

CSCU9X5
HCI – UI – UX
Assignment 1 –
Autumn 2024

#### **Submission:**

By 23:59 on the 1st of November 2024 submit two separate elements to the assignment on Canvas:

- Your report.

  Name the file appropriately (include your student number but not your name).
- Put your finished application files in a folder named with your student number, compress the folder (preferably zip) and upload to Canvas.
- Ensure that your application has everything it needs to run successfully in this folder, e.g. including media files.

#### THE BRIEF

You are required to design a web-based multimedia application and build a prototype version of it.

This prototype application must be built using **Bootstrap 5 / HTML5 / CSS / JavaScript** or **W3.CSS** technologies, with the support of libraries and frameworks.

# 1- Selecting a project topic & scope

The general topic of the application should be one of the following:

- 1. An interactive cultural site, for this you should pick a cultural experience which is not already available or develop an interactive experience which is significantly different from existing web resources.
- 2. A fanzine, i.e a site devoted to a specific cultural or artistic icon or music genre. Again, this site should be substantially different from existing web resources. I.e. niche is better,
- 3. A site devoted to a specific hobby, again one which is not already routinely available on the world wide web.
- 4. Another topic of your choice providing that you have explicitly discussed and agreed the topic with the course lead by the end of week 3. You will need an email trail to evidence that the project has been approved.

If you are unsure about the latter, please discuss this at the earliest opportunity with the course lead during the weekly tutorials or labs and before you have made any significant inroads in the project.

Treat the assignment as a "commercial" exercise: you have a deadline for producing your design and prototype (i.e. the assignment submission date) and you have a "budget" – it is worth 60% of your overall marks for the module.

Use these criteria to determine how long you should spend on the assignment and how much to produce. (If at any stage you are unsure whether you need to do more (or less) work, then please ask).

The focus of the report should be to demonstrate good design principles highlighted in the lectures.

Your website should have a minimum of 5 different types of pages, each with different types of user interface and interactive design principles.

### Requirements

There will be **TWO** components to the submission for the assignment:

- 1. A design report (worth 60% of the assignment mark)
- 2. A prototype website / multimedia application (worth 40% of the assignment mark)

The report should fully document your design for a multimedia application.

You should design a whole product, but only have to build part of it to illustrate the idea.

The report should contain: a description of the general concept including details of users, wireframe designs and justification of design choices, a plan for testing.

Using Bootstrap 5 / HTML5 / CSS / JS technologies or W3.CSS, you will build a prototype version of your designed website or multimedia application, that is, it is probably a partial implementation of your design which illustrates key elements.

Your prototype should clearly demonstrate the concept of your design, good use of multimedia, and technical competence with dynamic web development.

The sections below give more detail on the requirements for these components and the breakdown of marks.

## 1. THE REPORT

The report should be in the form of a design document that fully documents your design for a multimedia application. Remember that you should design a whole product, but only have to build part of it to illustrate the idea. Your report should detail a consistent design process and *be specific to your development*. **Do not include generic** information about design and testing procedures.

5% of the marks are for the overall quality and structure of the report itself.

Hint: use the areas mentioned below as your report structure.

Note: you should design the whole application, but build a prototype (restricted) version of it.

The report should contain the following:

- The **title** of your application, the file name of the main HTML file, and your student ID (but not your name).
- A description of the general concept of the website / application:
  - What is it?
  - Who is it aimed at?
  - How would you deliver it?
  - This should include an **overview** of who your target users are and **two specific distinct personas**, each with a scenario detailing an **activity**, **context** and **technology**.

# [10% of assignment marks]

- Details of the design of your entire application, including wireframes of major screen layouts, and a navigation map showing how these interconnect.
  - Thoroughly justify your design choices.
  - How does your design satisfy the needs of your personas and scenarios?
  - An excellent submission will have substantial support for these decisions in terms of references to design guidelines, heuristics, principles.

# [15% of assignment marks]

• Testing & Evaluation: a plan and report of appropriate usability testing.

In planning consider a wide range of user testing from inception to post-delivery feedback from customers. Note: you are not expected to carry out all testing: you are documenting the professional process you would follow given lots of time and resources. Report clearly which usability testing you have done (independently, or in groups), and its results. What can you conclude from these tests about your design? Are any changes advisable? (You don't have to make those changes.)

# [15% of assignment marks]

• A **brief** description of how you worked with other people – including during the turorials & labs - to broaden your perspective during this assessment and reflection on what you learned from that and how it improved your submission. For example, perhaps you took part in group discussions, and may have used other people to help you test.

