- Debs/weddings/social events
- IT and/or computer failure

The Faculty of Lifelong Learning reserve the right to request supporting documentation. If you are applying for an extension that exceeds **5 days** you must submit supporting documentation (e.g. letter from a doctor, employer, line manager etc.) so that any prolonged absence can be verified.

Please note that loss of/damage to a USB stick is not considered a valid reason for an extension. To avoid any unnecessary distress, please ensure that you **back up your work** regularly as you undertake your assignment. By registering with free online storage services such as Dropbox or Skydrive you can save your work online and access it at any computer. Alternatively use an external hard drive/or just email it to yourself.

Failure to submit a piece of assessment may result in a grade of 0.

Plagiarism Policy

Assignments which have copied work from websites, from other authors, from other students or any other sources will receive a grade of 0. All instances of plagiarism must be reported to the Head of Department who, in turn, is obliged to report them to the Registrar. Students who receive this grade may be asked to justify their actions to the University's plagiarism panel. Students must apply to the examination board at the end of the academic year to re-submit their work in such instances. Please note that copying verbatim from original sources is unacceptable even if you provide references.

Assignment Details

Tip for students: complete the final column with a '🌍' for each row to show you have read and understood the detail involved – if not, write in your query and contact your lecturer for clarification.

Module:	Web and UI Design			
Nature of Assignment:	Coding –Web Application			
Assignment Weighting:	20% of overall module marks			
Circulation Date:	17/04/24	**Submission Date:**	01/05/24	
Feedback - Dates and Nature:	**Feedback** Feedback will be provided within three weeks after the submission date. This will be provided in your shared OneDrive folder.			
Aim of Assignment:	The aim of this assignment is to assess your knowledge of HTML , CSS and JavaScript. In particular, the assignment will enable you to demonstrate your knowledge of UX design and Heuristic evaluation			
Alignment with Module Learning Outcomes:	The assignment aligns (fully or partially) to the following module learning outcomes: • Be familiar with various established sets of User Interface (UI) design principles • Critically evaluate User Interface (UI) usability based on established design principles and User Experience (UX) • Design, devise and create Web based applications using HTML, CSS, and JavaScript as appropriate			
Description (include link to additional detailed brief if required, e.g. case study, drawings, etc.):	Host a website on a topic that is of Interest to you, your website should have **4** html pages, {a homepage, an about us a contact us page, and a graphics based page, either a **Blog page, Product page, Portfolio page or Article page** }, an external stylesheet and a **javaScript script.** You can build on your website from previous assignments or start a new topic.			

Assignment :

Part 1: Design 30%

You can use your requirements document from assignment one as a base and update as needed or start from scratch. Remember your requirements have changed so update accordingly

Before implementing you first need to outline your requirements.

- *Create a requirements document using user centred design.*
- *You can use the Requirements document template on blackboard*
- *Outline your project aim and identify your user requirements.*
- *Consider different ideas to address user needs , define your problem statement and* create two or more different user personas
- Create a sitemap of your website and page descriptions.

Prototypes(10%)

- *Create two or more mock-ups of alternative designs for your* ***graphics page,*** *justify your design choices, refer back to principles as your justifications*

Evaluation (20)%

- ***Perform a heuristic review of your previous designs, make at least 4 observations adhering to different principles. For each one make a note of how it was improved for the final design.***

For each heuristic in the requirements document use the following layout

Problem	
Severity	
Heuristic	
Description	
Recommendation	
Screenshot	

Severity scale

1. Cosmetic: need not be fixed
2. Minor: needs fixing but low priority
3. Major: needs fixing and high priority
4. Catastrophic: imperative to fix

Part 2: Implementation 60%

Your website should have 4 HTML pages, an external CSS page, and an external JavaScript page.

