



Community Assessment: College Park Scholars

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Mathematics

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COLLEGE PARK
SCHOLARS

Introduction

The CPSS340 course is designed to teach its students about infrastructure, and to give students varying methods to use in order to evaluate infrastructure. We then had to choose a community and to evaluate the infrastructure within that community. The community I chose is the College Park Scholars community located in the northeastern area of the UMD College Park campus.

For example, one method explained is creating a map of between specific types of infrastructure and drawing connections between that and the different stakeholders associated with that infrastructure. We would then list the different interests associated with each stakeholder to help us identify where interests conflict and where they align. An example of this technique applied to the Cambridge Community Center, or CCC can be seen in Figure 1. In addition, another method is to utilize the various human senses, including those of smell, sight, sound, as well as emotions and the way people feel physically in regards to the infrastructure. Doing this, we are able to identify other characteristics, both positive and problematic within the infrastructure, and are thus able to use that to gain information about the community.

Once the community was chosen, the first part of the project was to understand the community, including its infrastructure, issues facing the community, and the priorities of the community as a whole, as well as the individual members of the community. For example, one issue facing the CCC is its weird and very nonlogical layout. For instance, the only way to get from one location to another within the building is to either leave the building, or to walk through a classroom.

Activities

The first thing that I did was to go out into the College Park Scholars community to assess it. Using the mapping technique mentioned, I laid out connections between the CCC, its stakeholders, and their priorities to assess how they interact.

