MULTIPLE PERSPECTIVES

In the field of Human-Computer Interaction (HCI), understanding and designing effective technologies require a comprehensive view that draws on previous literature. This assignment will focus on building an annotated bibliography using multiple papers from the ACM Digital Library. By examining a range of studies, methodologies, and analyses, you will gain a deeper and more nuanced understanding of a specific technology.

The ACM Digital Library is a rich resource of scholarly articles and conference papers that cover a wide array of topics within HCI and related fields. You will use this resource to find relevant papers that provide various perspectives on the technology you are studying. This will include different methodologies, theoretical frameworks, and socio-cultural contexts that influence how technology is built, studied, and analysed.

This approach will allow you to:

- Gain multiple perspectives about the specific technology, including diverse methods and viewpoints.
- Understand the socio-cultural nuances that are critical for thinking about and working with technology.
- Critically analyse and synthesise information from different sources to form a well-rounded understanding of the topic.

This annotated bibliography will form the foundation for your next assignment, a prototype proposal. You will be better equipped to propose innovative and informed design ideas by thoroughly exploring the existing literature.

THE ASSIGNMENT

This assignment is in two steps: first, you will create the annotated bibliography, then you will identify three design opportunities.

STEP 1 - Creating the annotated bibliography (Download the template on Wattle)

- **Group Discussion and Technology Selection.** With your group, start thinking about the type of technology you want to explore in your prototype. Examples include:

- Select the same technology explored in your previous assignment
- Interfaces using generative AI
- Interactive technologies for bikes, from riding support, way finding, AR, safety, security
- Working with drones
- Autonomous and semi-autonomous vehicles/machines
- Body movement and sports technology
- Technology for museums or musical performances
- Technology for children or the elderly
- Other

- **Finding and comparing examples in the ACM DL:**

Identify five papers specific to your chosen technology in the ACM Digital Library and use the following <mark>Analysis Criteria</mark>:

1. What is the context of use for the technology? Consider the people, the setting, and the circumstances of use.
2. What are the methodologies used to create and study the technology?
3. Discuss some of the design choices made in creating the technology, including whether accessibility, inclusivity, and sustainability where considered the design
4. Describe one way in which the technology can be improved.

- **Annotated Bibliography Requirements**

Your annotated bibliography needs to include:

- **Selection of Papers:** Five papers from the ACM Digital Library specific to your technology topic.

- **A summary of each paper of no more than 200 words:** Briefly summarise what the paper is about. (e.g., A user study/or analysis of (*technology or prototype description*), investigating (*approach/setting description/framework*). The results/presented framework suggest that (*description*)).

- **Analysis Criteria:** Using the <mark>Analysis Criteria</mark> listed above, elaborate in 350 to 500 words <u>for each paper</u> the analysis criteria.

STEP 2 - Identify Design Opportunities:

Based on the bibliography and your team's discussion, write about three design opportunities (200 words max. per design opportunity) that could be potentially explored in your next assignment (research proposal). These should be informed by the insights gained from the literature and your analysis of the different methodologies, contexts, and design choices. Consider how you can innovate or simply improve your technology.

THE ASSESSMENT PROCESS

1. The quality of your annotated bibliography and the argument you develop based on the selected publications will be assessed.
2. The use of key interaction design and HCI terminology provided in 1.8 Accessibility and Inclusiveness, 1.9.1 Usability Goals, and 1.9.3 Design Principles to illustrate key aspects of human-computer interaction will be assessed.
3. How well you identify three design opportunities and describe how these link to your annotated bibliography will be also assessed.
4. Each of the citations you select must be included in your final document. The citations do not count towards your word count.
   Please see the example provided here to create you annotated bibliography https://www.anu.edu.au/students/academic-skills/writing-assessment/other-assessments/writing-an-annotated-bibliography
5. You will use the provided template to complete this assignment and then submit a PDF via Wattle.
6. Remember to include a cover sheet!

This creative, people and technology focused, and analytical assignment follows the standard ANU grading system and has been aligned to meet internal ANU, Australian University and Government (TEQSA) expectations, including evaluation of a number of the required learning outcomes for the course.

GRADING RUBRIC

The following Grading Rubric will be used for assessment of this assignment.

TOTAL MARKS /20	POOR (N)	SATISFACTORY (P)	GOOD (CR)	SUPERIOR (D)	EXCEPTIONAL (HD)
Explain and Illustrate Key Aspects of Human-Computer Interaction (/6)	Does not use appropriate terminology or demonstrates understanding of key aspects of human-computer interaction. (0-2.5 marks)	Uses limited terminology, with some gaps in understanding key aspects of human-computer interaction. (3 marks)	Uses some terminology to articulate the proposed concept, showing an adequate understanding of key aspects of human-computer interaction. (4 marks)	Uses terminology effectively to articulate the proposed concept, showing a good understanding of key aspects of human-computer interaction. (5 marks)	Uses terminology from the provided resources to articulate the proposed concept comprehensively, demonstrating a deep understanding of key aspects of human-computer interaction. (5.5-6 marks)
Annotated Bibliography Comprehension (/6)	The annotated bibliography is missing or insufficient. (0-2.5 marks)	Articles are not from the ACM Digital Library and do not offer a HCI perspective. Articles have limited relevance to studying chosen space. Discussion relating to the guiding questions are limited or missing. (3 marks)	Articles are from the ACM DL and have some relevance to studying chosen space. Discussion relating to the guiding questions is general or vague and could be more specific and logical. (4 marks)	Articles are HCI papers from the ACM Digital Library. Articles have clear relevance to studying chosen space. Discussion relating to the guiding questions is specific and logical. (5 marks)	Articles are HCI papers from the ACM Digital Library. Articles have clear relevance to studying chosen space. Discussion relating to the guiding questions is specific, logical, and original. (5.5-6 marks)

Annotated Bibliography Analysis and Identified Opportunities (/6)	Annotated bibliography review missing or insufficient. (0-2.5 marks)	The annotated bibliography restates paper contents with limited analysis. Analysis of insights, opportunities, and gaps are missing or too brief. (3 marks)	The annotated bibliography mostly focusses on describing the paper content, but some analysis is provided. Some insights, opportunities, and gaps are identified but are lacking in detail or specifics. (4 marks)	Description and analysis are well-balanced. Analysis of insights, opportunities, and gaps is comprehensive and detailed, but could be more nuanced and specific. (5 marks)	Description and analysis are well-balanced. Analysis of insights, opportunities, and gaps is comprehensive and detailed with reference to specific examples and ideas. (5.5-6 marks)
Openness to Providing and Receiving Feedback (How well you work in your group and with your peers) (/2)	The student is not open to or does not provide constructive feedback to others. (0 marks)	The student shows limited openness to feedback, with significant areas for improvement. (0.5 marks)	The student provides and receives feedback, but with some areas for improvement in effectiveness. (1 mark)	The student is open to and provides constructive feedback to others effectively. (1.5 marks)	The student is open to and provides constructive feedback to others in a highly effective manner. (1.5-2 marks)
Cover sheet	**Missing or incomplete cover sheet -2 marks**				