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| Module Title: | Web User Interface Design |
| Language of Instruction: | English |
| Credits: | 10 |
| NFQ Level: | 6 |
| Module Delivered In | 2 programme(s) |
| Teaching & Learning Strategies: | Learning is divided into lecture and practical sessions over one semester. Lectures will provide the theory. The practical sessions will provide students with hands on experience in designing and developing responsive web interfaces. It will also provide the opportunity to implement and reinforce material presented in lectures, to learn by doing. |
| Module Aim: | To provide learners with the necessary skills to design and develop responsive 'design driven' websites. |
| Learning Outcomes | |
| <i>On successful completion of this module the learner should be able to:</i> | |
| LO1 | Explain the underlying architecture of the internet and world wide web. |
| LO2 | Develop responsive web pages using HTML and CSS that adhere to current Web standards and UI principles. |
| LO3 | Enhance web pages with interactive content using JavaScript. |
| LO4 | Evaluate the planning and development of effective websites to meet specific case studies. |
| Pre-requisite learning | |
| Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i> | |
| No recommendations listed | |
| Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i> | |
| No incompatible modules listed | |
| Co-requisite Modules | |
| No Co-requisite modules listed | |
| Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i> | |
| No requirements listed | |

Module Content & Assessment

Indicative Content

Introduction to Web Architecture

Overview of the internet and world wide web. Web protocols including HTTP. Web concepts including URL, DNS, cookies, browsers, caching, client-server model. Current web standards and UI design principles. Tools and technologies.

HTML

HTML structural elements, tags and attributes. Lists, tables and forms. Inline vs block-level elements. Embedding images, video and audio. Separation of content from presentation.

CSS

Introduction to CSS, selectors, colours, typography, using CSS for layout and navigation, box model, positioning. Responsive designs, creating styles to target various devices and viewports and media queries.

JavaScript

Clientside scripting using JavaScript, browser object, document object model. Integrating user interaction by dynamically generating and modifying HTML content and CSS properties. JavaScript libraries and API's.

UI Design

Consideration of the principles of good UI design. The sizing, colours and positioning of elements. Grouping and consistency. Website organisation and visual hierarchy that guides the user around the web pages. Clear purpose of imagery.

Website Planning and Development

Planning and development of effective layouts (mobile, tablet and desktop) and designs (appropriate colour schemes and fonts etc.) to meet clients needs following research into current trends and target audiences. Using design skills to complete a web project from concept through UI development, sitemaps, wireframing, development and hosting.

| Assessment Breakdown | % |
|-----------------------|--------|
| Continuous Assessment | 20.00% |
| Project | 60.00% |
| Practical | 20.00% |

Continuous Assessment

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|------------------------|-------------------|------------|-----------------|
| Examination | n/a | 1,2 | 20.00 | n/a |

Project

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|------------------------|-------------------|------------|-----------------|
| Project | n/a | 2,3,4 | 60.00 | n/a |

Practical

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------------------|---|-------------------|------------|-----------------|
| Practical/Skills Evaluation | Laboratory sessions will employ activities to assess skills in designing and developing simple web pages. | 2,3 | 20.00 | n/a |

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

| Workload: Full Time | | |
|----------------------------|--------------------|--|
| <i>Workload Type</i> | <i>Frequency</i> | <i>Average Weekly Learner Workload</i> |
| Lecture | 12 Weeks per Stage | 2.00 |
| Laboratory | 12 Weeks per Stage | 4.00 |
| Independent Learning | 15 Weeks per Stage | 11.87 |
| Total Hours | | 250.00 |

Module Delivered In

| Programme Code | Programme | Semester | Delivery |
|----------------|--|----------|-----------|
| CW_KCIAD_B | Bachelor of Science (Honours) in Computing in Interactive Digital Art and Design | 4 | Mandatory |
| CW_KCIAD_D | Bachelor of Science in Computing in Interactive Digital Art and Design | 4 | Mandatory |