How did that change your ideas?

### [5% of assignment marks]

• A description of what your built prototype version contains, justifying why you have implemented the parts that you have to create the prototype version, and how this particular version of the overall system will help you evaluate your design.

### [5% of assignment marks]

• A **list of all sources** for any media and external CSS and JavaScript libraries used in the prototype (i.e. web addresses, references scanned from etc), with a **short description** of what any external libraries are used for.

[5% of assignment marks]

Word count / page limit: 3500 words +/- 20%. That's roughly 14 pages or less.

#### 2. THE APPLICATION PROTOTYPE

Using **Bootstrap 5 / HTML5 / CSS / JavaScript** or **W3.CSS** technologies, you will build a prototype version of your designed multimedia application, that is, it is probably a partial implementation of your design which illustrates key elements.

Your prototype should clearly demonstrate the concept of your design, good use of multimedia, and technical competence with dynamic web development. An excellent submission will satisfy all of these criteria to a high level.

The allocation of marks is:

## • [25% of assignment marks]

for good use of interactive modalities and multimedia elements, providing a high-quality prototype in terms of how well it demonstrates your concept,

• [15% of assignment marks] for technical competence in web technologies

As a prototype, your application should:

- Show examples of all information presentation styles to be used in the final product.
- Include examples of all types of navigation and interaction to be employed.
- Clearly indicate when material is missing or will be different in the final system e.g. never have a clickable button that does nothing! At least have a text box describing what should happen.
- Use **relative URLs** to local content (images, web pages) where possible so that the application can be run on the **local file space** (and not via a web server).

The emphasis in the prototype is NOT on the quality of media you have available, but on the sensible integration of different media (text, graphics, animation etc) and the usability of the system (e.g. is it easily navigable).

So do not spend hours on producing original media.

Where you would use different media in the final product, this should be indicated in the prototype (e.g. a still image in place of a video, with some text indicating this).

You may be able to find suitable media on the Web, or in books, magazines etc, but beware of copyright issues.

Be sure to reference your sources in your report.

You are encouraged to make use of third party CSS frameworks and JavaScript libraries (such as JQuery, Bootstrap, W3.CSS etc), but how you make use of them must be clearly documented in your report.

Remember to supply the library files with your submission (unless they are linked to via a web address).

### **Academic Integrity**

Work which is submitted for assessment must be your own work. Academic misconduct may include plagiarism, which means presenting the work of others as though it were your own. The University takes a very serious view of plagiarism, and the penalties can be severe (ranging from a reduced grade in the assessment, through a fail grade for the module, to expulsion from the University for more serious or repeated offences). Specific guidance in relation to Computing Science assignments may be found in the Computing Science Student Handbook. We check submissions carefully for evidence of plagiarism, and pursue those cases we find. All students should note that the University has an agreed policy setting out procedures and penalties for dealing with academic misconduct.

This policy can be found on the University's portal

 $\underline{https://www.stir.ac.uk/media/stirling/services/academic-registry/documents/policy-and-procedure-academic-integrity-misconduct.docx\ .}$ 

The policy also gives guidance on proper and adequate acknowledgement of source material, but if students are in any doubt at all about the nature of plagiarism, or the means by which to avoid it, students are strongly advised to consult their tutor. Students should clearly understand that it is their responsibility to be sure they understand these matters. Ignorance is not accepted as a defence for plagiarism.

#### **Extensions**

Students who can show good cause may be permitted extensions to the assignment deadline.

See

https://www.stir.ac.uk/about/professional-services/student-academic-and-corporate-services/academic-registry/academic-policy-and-practice/quality-handbook/assessment-policy-and-procedure/

for details of the policy on Extensions for Coursework.

Students must request an extension via Canvas (Extension Request, in the left-hand navigation). Supply enough detail that your request may be judged by the module coordinator. Extensions will be granted for exceptional reasons only, and should be submitted in advance of the coursework deadline. Students with an ARUAA may also request an extension on the basis of their ARUAA,

but similarly must give a rationale for the particular need for this extension.

# Late submission

Without an agreed extension, the assignment will be accepted up to seven days after the hand-in deadline (or expiry of any agreed extension) but the grade will be lowered by 3 marks (out of 100) per day or part thereof.

After seven days the work will be deemed a non-submission and you will receive 0 marks for this assignment. Since this assessment is worth 60% of the module grade, this will effectively mean a fail grade for the module.