# Coursework commentary 2017–2018

## CO2227 Interactive multimedia

### Coursework assignment 1 - Creativity and the Internet

### General remarks

This year's coursework assignments involved aspects of the Internet, and their interaction with creativity in a computational context. In the case of coursework assignment 1, the focus was explicitly on the Internet, and students were required to write a critical essay, and then develop an artwork

For coursework assignment 2, the concept of recommender systems was to be examined. Though these have existed before the Internet came into being, they have expanded in capacity and use as a result of the enormous amount of information available on the Internet. Again, a discussion of the area, followed by the implementation of an algorithm and then artefact inspired by their investigation, was required.

Students were also asked to develop their ability to critique work — their own and others' — by providing self-reflection for each of their own artefacts, as well as critically examining the coursework assignment 1 submission of another student.

At level 5, examiners expect students to be able to present coherent academic writing, with proper referencing and citation. In addition, insightful analysis and discussion of creative artefacts is expected, and students should be demonstrating that they are developing these abilities.

This year, the examiners were pleased to note that almost all students correctly followed the format and instructions for submission. However there were a couple of submissions that contained the incorrect assignments (and instead were for another course). Unfortunately in these situations we are unable to award any marks, so it is essential that you check that you are uploading the correct coursework assignment for all of your submissions.

# Comments on specific questions

This coursework assignment had two main parts; most students submitted both parts, and obtained at least a pass mark for this work. All students also included their coursework partner for the second coursework assignment, though a couple did not submit all of the details asked for.

### Part 1

The first part required a discussion of the topic, particularly in the context of the creation and dissemination of artworks. Here, students were expected to read appropriate books and articles, as well as considering both the facilitation and the prevention of such creation and dissemination.

There were some extremely good essays that discussed these aspects well. One student linked the development of the World Wide Web with the development of digital art, and argued that they both became mature at a

similar time, thereby enabling the idea of Internet art more strongly. Another student mentioned the dilution of the quality of art being produced, saying that the Internet has allowed many more people to consider themselves artists and creators. This was substantiated by appropriate reference to published articles.

Some students only presented the ways in which creativity has been enhanced, and omitted to include the arguments pointing out that it has also been stifled. Such essays scored lower marks.

Some weaker essays simply presented a number of summaries of articles, or a lot of information, with no critical thinking or consolidation. We are looking for a demonstration that students can do more than just find and report information; an ability to present an argument, with justification, is an important aspect of critical thinking. This is one part of academic writing that is essential to develop.

However, the most important aspect that resulted in lower marks was weak citation and referencing, which is the other part of academic writing that is essential to develop. In particular, the absence of citation was an issue in many essays; and in some essays, the absence of references made this worse. If at this stage you do not know what citation is, or how to appropriately cite the material that you use, you need to find out and make sure you can do so for future submissions.

### Part 2

The second part required the development of a creative artefact, in *Processing*, that would have been difficult to produce before the advent of the Internet. This was approached in a variety of ways, including some very innovative work.

Submissions were assessed according to a number of factors: creative impact (which included actually addressing the remit of the artefact); quality of code and implementation; discussion and self-reflection.

An excellent submission was based on the concept of dial-up, and hacking; another great artwork made use of the Google custom search API to build up a library of images which then were used to make a collage. An artefact that made use of layers to construct an artwork, based on some of the work from earlier parts of the course, including the work of Carmen Herrera, was done very well.

There were many submissions that made use of weather, Twitter, or other API data, as a way to create an artefact that relies on the Internet. This was acceptable, and some were very good, though some did not demonstrate deep understanding or creative insights.

The discussion required was often good, though some weaknesses were shown. Not all students provided the self-reflection and insight required, and sometimes focused on only technical and coding critique. Sometimes students had little concept of what a timeless work of art might be, though some did give some good explanations of what they considered it to mean, and then evaluated their own work with respect to such definitions. The understanding of the role of the Internet was not always that strong.

Students who felt that they would not have been able to learn as much as they had without the Internet demonstrated this lack of understanding.

In general, the work was approached well. Most students included reasonable comments in their code, though some work was weakly coded and not commented upon at all. The quality of coding itself was mixed, with some

being very elegant and impressive, and some being rather brute-force and limited. It's very important to continue to develop your coding ability, so that you can implement your creative ideas with as few limitations as possible.

## Part 3

The final part of coursework assignment 1 required students to identify a fellow student with whom they could swap completed assignments. You were required to submit three things: your swap-partner's name, their UoL student number, and a very brief description of how you know them. Although this part was worth only 2% of the overall marks for coursework assignment 1, it was not optional. All students included their coursework partner, though a couple did not submit all of the details asked for.

# Coursework commentary 2017–2018

## CO2227 Interactive multimedia

### Coursework assignment 2 - Recommender systems

### **General remarks**

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For coursework assignment 2, the concept of recommender systems was to be examined. Though these have existed before the Internet came into being, they have expanded in capacity and use as a result of the enormous amount of information available on the Internet. Again, a discussion of the area, followed by the implementation of an algorithm and then artefact inspired by their investigation, was required.

