

DESN27425 Module 2

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Modeling and Materials
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Web Template: <https://ixd462.phoenix.sheridanc.on.ca/DESN27425%20Module%202/>

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Design Statement

By learning and applying new software, new web pages, and new functions, use data visualization to give new meanings and functions to maps based on their original functions.



Research

This project was based on the lectures in class and the tutorial videos at the end of class. After I decided to go in the direction of laser cut, I also did some background learning and understanding of laser cut on my own.

For the follow-up, I used mostly Photoshop and Illustrator to get the cuts set up. But since I'm not as good at Illustrator as I am at Photoshop, I searched for some extra tutorial videos to help me get it done.



Activity 1

Week 6 activity had two parts, an observation of indoor and outdoor spaces on campus and an initial understanding and application of mapbox.



Activity 1

For the filming session, I started at the learning commons in C-wing, went to S-wing, and walked through the paths on campus all the way to the cafeteria and even the gym, and finally back inside the academic building back to C-wing.

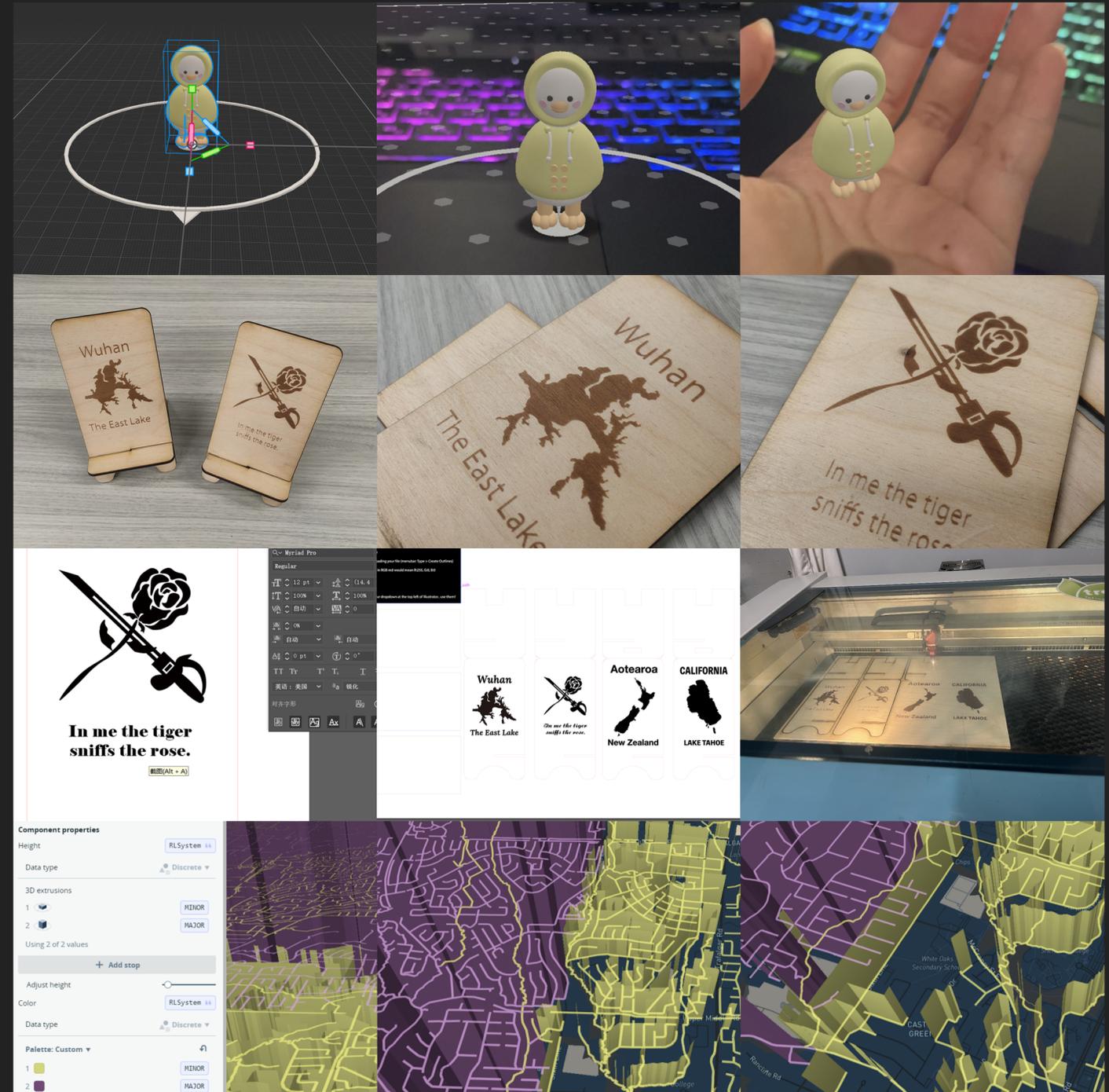
The photos I took ended up being used as color references in the mapbox that follows.



