

Intro to Mapping and GIS: Module 4, part 4 Simplifying with MapShaper

What's up everybody? Welcome back to module 4. We're going to continue to simplify shapefiles, we're going to use a different tool this time. Last video we were using QGIS to simplify the data, but this time we're going to use a website called MapShaper very similar and with the exact same end result, but just kind of a different way to go about doing it and it does have a cool tool that I'll show you.

So what we're going to do is go ahead and grab any shapefile that we've worked on that has shapes. Probably your best bet is countries if you still been working with that since the beginning like I have, so go ahead and have those open up which I do here on my computer, I've got all the files here.

One thing to know before you get your files into MapShaper all of the files that make up a shapefile need to be zipped. So however, you need to do that, go ahead and do that with all of your shapefile files. On a Mac, it's simple you can just select it all, right click and hit compress and I have this nice little zip file that was just created. Windows is obviously going to be different, but get that zipped up into one file and then in your web browser go to mapshaper.org

I've got to pull up here, it's pretty straightforward instructions here. What I want you to do is drop a zip file into the website. So what we're going to do here is take that zip file that we created and go ahead and just drag and drop it up here at the top. Okay, so we drag that in here and it's going to ask us do you want to upload all of those files? if these are the files you want, obviously yes, that's right.

So go ahead and import and you will now see a screen that shows every country in the world, looks very similar to what it did in QGIS. Obviously, we don't have nearly the functionality, but one thing we can do is simplify it. So that's what we're going to do here, so go and get the simplified button. There's a couple different methods you can use some other options here.

I'm not really going to get into that, it's pretty advanced. There is a reading on simplification if you want to dive a little bit deeper, but for now the default selection will work just fine. So go ahead and hit apply.

And this is why I really like this website, is at the very top here after you click simplify and you've got this little bar you can drag around and this is really cool if you drag it because you can actually see how simplified things get, so like if you go all the way to like zero, which is like madness, like obviously the shape looks nothing like the United States anymore, but what's nice about this feature is you can really get sort of a sweet spot.

So let's say, you know, we're building a map that's going to include Canada, Alaska, United States, you can really work that simplification to make it as simplified as possible without really affecting how it looks on a zoomed-out scale like this, so I could say you could probably go all

the way maybe around in this range and really not notice too much, maybe about four or five, it's totally up to you.

Obviously the more simplified you go the smaller the file sizes will be which is the better if you want to put it on the web, but obviously you lose detail. So you have to find that fine line anytime you simplify shapes, but I like this I'm going to go ahead and hit export. I'm going to go ahead and hit shapefile.

There are some other options. Well, we will talk about GeoJson in the next video, but for now, let's just do shapefile, hit export, and you now have a new file a new zipfile to be precise of this simplified shapes using MapShaper. Again, the nice thing about it is you can use that slider. You can really tell exactly how simplified you want to get it and then you can export it.

There's not that option in QGIS. You just kind of have to sort of start guessing with the tolerance and that can take a very long time. So this can be a nice shortcut if you're building a map and you want it to be simplified but not too simplified and you kind of want to walk that fine line. So go ahead and unzip the file we just downloaded and now you can drag that into QGIS, or double click on it, or add layer, whichever way you want to open it up.

But now that we exported it out of MapShaper as a shapefile you can use it in QGIS. So I just open it up and you can see it's simplified, but it's a really nice sort of simplification. I think it's you know, obviously not nearly as much detail, especially if you look sort of these coves sort of look at these countries, but the overall shapes of every country still very intact.

This is nice and then now we can go in and we can start getting rid of other countries or do whatever we want with the data. So that's it for this video, we have one more video to go with the hands-on portion. We're going to talk a little bit about exporting shapefile data out and things to keep in mind when publishing on the internet. So tune in! See you then, thanks.