CM20314 - Experimental Systems Project

Deliverable 1: Proposal Specification

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Set: Monday 09/10/2023 (week 2) **Due:** Friday 10/11/2023 (week 6), 8pm
Percentage of overall unit mark: 15%
Submission Location: Group submission via Moodle **Submission Components:** Report **Files:** PDF named 'Group # - Proposal'
Anonymous Marking: No

1 Overview

For CM20314 your overall project involves the proposal, specification, design, implementation, testing, and evaluation of a novel interactive system. This deliverable focuses on the description of the initial problem domain, identification of possible challenges to address, the proposal of a system that would address one or more of these challenges, as well as the approach you plan to take in order to achieve your overall goals.

2 Deliverable

The deliverable is a group report, written in teams of 7-9. It must have between 2000 – 3800 words including figure captions – this is a hard limit (appendices are not to be used to extend this limit etc.). Tables of content, figures, diagrams, and references do not count towards the word limit. It must use the ACM Primary Article Template which is a single column format (use Word or LaTeX for editing; submission must be PDF): https://www.acm.org/publications/taps/word-template-workflow

You should remove the CCS Concepts, Additional Keywords and Phrases, as well as the ACM Reference format sections.

In addition to the report, the group must also submit a Group Contribution Form (see below) which does not count towards the word limit.

Structure: The following structure is mandatory. The report is worth 15% of the of the overall unit mark and it will be marked according to the criteria below. Every point listed below must be adequately and concisely covered in the report. The marks listed below sum up to 100%.

Background – about 3-4 pages[1] (45%)

- Describe the chosen domain/area (from education, wellbeing, sustainability, hobbies, local businesses, and charities – you can select one of these or combine).
- Describe a set of challenges/issues that you have identified in the domain/area raising both technical and societal issues.
- Showcase your motivation for choosing the specific domain/area and challenge/issue.
- Describe the stakeholders (users and otherwise) that are affected, their context, their tasks, as well as their goals.

  [For the above you would need to show knowledge and understanding of past and current work in the subject area. This could be by reviewing literature, reviewing systems that have similar goals, and even having preliminary engagement with stakeholders in the problem area.]

Proposed system – about 1-2 pages (15%)

- Propose an idea for a novel interactive system that would address one or more of the challenges/issues identified.
  - Clearly state the aim of the system as a proposed solution.
  - Report who may benefit from the proposed system and how.
  - Describe potential positive and negative impacts of the proposed system (considering legal, ethical, and professional implications).

Programme and Methodology – about 3-4 pages (including diagram) (40%)

- Describe the steps you would need to take to achieve your project aims (measurable objectives against which you would wish the outcome of the work to be assessed).
- Describe the project management and software development approaches/ methodologies to be used and justify your choices.
  - e.g. programming languages, tools, systems to be used.
- Describe the programme of work with enough detail to specify workplans, roles and responsibilities for individual team members, how the group will work together, as well as the milestones that can be used to measure the project's progress.
  - Include a diagram of the project plan (e.g. Gantt Chart or PERT).
- Briefly describe potential risks that might arise and your plans to mitigate them.

[1] The suggested "about x pages" is for guidance only, not mandatory.

References – (does not contribute to the word count)

- Include a bibliography of the academic papers, articles, websites, and other media you used to provide support and rigour in your report.
- For citations and references you must use the ACM format: https://www.acm.org/publications/authors/reference-formatting

Please notice that the ACM citation format is not explicitly covered by the library website on referencing (see below). If you request the assistance of a librarian, please mention that you are using the ACM format.

The marking criteria for the deliverable are as follows:

Criteria	Percentage of overall deliverable mark
Background	**45%**
Description of the domain	10%
Description of identified challenges	15%
Showcasing motivation	10%
Description of stakeholders	10%
Proposed System	**15%**
Clearly stating the aim of the system	5%
Who may benefit from the system and how	5%
Description of positive/negative impacts	5%
Programme and Methodology	**40%**
Description of project steps/measurable objectives	10%
Description of approaches/methods to be used	10%
Description of the programme of work	10%
Diagram of project plan	5%
Description of potential risks and mitigation plans	5%
References and General	**-10% max loss**
Template non-adherence	up to -2%
Structure non-adherence	up to -2%
Citation style non-adherence	up to -2%
Poor presentation	up to -2%
Non-coherent writing style	up to -2%

3 Group Contribution Form

In addition to your report, please submit a separate PDF with a Group Contribution Form as described in a separate document **"CM20314 - Group Contributions and the Group Contribution Form (GCF)"**.

4 Academic Integrity

Your work will be checked to ensure that you have not plagiarised. For more information about the plagiarism policy at the University see:
https://library.bath.ac.uk/referencing/plagiarism.
Remember that published work that you refer to in your report should be clearly referenced in your text and listed in a bibliography section given at the end of your report. For more information see: https://library.bath.ac.uk/referencing/new-to-referencing.

There is currently much debate about the use of Generative AI Large Language Model (LLM) tools such as ChatGPT in Higher Education and how these impact on assessments and academic integrity.

AI tools can be useful to support you in your project, for example to help inspire ideas and find information quickly. However, AI systems do not possess true comprehension or reasoning abilities. They generate responses by identifying patterns in their training data, not through deep understanding. So, while they may seem intelligent, they cannot replace human critical thinking and analysis which are assessable elements in your reports. If you are thinking about using AI tools in this report, there are some important things to think about before you do.

What **not** to do:

- Have them write full assignments for you. It is unethical and it prevents you from developing core academic skills.
- Copy directly from the tools' output. Passing off AI content as your own is a breach of academic integrity: https://www.bath.ac.uk/corporate-information/academic-integrity-statement/ states that by submitting your coursework, among other things, you confirm that *"You have not presented content created by generative AI tools (such as Large Language Models like ChatGPT) as though it were your own work"*.

What to do:

- Use them to brainstorm ideas.
- Get different perspectives.
- Summarise content.
- Stimulate discussion.

Always maintain a critical mindset:

- Does the response make sense?
- Is it well reasoned and supported?
- Always verify the output! This hones your critical thinking abilities.
- Review citations and references carefully as some of them are fake or irrelevant. Validate key points by reading the original work and confirming or rejecting the generative AI synthesis of information.

5 Getting Help

- During your tutorials the tutors will be available to answer questions and offer guidance. Please note that tutors will not be able to make decisions on behalf of your group about the course of the project. They are there to discuss your ideas and offer advice.

- Use Moodle forums to post general questions or questions specific to your group's project. The unit convener will respond to these as well as your peers. This way we will create a repository of knowledge that will be available to all.