Students were also asked to develop their ability to critique work – their own and others' – by providing self-reflection for each of their own artefacts, as well as critically examining the coursework assignment 1 submission of another student.

At level 5, examiners expect students to be able to present coherent academic writing, with proper referencing and citation. In addition, insightful analysis and discussion of creative artefacts is expected, and students should be demonstrating that they are developing these abilities.

This year, the examiners were pleased to note that almost all students correctly followed the format and instructions for submission. However there were a couple of submissions that contained the incorrect assignments (and instead were for another course). Unfortunately in these situations we are unable to award any marks, so it is essential that you check that you are uploading the correct coursework assignment for all of your submissions.

## Comments on specific questions

Coursework assignment 2 began with a requirement that students critique another student's work, and then went on to give students an opportunity to learn more about the area of recommender systems, and then develop a creative artefact that could become part of their portfolio, based on this topic.

A number of students (around 10%) failed to submit anything for Part 3, resulting in a very weak mark. Apart from this, many submissions were strong, and there were also some excellent submissions, with close to a quarter of students obtaining a first.

### Part 1

The critique was done very well by some students, with three students obtaining full marks for this part of the submission. Examples of this work are made available in the VLE. Those who did a good job were able to provide an insightful comment on both the technical and creative aspects of their swap partner's work. In particular, one of the very good ones started with a summary of the work, then identified areas of weakness in the submission and specific critique, for example:

'There are some ideas which can be argued upon. In line 6, the author states that "The art is not a physical object anymore", and partially reiterates the same idea in line 11, stating that "Production and distribution of physical items (painting, records, tapes, books...) are substituted by electronic files easy for storing and sharing over networks". Beyond dispute, the digital format of many art forms has gained a large representation (music, film making, visual arts, etc.). However, in its biggest proportion, the art is still a physical object and it seems like it would remain such for an indefinite period of time. Consider a paper book (and the illustration it contains), a sculpture, an artisan craftsmanship piece of work such as a ceramic vase, a painting (which still has predominantly physical and not digital format), a work of design, architecture or a performing arts act (dance, theatre, opera, etc.).'

And then went on to suggest areas of improvement, for example:

'The essay would also benefit from a better internal structure (a clear introduction, clear division between different paragraphs in general). It gives the impression of some degree of repetitiveness, although, clearly it was not intended by the author. For instance, the topic about new tools is discussed in several paragraphs (2, 7 and 8) while focusing on other ideas in between.'

Weaker critiques often took a blow-by-blow approach, in a very literal sense, rather than including an overall view on the work. Some weaker submissions also suffered from some of the following: comparing the work being critiqued with the student's own submission; not providing a mark assignment as requested; giving a straightforward average of marks for each section to obtain a total (instead of a weighted average); focusing only on the essay and the technical aspects of the implementation, and not considering the creative aspect of the artefact or its impact. Good critiques commented on the quality of code as well as the quality of the discussion and self-evaluation in the submission, and made suggestions for improvements.

#### Part 2

For Part 2, students were required to present an appropriately written essay about recommender systems, with a clear focus. There were a number of excellent essays in this submission, which showed a strong development of the ability to argue and bring together views from a number of different sources. This time there were also far fewer essays that were missing citation, which the examiners were pleased to see.

There were a few very weak essays with almost no content, which obtained very low marks; however around 20% of students achieved a mark of over 25 out of the available 30 for this. One student misunderstood what recommender systems are and submitted an essay about searching more generally, and advertising, as vehicles for recommendation.

This showed a lack of clarity and ended up being an essay that was mostly summaries of content, rather than one that addressed the specific requirements asked for. The most important thing to understand is that recommender systems are qualitatively different from general advertising,

and the ways in which they work. Few students included population-based or aggregate systems in their discussions. One of the stronger essays included privacy issues as a point of discussion, and another brought in their thoughts from a documentary they had seen about the rock group Rush, who as early as the 80s had been using word of mouth from fans, and touring, because their songs were too long for radio exposure which was the usual dissemination vehicle of the day.

### Part 3

For the final part, students were required to develop an artefact based on ideas from recommender systems. Unfortunately a number of students submitted work that was only marginally connected with recommender systems, such as one student who implemented a solitaire game, and another that was about how the human brain supposedly learns. Submissions with only tenuous connection to recommender systems obtained much lower marks; it is very important to respect the brief and adhere to what has been asked.

There were, however, some excellent submissions, some of which also contained strong reflective essays. Particularly good examples included a visualisation of a simulated recommender system (which the student felt had been less successful than they had hoped, but they showed excellent development approaches and great self-reflection); a humorous artefact about dating and choosing to split up; a fruit choice recommender system that included a well-considered implementation; a book recommender using a very large dataset; a game that demonstrates how hard it is to make a good recommendation that includes all required factors; a filter (image) recommender that used a survey form to overcome the cold start problem; and a sampling suite to allow recommendation, inspired by the work mentioned above about the rock group Rush.