

1. Positive effects in the intersection of society and technology are everywhere. With the OMSCS program, classes and education are offered online and at a lower cost than normal, traditional, on-campus courses. Students can also work in their free time and outside of their normal jobs in order to take tests, complete assignments, and finish the course. Recorded lectures allow students to rematch all or parts of the course in order to build a stronger understanding of the material.

Negative effects occur quite often with these items, as well. One substantial negative effect of this would be towards people who don't have access to internet or a computer. They can't utilize the OMSCS program in this instance. Another negative effect is the loss of direct contact between students and instructors. There is less feedback from the instructor to the student, as well as the peer-to-peer feedback and relationships that students get when they're in a classroom together. Feedback from the instructor is also important as it also provides accountability.

In order to achieve more feedback and interactions between the students and instructors, we have things like Piazza and Slack available for instructors and students to use. Group projects encourage students to work together and form teams and inherently study together and build relationships.

2. In my current position, I work with different companies to implement a customized Computerized Maintenance Management Solution (CMMS). To implement, I need to be able to import data, make changes, and do other items within the CMMS. Once that is done, the customer will begin their training with me so that they can learn how to use the software in an efficient and beneficial manner. Typically, the stakeholders in this would be the customer. Many meetings are held to help with the customer in order to determine how it will affect their job. They have motivations to make their jobs easier. Typically, they want to know costs and the performance of their equipment. With each customer, I have a set amount of hours that I can work with the customer and on their implementation. What this means is that they also have motivations to save money. Another motivation is security within the application and being able to hide or show parts of the implementation to different user groups.

The design of the implementation actually grows for this. I have to find ways to create reports that show the customer costs and performance of their implementation. Security had to be implemented that effected what a user saw when they logged in based on the group they belonged to. Furthermore, I have to work in a manner that is quick and efficient in order to get all of this done for them within their specific set of hours. If I don't, then the customer might be required to pay an additional amount for more hours.

3. If I were to redesign Piazza, I would redesign single message threads and how they are presented to the user. As I go through Piazza, I'm constantly searching for message threads that may have some relevance to me, or may have an answer to a question I posted. I would create simplicity so that a view of the messages that the currently logged in user has written on. I would also redesign searching through the message threads by adding other items to be searched on such as searching in a date range of when the message was created. This would incorporate the predictor and processor views of HCI. This would also help with the cognitive tasks of the user as they don't have to remember the exact date the message was written. If we redesigned the alerts for the messages that are relevant, then I might make visual notifications on the user's desktop when an answer has been received for one of their messages. One final thing I might do is give the user the ability to hide messages. This would reduce clutter on the screen and not give an overload of information while searching through. This would give the user more direct manipulation in the interface.

In short, the items I chose and as described above are:

- a. Simplicity – Lesson 2.5
 - b. Predictor and Processor Views – Lesson 2.1
 - c. Cognition – Human Abilities – Lesson 2.4
 - d. Visual Perception – Human Abilities – Lesson 2.4
 - e. Direct Manipulation – Lesson 2.3
4. Facebook, <https://www.facebook.com/>, is a common application that many people use. It also violates some of the HCI principles that we've gone over in this unit. The first one that is most notable is a consistency. Facebook changes its layout more often than not. Just recently it added the ability to do more than just "like" a post. It also made it possible laugh, show anger, and do other things. This example also violates the discoverability as it isn't apparent unless you already know about it. Furthermore, it removes values and doesn't force positivity as now we can essentially "dislike" something by showing anger.

You could also note that it violates some security HCI principles through the loss of discoverability. Not many people know that you can actually force Facebook to ask you before it tags you in a photo. This also violates the ease and comfort and sometimes photos are posted that you may make you uncomfortable if you were to be tagged in them without knowing that Facebook needed your permission first.

When videos started showing up on Facebook, many of these didn't have closed captioning available. This has been resolved, but at the time it didn't take into account human abilities, or the sometimes the lack there of. People who had auditory difficulties wouldn't understand the video without the closed captioning.

Assignment P5

Due: Sunday, October 2nd, 2016, by 11:59PM [UTC-12 \(Anywhere on Earth\)](#). This assignment is based on lessons 2.9 (Interfaces and Politics) and 2.10 (Conclusion to Principles).

Assignment Instructions

Answer the following four questions in a maximum of 300 words each (unless stated otherwise); if you supply more than 300 words, the grader will stop reading at the 300th word, and you will not receive credit for anything written after that. Clearly delineate where each answer starts and ends. You are encouraged but not required to complement your responses with diagrams, drawings, pictures, etc.; these do not count against the word limit, though any captions, text in tables, etc. does.

1. The OMSCS program is an excellent example of a place where technology and society are intersecting. First, select and describe a positive effect of the existence of programs like the OMSCS program, emphasizing how that positive effect is due to specific criteria of the program (~100 words). Then, select a potential negative repercussion of programs like the OMSCS program, emphasizing how that negative effect is also due to specific criteria of the program (~100 words). Finally, design how the program can be structured to preserve the positive effect while limiting the negative effect (~50 words).
2. Identify an area you encounter regularly where political motivations are determining the design of technology. First, describe the area you've selected (~50 words). Then, describe the stakeholders in that area, including their motivations (~100 words). Then, describe at least three ways those motivations are specifically affecting the design of the technology in that area (~100 words).
3. Use at least five of the principles covered in this unit to redesign a piece of Piazza (for example, the topic list, a single message thread, the notification system, etc.). Present your design (~125 words), and then specifically describe how each of five principles from this unit can be applied to that redesign of Piazza (~125 words). For the purposes of this question, a principle could be any lesson topic, any design guideline or heuristic, any theory concerning interface design, or any paradigm of interaction design.
4. Select any publicly-viewable web interface you encounter on a regular basis, and critique it from the perspective of the topics covered in this unit. First, briefly describe and provide a link to the interface you've selected (~50 words). Then, describe how the interface violates five of the principles we've discussed in this unit (~200 words). For example, you might discuss how the interface uses poor representations, violates the principle of equity, violates the principle of consistency, commits value-insensitive design, and demands a high cognitive load.