COMP09096 Creative Technologies Professionalism

Coursework assessment: Technical report

1) Technical Report: Justification

The writing of a technical report is a core requirement of this module. One of the main reasons why you are being asked to do this is because written skills of this nature are often required when working in the creative industries. Graduates also need transferable creative skills such as written and communication skills in addition to a firm demonstration of technical skills.

For example, in your future career within the creative industries you might be involved in writing invitations to tenders or simply documenting reports about the project documentation of a final product (e.g. whether it be designing a website or a piece of animation). It is important to note that any employer regardless of your discipline will expect you to be able to demonstrate sound written and oral communication skills.

However, the principal onus of undertaking this coursework is on developing your organisational, logical, critical thinking and written skills. These are key 'soft skills' deemed essential in any job role. Furthermore, this coursework is designed to assist you with your final year Honours Project in addition to solidifying your knowledge in your subject area from a theoretical perspective as opposed to a technical one.

2) Technical Report: What you have to do

For this assessment you are required to write an academic report on a topic related to your subject area. There is a choice of topics for each subject deemed to be relevant to your academic discipline, which is detailed later in section four of this document.

You will be expected to research your chosen topic to compile credible academic sources (e.g. books, academic journals and reliable websites) which will form your references and inform your written work through referencing and quotation. From your compiled literature you will: (1) provide an overview of the topic area (literature review), (2) an explanation of the

importance of the topic to your subject through analysis of your research findings leading to (3) an overall conclusion.

As this is a technical report, you will need to make use of appropriate heading and section numbering. Although not limited to the following, the list below presents a minimum number of expected headings:

- **Title** (your title should summarise what the topic of your report is about)
- **Abstract** (should be concise and provide an overview of the entire report)
- **Introduction** (should set the scene of the report, provide some background, state what the report is designed to achieve, provide some initial key arguments from the literature, sign post the reader)
- **Literature Review** (provide the key arguments from the literature making sure that all authors are properly cited both directly and indirectly)
- **Analysis** (analyse your findings on your subject area based on your literature review)
- **Conclusion** (provide conclusions, future directions, sum up the area)
- **References** (must be properly referenced: e.g. books, academic journals, reliable websites)
- **Appendices** (provides additional information that is useful to the reader – additional raw data, questionnaires etc.)

The University's adopted referencing system is Harvard. Details on this style of referencing can be found via the University Library's website at http://www.uws.ac.uk/about-uws/services-for-students/library/guides-and-online-help/. You will find the necessary resources under Bibliographies and Referencing section.

3) Format of Report

In addition to the above listed guidance you should also ensure the following:

- The abstract should be between **150** and **200** words.
- The word count of the body of the report should be approximately **1800** words. **References are not included in the word count.**
- A minimum line spacing of 1.5 lines is used.
- Your work is broken into paragraphs.

- The report is written in the third person.
- Your font type is Arial and 12 point.
- The file format should be a Word Document.

Suggestions for topics are given below in section four. You may choose a topic of your own choice which is not on the list below but this must be discussed with the module co-ordinator before the end of **22nd September 2017** (so hurry if you wish to choose your own topic). **It should be noted that the technical report that you have to submit is an individual piece of work.**

Submission

You should upload your file to the appropriate submission link on Moodle.

You should name your file in the following way:

 CA2_B********.doc or .docx (where ******** is replaced by your Banner number).

Please keep to this format as it helps sort files and mark anonymously.

All work will be checked using turnitin plagiarism checking software. You may submit revision copies of your work via the revision link for this assessment as many times as you wish. You may only submit once to the final submission link. If unsure please seek the advice of a tutor.

The University has a guide to what Plagiarism is and how best to try and avoid it in your own work. You can access this document under week two of the modules Moodle site.

Deadline: Friday 20th October 2017 by 4pm on Moodle

There is a weighting of **50%** from the overall module mark for this assignment.

A guide to uploading your work will be made available on the Moodle site for this module.

4) Technical Report Topics

Computer Games Technology/Development:
1. Evaluation of game engine platforms for the purposes of 2D and 3D game design.
2. Review of the fundamentals of software engineering practices for creating games.

3. Analysis and comparison of game development techniques and approaches for 2D and 3D game design.
4. Reviewing the use of AI techniques in computer game design.
5. Assessing the impact of social, casual and mobile games in the evolving games industry.
6. Examining the theory and practice of level design: assessing its importance towards games development.
7. Review of coding standards and principles in the context of games development.
8. Analysis of virtual and augmented reality gaming: future directions for the games industry.
9. Reviewing the importance of quality assurance and software testing in the context of computer games design.
10. Review of the characteristics of games immersion and its importance towards games development.

Computer Animation:
1. Review and comparison of 2D and 3D computer animation software.
2. Analysis of the fundamentals of lighting design techniques for computer animation between real and virtual worlds.
3. Reviewing and comparing the development of methods and practices used in 3D modelling.
4. Comparison and contrast of character animation fundamentals for 2D and 3D character animation.
5. Review of modelling methods in the context of facial animation techniques.
6. Review of the concept and theory of character rigging and approaches to rigging using Maya, 3ds Max, Houdini and Blender.
7. A review and critique of the various types of render passes assessing their purpose within computer animation.
8. Review and discussion of texture mapping in the context of 3D modelling.
9. Discussion and contrast between traditional polygon modelling techniques and the sculpting approach concerning their different approaches to modelling.
10. A review of the role of computer animation within the games industry.

Web and Mobile Development:

1. Review of the privacy implications of HTML5.

2. Review of the implications of user interface design on mobile devices.

3. Discussion of the latest development in geolocation techniques.

4. Accessibility and internationalisation of Web sites: reviewing the principles of good website design.

5. Review of the application of HTML5 in mobile devices.

6. Responsive Web Design (RWD): reviewing its implications on user experience.

7. Review of web development frameworks: a comparison of server-side and client-side frameworks.

8. Review of coding standards for HTML5, CSS and JavaScript.

9. Examining the potential benefits of Model-View-Controller (MVC).

10. Review of the history and principles of the W3C and the application of their standards towards web development.