Your website should include at least these elements

- **A dropdown menu**
- **A footer element with social media links (links can be fake)**
- **Media (Video, Audio)**
- **Animated gradient (can be made with css, js or php)**
- **An embedded google map**

JavaScript

- **Change HTML elements with JavaScript**
- **If statement**
- **Call a function**
- **onclick event**
- **onchange event**
- **onmouseover event**
- **An alert, confirm or prompt box**
- **Information stored and retrieved from localstorage**

These are just the basic elements, but you should expand on these to get full marks, you can include any other elements you like including ones that have not been covered in class.

Ensure each website page has appropriate & consistent titles, menus, and continuity between pages for that website.

Ensure your code is commented well, explain each part of your code and its purpose with comments

	30% of marks will be for basic elements. 20% will be for comments and syntax 20% of marks will be for use of colour, layout, navigation, presentation, originality Upload all the html, css and js files, requirement and prototype files in a zip folder, if hosting in the comments section of the upload add the url to your hosted website.	
Notional engagement hours:	It is anticipated that you spend approximately '18' hours for this assignment. The assessment criteria/rubric presented below sets out in detail what successful engagement involves and you should read through this carefully as you complete your assignment and evaluate your progress against the various criteria. In particular, you should focus on including all the basic elements first and on having clear comments and then adding more elements.	

Submission Details

The assignment should be submitted as a zip file via OneDrive by midnight on 1st May **2024**.

Late submissions (where no formal extension has been granted) will be penalised as outlined below. For more on this, please consult the Institute's Policy on Late Submissions of Assignments available at: https://www.itcarlow.ie/public/userfiles/files/Late-Submission-Assignments.pdf

Penalties for late submission for current assignment (where no formal extension has been granted):	• Assignments received at any time after two weeks of the due date to be graded, but a penalty applies, as follows: a. Assignments submitted at any time up to one week after the due date to have the mark awarded to them reduced by 10 per cent (for example, from 57% to 47%); b. b) Assignments submitted more than one week but up to two weeks after the due date to have the mark reduced by 20 per cent (for example, from 87% to 67%); c. Assignments received more than two weeks after the due date shall not be accepted. In this event, the learner shall receive a grade of 0.

Academic Integrity

All work submitted should be your own. It is each person's own responsibility to ensure that academic integrity is maintained.

Should you require any further support on this, please consult the resources available to you on TLC Student Hub and in particular Module 3 of the PACE Programme.

For more detail on Academic Integrity, please consult the Institute's Academic Integrity Policy and Procedure: https://www.itcarlow.ie/public/userfiles/files/Academic-Integrity-Policy-V4.pdf

MODULE AIM			
To equip the student with knowledge of the structure of the WWW and with skills to effectively create client-side web pages and basic web apps			
LEARNING OUTCOMES			
On successful completion of this module the learner should be able to:			
1. Be familiar with various established sets of User Interface (UI) design principles			
2. Critically evaluate User Interface (UI) usability based on established design principles and User Experience (UX)			
3. Design, devise and create Web based applications using HTML, CSS, and JavaScript as appropriate			
MODULE ASSESSMENT			
Assessment Component	**Details**	**Learning Outcomes addressed**	**% of total**

Project	**Introductory Web Development Skills Project: Students will create a static website applying UI & UX principles.**	**1,2**	20.00
Project	**Design & development of a hosted dynamic website. Application of HTML, CSS, PHP Programming skills**	**2,3**	20.00
Project	Application of a dynamic website with development skills in HTML, CSS & Javascript. Application of UI & UX design Principles.	**1,2,3**	20.00

Grade Descriptor for Web and UI design

Grade	**Criteria relevant to assessing Knowledge, Understanding, Application** (Bloom's levels 1–3)	**Additional criteria relevant to assessing Analysis, Synthesis, Evaluation** (Bloom's levels 4-6)