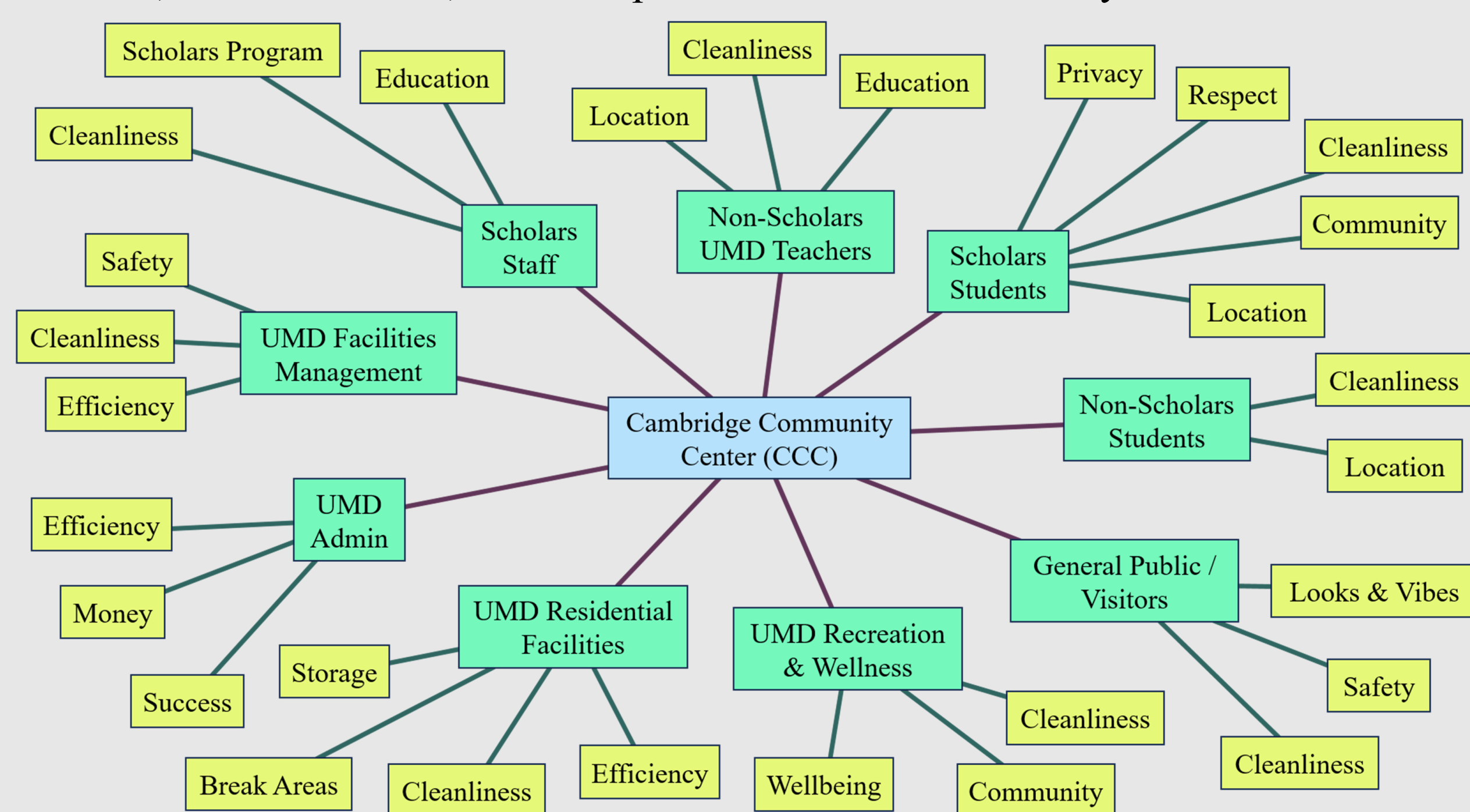


Figure 1 (above): This is a map that I created that shows a specific type of infrastructure in the center, the CCC, connecting to different groups of stakeholders, and then those groups connected to their own values. Some values are shared, like cleanliness, others conflict, like how scholars students prefer the CCC to be close to where they live, yet non-scholars students would rather it be closer to the other class buildings.

Activities (continued)

Another thing that I did was to go into the community itself and to use different senses to see what I could learn from that. For example, using the sense of sight, I was able to see a lot of nature around, plenty of recreational spaces allocated within the community, as well as more basic but non-obvious items such as the lampposts and wide, flat pathways.

Figure 2 (right): This is an image that I took of the community that shows an example of what I could see. Within the image, you can see infrastructure such as benches, lampposts, trees, buildings, tables, and trash cans.

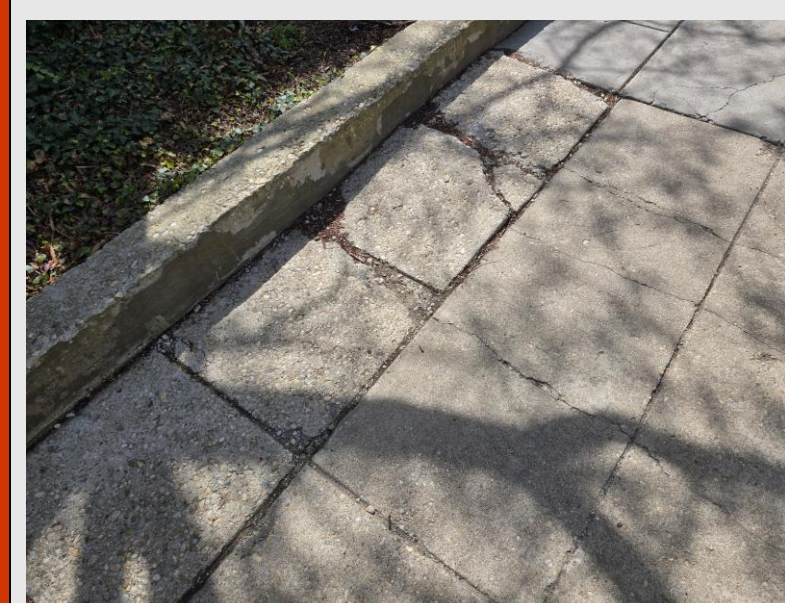


Figure 3 (left): This is an image that I took of part of the pathways within the community. The pathway adjacent to the plant section is cracked and rugged, making it more difficult and less safe to traverse, especially for individuals who may not be able to walk without technological aids.

Finally, after all of the observations and related assessments that I completed, I was tasked with reimagining the community. This includes incorporating already-existing infrastructure improvements and to understand how these changes would impact the community, and how the improvements could be physically implemented.

Discussion

Although this was not my first choice for what I would do for my practicum experience, it was definitely an interesting experience that I learned from. For example, although I knew about being able to use human senses such as sight, sound, and smell, I had not previously considered senses such as emotions and how people physically feel as something that should be considered with equal weight when analyzing different things, which is now something that I will consider whenever I need to analyze things with my senses. It was also an interesting task to reimagine this community. I have always considered myself to be a creative person, and I have previously designed similar things using a medium like Minecraft for fun, I have never really considered physical restraints when doing that, which was something that I had to do for the reimagining of this community.

As someone pursuing a mathematics degree and interested in a career related to that, this experience was a little out of the scope of what I am likely to do as a job. That said, it did present me with several tools that can be applied to almost any job or research activity that I may work on in the future. However, I still believe that on whatever path my life goes, it is unlikely that I will work on infrastructural analyses, unless I happen to get a job that strictly involves designing infrastructure with my mathematics degree.

In the future, one thing that could be done to expand upon this work is to consider different infrastructure systems, both hypothetical and currently existing, and then to consider how those different approaches may be implemented and used in this community to improve it. This could also be done several years in the future once more technology has been developed that could be implemented. For example, how artificial intelligence may have infrastructural applications that have yet to be figured out and concretely laid out.

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