Activity 2

After last week's study, we have further understood our ultimate goal and optional direction for this project and have tried different approaches to that direction.

After these attempts, I finally chose laser cut as my choice for my final piece.



Spatial Workshop 1

For this workshop, I chose photos of on-campus spaces that I took in the activity 1.

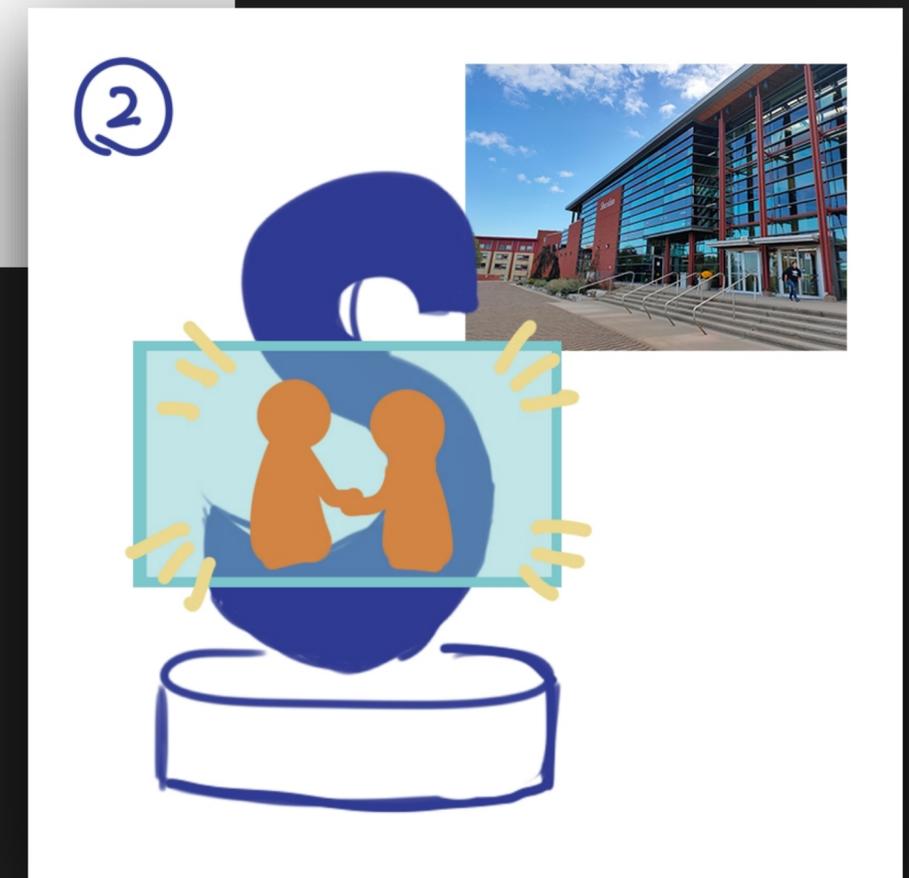
They were the gym, the library, and the S-wing building.