70 – 100 **1.1**	**Excellent** A comprehensive, highly structured, focused and concise response to the assessment task, consistently demonstrating: ▪ An extensive and detailed knowledge of the subject matter. ▪ Ability to analyse problems and identify requirements to provide an optimal solution ▪ Addresses all of the specifications and provides an optimal solution ▪ Applies all of the UX and programming concepts correctly ▪ Clean code with no superfluous code. ▪ Excellent presentation (code structure, documentation). Anybody can understand the code.	A deep and systematic engagement with the assessment task, with consistently impressive demonstration of a comprehensive mastery of the subject matter, demonstrating: ▪ An ability to identify correctly all input and output and provide alternatives ▪ An ability to identify and use proper elements and concepts and clearly document their use ▪ An ability to apply required UX principles and produce correct results ▪ The program works and meets all specifications. Does exceptional checking for errors and out of- range data ▪ Documentation is well written and clearly explains what the code is accomplishing ▪ The code is extremely well organized and easy to follow and adheres to
60 – 69 **2.1**	**Very Good** A thorough and well-organised response to the assessment task, demonstrating: ▪ A broad knowledge of the module matter. ▪ Addresses all of the specifications and provides a correct solution ▪ Applies nearly all of the UX and programming concepts correctly ▪ No irrelevant or unnecessary code ▪ Good presentation (code structure, documentation). Any expert could understand the code	A substantial engagement with the assessment task, demonstrating: ▪ An ability to identify correctly all input and outputs ▪ An ability to identify and use proper code elements and concepts ▪ An ability to apply required UX principles and produce partially correct results ▪ A program that runs and meets all specifications, does some error checking ▪ Documentation is simple comments and header that is useful in understanding the code ▪ The code is well organized and adheres to coding standards
50 – 59 **2.2**	**Good** An adequate and competent response to the assessment task, demonstrating: ▪ Adequate but not complete knowledge of the module matter. ▪ Addresses most of the specifications and provides a mostly correct solution ▪ Applies most of the UX and programming concepts correctly ▪ Very little irrelevant or unnecessary code ▪ Good presentation (code structure, documentation). An expert could understand the code with some extra explanation	An intellectually competent and factually sound answer with, marked by: ▪ An ability to correctly identify some input and outputs ▪ An ability to identify some correct elements and concepts and applied correctly ▪ An ability to apply required UX principles but does not produce correct results ▪ The program produces correct results but does not display correctly, does little checks for errors ▪ Documentation is a few simple comments that explain the code. ▪ Code is readable and adheres to some coding standards

40 – 49 **Pass**	**Satisfactory** An acceptable response to the assessment task with: ▪ Basic grasp of module matter, but somewhat lacking in focus and structure. ▪ Addresses some of the specifications and provides a partially correct solution ▪ Applies some UX and programming concepts correctly ▪ A small amount of irrelevant or unnecessary code. ▪ Satisfactory presentation (code structure, documentation) with an acceptable level of presentation errors.	An acceptable level of intellectual engagement with the assessment task showing: ▪ An ability to identify only one input or output ▪ An ability to identify code elements and concepts but not applied correctly ▪ An ability to identify UX principles but not applied correctly ▪ The program produces correct results but does not display correctly, no checks for errors. ▪ Documentation is a few simple comments that do not explain the code well ▪ Code poorly organized and does not adhere to coding standards
0 – 39 **Fail**	**Unacceptable** A response to the assessment task that is unacceptable, with: ▪ A clear lack of understanding of the subject matter ▪ A failure to address specifications and provide a correct solution. ▪ Cannot apply UX and programming concepts correctly ▪ Incomplete or broken code ▪ A large amount of irrelevant or unnecessary code ▪ Poor presentation (code structure, documentation) ▪ Evidence of substantial plagiarism	An unacceptable level of intellectual engagement with the assessment task, with: ▪ An inability to identify any inputs or outputs ▪ An inability to identify code elements and concepts ▪ An inability to identify UX principles ▪ The program produces incorrect results ▪ No documentation ▪ Code is completely unorganized and ignores all coding standards

[2] Anderson, L. W. and David R. Krathwohl, D. R., et al (Eds..) (2001) *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon. Boston, MA

Mustapha, Aida & Samsudin, Noor & Arbaiy, Nureize & Mohamed, Rozlini & A Hamid, isredza rahmi. (2016). Generic assessment rubrics for computer programming courses. 15. 53-61.