Study in Cartography

Course: GEOB 472

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GEOB 270, GEOB 370 and GEOB 373

I did not take the 3 level cartography course (GEOB 372). So I will talk about courses I took related to cartography. I have taken GEOB 270, GEOB 370 and GEOB 373. GEOB 270 is the basic course about cartographic modelling and exploratory data analysis to enter the GIS world. ArcGIS is the tool I learned from that. I like this tool. It's the software to make static maps. It's different from coding on the web. By using ArcGIS, I just need to follow the tutorials, click some buttons and get one map. I learned how to clip, cut, buffer and some basic concepts about GIS. For GEOB 370, it's a higher level course about digital terrain models, management issues and spatial interpolation for GEOB 270. It's still an ArcGIS learning course to build static maps but with high level or complicated analysis. GEOB 373 is a course talking about remote sensing. It's a satellite analysis course via building maps with ArcGIS.

GEOB 472

This course is a bit scary for me at the beginning, because there are a lot of small assignments worth only 1 point but not pretty easy to finish. I always thought I couldn't finish it but I still finished them all and it was not bad. I learned a lot from this course. I am not pretty good at web coding (I learned a little bit by myself before). Not only I learned how to use API but also Github. This is a web coding course. It's different from Static maps built by ArcGIS. Users or readers can interact with maps to achieve different effects. I will use Lab 2 and two 3D assignments to give more details.

2D maps

Lab 2 is the second big assignment. It's the divide from 2D interactive map learning and 3D interactive map learning. There are a lot of challenging problems. First, I can't even finish some basic drawing using P5.js, such as a circle on the map. It's about coding... I need to read the documents to use different functions they wrote. If there is a comma missed, my code can't be run. Debugging part really drives me crazy!!! It's better if i can't fix it after one night of sleep. But for some problems, I need to ask the professor and rethink them for days to fix them. For example, how to use Leaflet functions in Mapbox? Actually, I did not really understand how it works. But the measuring-distance function is on the Mapbox examples. I just need to use that code to edit some parts and just use it. It's not a very best way for learning. But it's a very important skill in coding: Using API or other people's code!!! Adding buttons or another website link are not hard for me. But another part that drives me crazy is the Github website link. By the way, I am very appreciated that professor Luke could introduce me this free Github website service. I could just send others my Github link and they can open it wherever they are... And it's free... But one problem here is that i always can't see anything when i just upload everything on my project. I thought there are some problems about my code... No... I just need to wait a minute and let Github server deal with it...

3D maps

I am very interested in this part of learning. But maybe because of this coronavirus, teaching about this part is almost ignored. 3D map teaching is one of the reasons why I took this course. Although I finished two small assignments, "Introduction to immersive

& 3D via A-Frame" and "Simple bridges between 2D GIS and 3D visualization", I don't think it's enough for building a very cool 3D map. But because I am very interested in this immersive visualization, I think I will reopen the A-Frame website and make some cool stuff. Recently, AR Glass is very popular (Although i don't think it will replace current smartphones). I am still very excited to join this trend and build a very cool 3D map for the AR Glass.