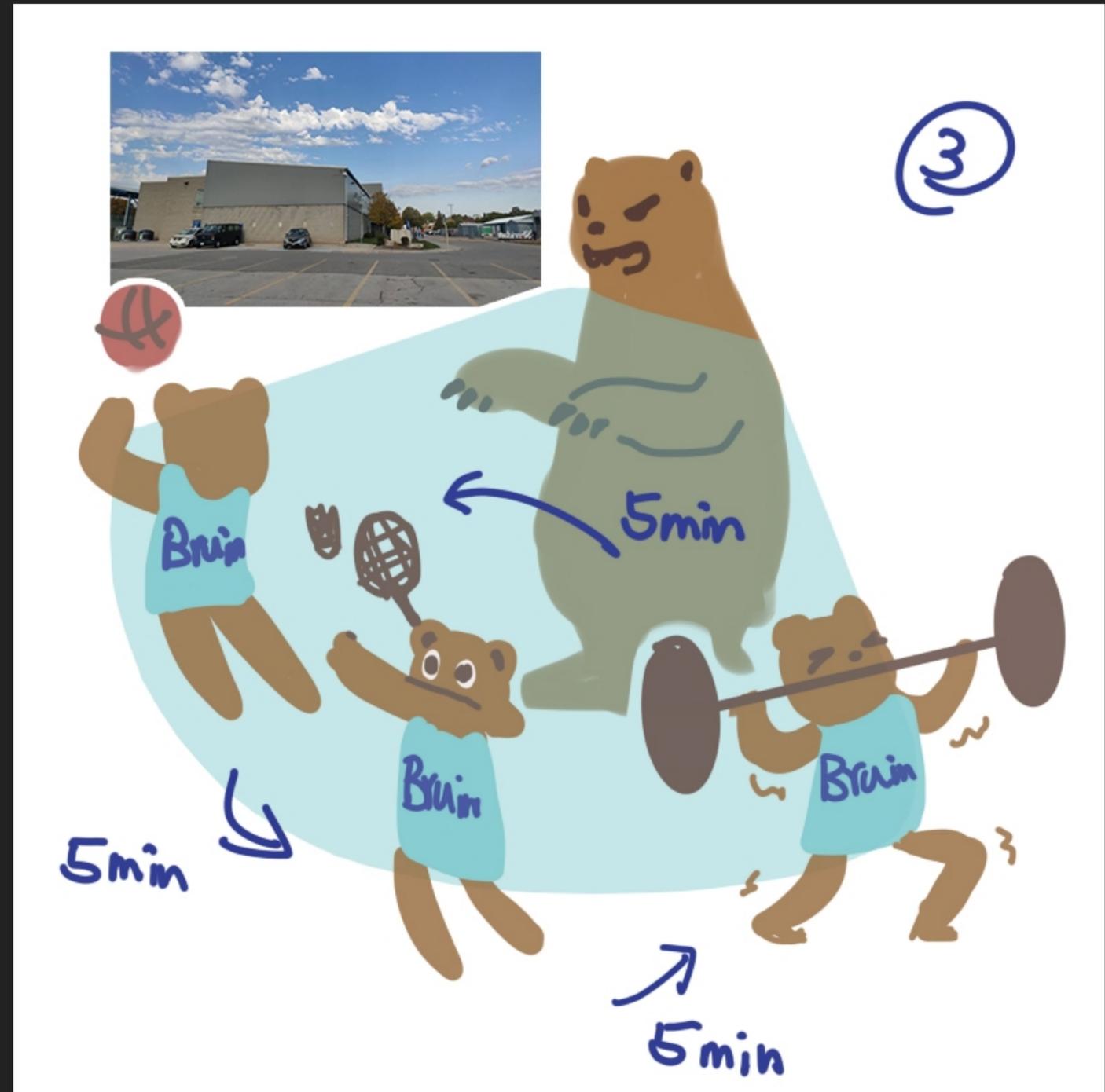
Spatial Workshop 2

Our group chose four locations on campus with different functions to think about (mostly) options for better publicizing their functions that could be done through AR technology.

The first and second are at the same location, the "S" sculpture in front of S-wing. We would like to add a QR code that can be scanned on its pattern, so that visitors can get a 3D interactive map of the campus or see videos of previous campus events.



The third one is about the stadium. As you can see from the example image, the stadium itself shows very little information about its function. Many students also reported that it took them a lot of time to realize that the gymnasium also had these equipment supplies. Therefore, we would like to have a feature that takes the school mascot Bruin as a character and creates looping animations of Bruin using each piece of equipment in the stadium, which will randomly appear when scanning the sculpture of the bear at the entrance, and change every five minutes (or one minute), in order to allow visitors to scan and learn about the stadium's functions over and over again.



The fourth one is about the library's board game lending service. During the discussion we realized that many people were not aware that the library had a board game lending service. We would like to design an interactive AR presentation where visitors can scan and slide the screen to see the board games the library has and inquire about borrowing them.



④



The last one is about the aisle at the entrance of J-wing. there is a distance from the front door of J-wing to the classroom or stairway, which is set up with rows of chairs, but we felt that we could use AR to go on top of this space to make a virtual exhibition of students' work. the exhibition spaces would be located on both sides of the aisle, so that when visitors or students pass by, they can see the latest student work.



