CS-GY 6543/CS-UY 4543 Human Computer Interaction Assignments

Individual Assignment #1 | Due Date : Sep 20, 2023 4 PM

Usability Evaluation Assignment (out of 10 points)

The purpose of this assignment is for you to think critically about a HCI product/experience. For this assignment particularly, you will be challenged to perform desk research for existing solutions, and evaluate the perceived usability of such solutions. You will build upon this assignment in future assignments. This assignment is expected to be in APA style format with standard page borders and 12pt Times New Roman font.

STEP #0 (50 words)

Reflecting back on your past collaborations, and your collaboration style:

- What expectations do you have from collaborators for successful collaborations ? (eg. communication style, working early towards the project or closer to deadline, synchronous or asynchronous, in-person or virtual, etc.)
- It is hard to be perfect. In 30 words, what is one collaboration skill you would like to improve during group projects this year ?

STEP #1

You should identify 3 development goals that you feel most passionate to solve using technology from the 17 goals listed in The Design brief section in the CHI 2023 Student Design Competition Website. For now, please ignore content outside of the "The Design Brief Section".

For your ease, these 17 goals are also listed below. More details on the UN website:

1. No Poverty

2. Zero Hunger

3. Good Health and Well-being

4. Quality Education

5. Gender Equality

6. Clean Water and Sanitation

7. Affordable and Clean Energy

8. Decent Work and Economic Growth

9. Industry, Innovation and Infrastructure

10. Reduced Inequality

11. Sustainable Cities and Communities

12. Responsible Consumption and Production

13. Climate Action

14. Life Below Water

15. Life on Land

16. Peace, Justice and Strong Institutions

17. Partnerships for the Goals

STEP #2 (450 - 900 words)

For each of these 3 goals, search for an existing or proposed technology based solution. You will use Google Scholar to search research papers that discuss solutions for the 3 goals involving users interacting with technology. There has to be an HCI component to the solution in the paper you choose. A sample query is presented here, but you will have to be more creative to find interesting solutions:

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C7&q=Sustainable+Cities+and+Communities+HCI+technology+solution&btnG=

For each goal, select one research paper that you think is most relevant to the field of UX or HCI. Briefly explain the associated tech solutions from the papers, and the human computer interaction part of that solution. Please remember to cite these papers and do not copy paste the text! You made a figure or diagram from the paper, if need be.

STEP #3 (900 - 1100 words)

Now perform a usability evaluation of those 3 solutions to the best of your abilities based on the info available. You should discuss the following topics from our discussions with regard to how you would assess the usability of each solution for each goal:

- What are the common affordances users will find with this solution? What are the signifiers of those affordances (how does the user know what to do)?

- How is the user constrained by the design of the product/experience? Why? Are there other constraints that are needed?
- What about the design of the product/experience do you like? What don't you like?
- Can you understand what the designers "were thinking" when they put the product/experience together? How did that influence the user experience?
- If the product/experience demonstrates human-centered design, how so? How may it fail to?