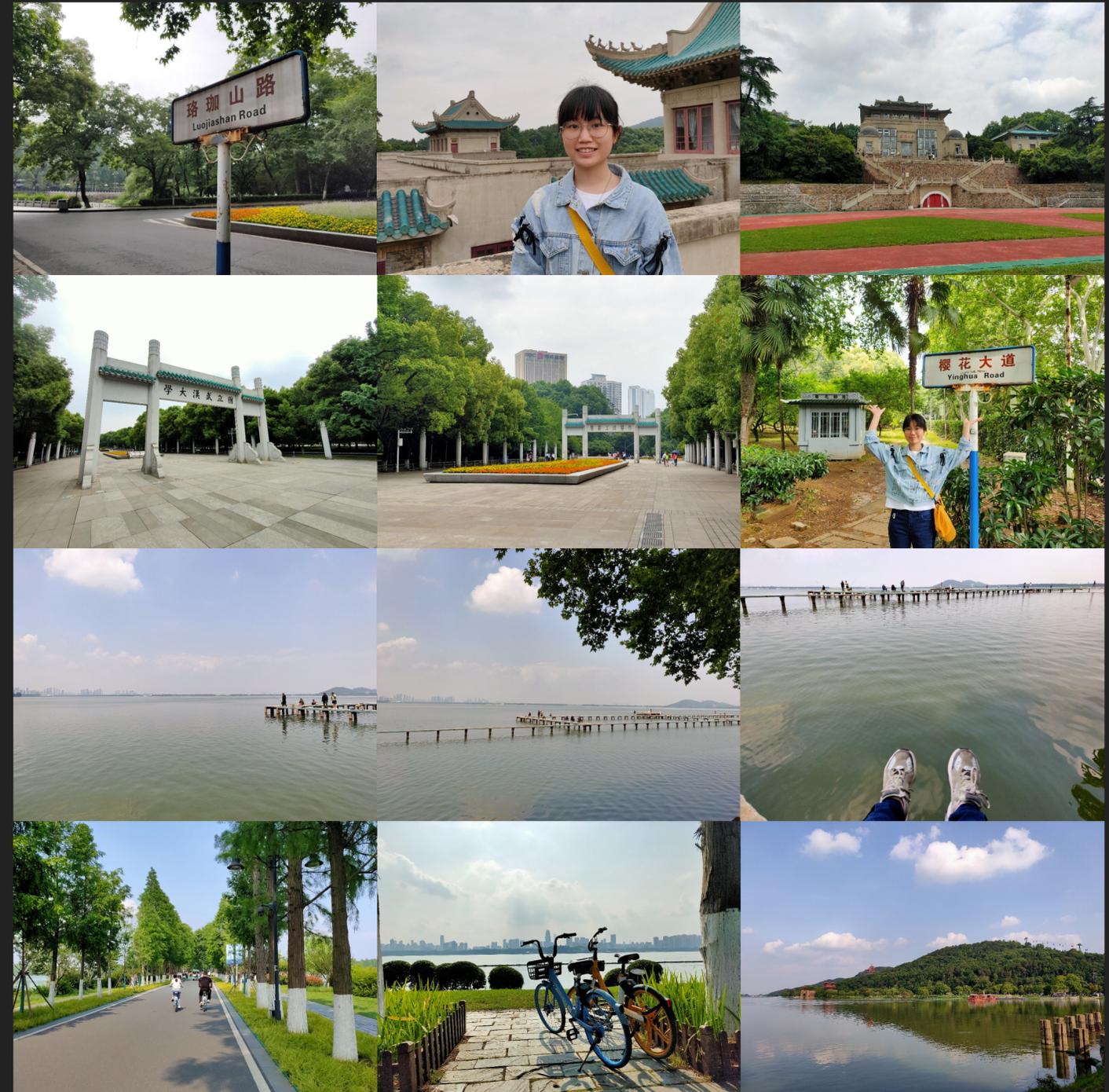
Final Design

For my final assignment, I chose laser cut as the direction for my final assignment. I chose to go deeper into the theme of Wuhan East Lake that I chose in the previous activity, and made the final map explicitly about "Wuhan University - Wuhan East Lake".



Final Design

This was very meaningful to me because both of my parents are students at Wuhan University and met in Wuhan. The main gate of my father's college faces the corner of the East Lake, and even this area has since become a popular attraction because it is a good location to watch the sunrise and sunset. I visited Wuhan University and Wuhan East Lake on my own when I returned to China this summer, and the nostalgia for my parents' college days that I sensed in their descriptions made me think that using it as a theme was a choice that made sense in its own right.



Final Design

I finally decided to create two layers of cuts, one for the East Lake and the pond on the school grounds, and a second layer for the roads and school buildings on the school grounds. One of the roads was filled with black so it would be visually more obvious and present. When the two layers of boards are put together, the upper part of the body of water that is hollowed out distinguishes itself from the land part and shows through the wave texture of the lower layer of boards to differentiate the two layers of boards with their respective messages.



Achievement

In this project I learned the principles and applications of aero, mapbox, and laser cut, and was able to independently complete the design of my homework assignments, conceptualize and test them on my own, until I finally succeeded.

Challenge

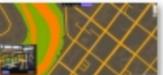
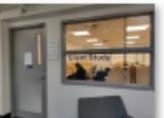
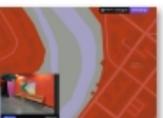
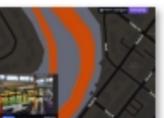
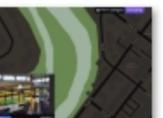
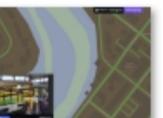
At the end of laser cut, I found that the vertical lines were blurred to varying degrees or even unprintable due to the board having a slight curvature to it. I reflected on this, for example, if I had set a larger cut size, I would have been able to better increase the tolerance of the cut and get a finished product with more detail and accuracy.

Reflection

The process of learning to understand what maps mean to people and the memories they carry through this study, through the application of new software and new features, and giving new functions to maps, has in itself generated the same possibilities of interaction and interactions.

At the same time, the AR test in the project also make me think that the virtual and digital application of different works (eg. the student works virtual exhibition in the 5th idea that our group got in the workshop 2) in life will also accomplish a more efficient experience of using the facilities with the lowest consumption of resources.

PROCESS WORK

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 Interior 4.jpg	 Interior 5.jpg	 Interior 6.jpg	 Interior 7.jpg	 Interior 8.jpg	 Interior 9.jpg	 Mapbox 11.png	 Mapbox 12.png	 Mapbox 13.png	 Mapbox 14.png	 Mapbox 15.png	 Zhejun Module 2	 Zhejun-DESN 27425-Modul

PROCESS WORK



低像素



选图



Cut 1.ai



Cut 2.ai



Laser Cutting Tutorial.ai



Parks.geojson



Rivers_and_Creeks.geojson



Trails.geojson



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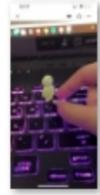
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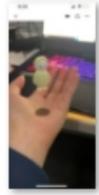
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Cut 1.png



fs cut 2.png



fs cut1.png



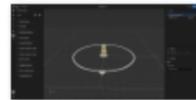
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Microsoft Teams-image (2).png



Microsoft Teams-image (4).png



Microsoft Teams-image.png



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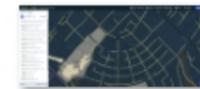
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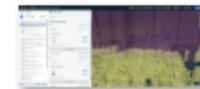
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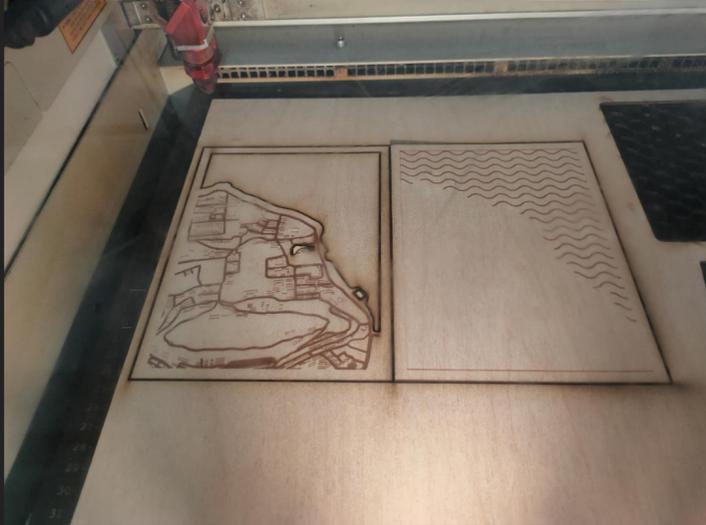
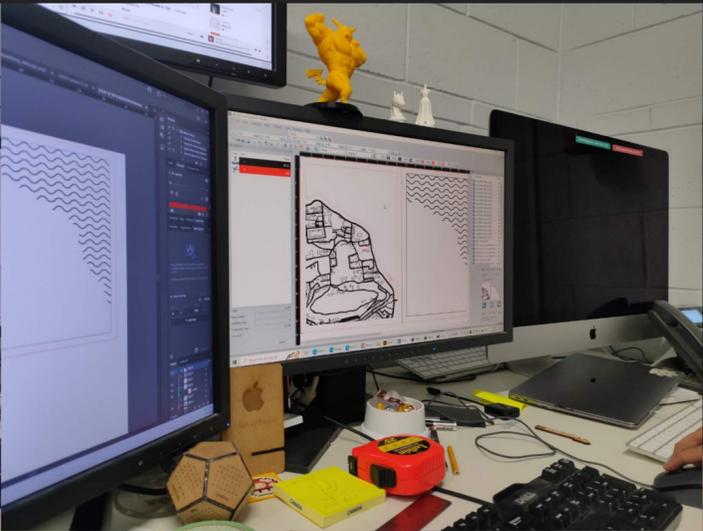
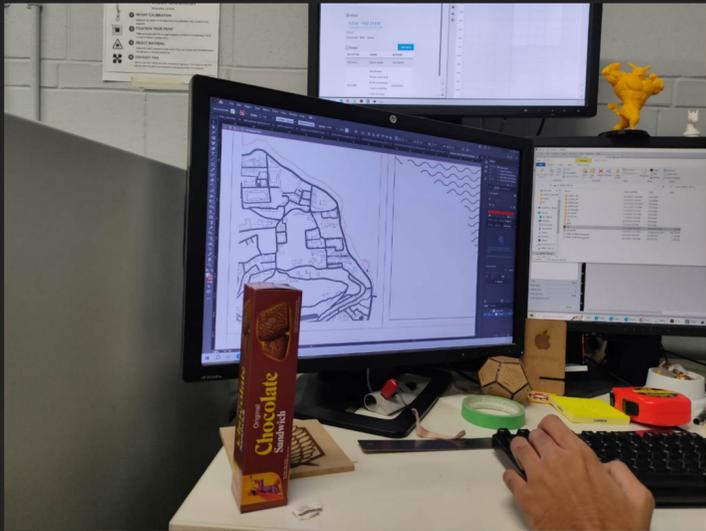


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PROCESS WORK



PROCESS WORK



Citation

"8 Uses of Laser Cutting and Their Importance." [Www.xometry.com, www.xometry.com/resources/sheet/laser-cutting-uses/](http://www.xometry.com/resources/sheet/laser-cutting-uses/).

"10 Best Laser Cutter Projects in 2021." All3DP, 6 May 2021, all3dp.com/2/best-laser-cutter-projects-laser-cut-ideas/.

"20 Crafty Uses for a Laser Engraver and Cutter." AP Lazer, aplazer.com/20-crafty-uses-for-a-laser-engraver-and-cutter/.

"150 Amazing Laser Cutter Projects and Ideas to Inspire You.

" Ponoko, 26 July 2018, www.ponoko.com/blog/design-ideas/laser-cutter-projects-ideas/.

Edwards, Luke, et al. "The Best Laser Cutters in 2022." Creative Bloq, 20 May 2022, www.creativebloq.com/buying-guides/best-laser-cutters.

"Laser Cutter Projects." Pinterest, www.pinterest.ca/msgiacopasi/laser-cutter-projects/. Accessed 17 Nov. 2023.

"武大标识-武汉大学." [Www.whu.edu.cn](http://www.whu.edu.cn), www.whu.edu.cn/xxgk/wdbs.htm. Accessed 17 Nov. 2023.

"Wuhan University." [En.whu.edu.cn](http://en.whu.edu.cn), en.whu.edu.cn/.

"Wuhan University 3D Map | WHU 3D Map | CUCAS." [Whu.cucas.cn](http://whu.cucas.cn), whu.cucas.cn/3d_map/. Accessed 17 Nov. 2023.

"Wuhan University Location and Maps | UniRank." [Www.4icu.org](http://www.4icu.org), www.4icu.org/maps/cn/954-wuhan-university/. Accessed 17 Nov. 2023.

[Ftcdn.net](http://ftcdn.net), 2023, as2.ftcdn.net/v2/jpg/02/23/02/23/1000_F_223022310_LtF7yGPHFdxsQFECSNMZrYel7w7ybzXm.jpg. Accessed 16 Nov. 2023.