

Hello everybody! Today we are going to be opening up QGIS for the first time. Make sure it's installed, you can't go any farther if it's not, so we have videos for both Mac and PC users. Whichever you're using, make sure you have it installed and ready to go. So as you can see on my screen right now, I have QGIS pulled up, so wherever you have it installed go ahead and open it up.

Like me you probably won't have any recent projects because it's just installed, but everything else should look pretty similar to what I have. One caveat going forward, I will be working on a Mac computer for the entire time. All these videos will be on a Mac, so if you're on a Windows computer and things look just a little bit off that might be why, but everything should line up almost exactly, so there shouldn't be any issues and if there's anything I can think of all I mentioned.

So this is QGIS. It's a really nice program for working with mapping data, spatial data, which would be doing in this class. It's also great for editing data, exporting data, we will get on all that, but right now we're just going to very quickly go over some of the very basic parts of QGIS.

So anytime we want to open, we want to add a new layer, we will go to this layer menu, add layer. We have some vector raster menus up here, these are different analysis tools that are built into QGIS, we will get into that.

Anytime we have layers onto the map they will show up in this little layers panel on the bottom left here. This is a browser on your computer, so if you want to go this route to open files, you can, that's not how I'll be doing it but it is one option and then there's a host of other options at the very top here that you can use to do various things in QGIS. We will be going over many of these, but if you want to just take a peek around and just kind of hover over them and see what you can do in QGIS just to get familiar with it, that would be great.

I'm gonna dive into this deeper as we actually work with data, but first we need some data. So, now that we got QGIS open go ahead and open an internet browser of your choice. I'm going to use Chrome, but feel free to use whatever, go ahead and go to: www.naturalearthdata.com and you'll end up on the homepage like here.

Go ahead and click on the little downloads button at the top, and this will take you to a screen where you can download some data. So the first data we're going to download is pretty simple. It's just going to be the outline of every country in the world, and so that will be every country and every continent.

So go ahead and go over to this little large-scale data part over here on the left side hit cultural, and it'll be the first thing that pops up and you feel free to look at the other things available on the website download them and play with them you can feel free to be adventurous, but for this class we're just going to look specifically at the country's data. So go ahead and click this little download countries button under the admin 0 countries tab.

So depending on your computer, it's gonna either download very quickly or very slowly, but it is a ZIP file, what we're downloading is a shapefile, and I'll explain a little bit more in detail what that is. There was a mention of it earlier, but we're going to dive a little bit deeper into it.

But the shapefile is contained within a zip drive, so go ahead and wherever that's downloaded open that up for me in my Mac gets in my downloads folder. It may be somewhere else, but for me, I'm in my downloads folder. I see this in `ne_10m_admin_0_countries.zip`, go ahead and double-click that or unzip it however, you need to. You will see this folder and go ahead and open up this folder. And this is, basically what a shape file is. Shape files, you might be able to confused at first. I definitely was, but a shapefile is technically multiple different files that all work together to make a data spatial to be basically to make them be able to show up on a map.

I'll go through some of these files that will be important to us. I will say go ahead and ignore the read me and version files, these are not important for our purposes. The main one here is going to be this dot shapefile SHP.

So a shape file is a collection of files and confusingly, one of those file is a DOT SHP file, which is kind of basically a shapefile, but this is the main this is kind of like the center of the files, this this is the most important file. You need all the files to make it work, but this is where most of the data is stored and so the way I have it set up on my computer if I actually double click on the shape file and actually open up in QGIS, which we will do in the next video, but for now, let's just look at the files. So this is the most important one.

We also have this PRJ file. that's the projection file. We have a reading in this course that deals with projections that will kind of dive into that a little bit deeper what projections are and why they're important, but just know that you have to have this file as well.

This DBF file right above it here, this is like where the data is stored and we'll see what that looks like in QGIS in the next video. In CPG is an optional file, that's the characters of the shapefile and this SHX as well as another file that we will need.

So together these four right here will be the ones that we definitely need. Go ahead and ignore the readme in the middle there. CPG is optional, but doesn't hurt anything to leave him in there, so just go ahead and leave them in place.

And I will say one other thing before we get into opening this data, all of these files need to be in the same directory when you open them up if you have like your PRJ file in a different directory or on a thumb drive and the other files are located somewhere else it will not open correctly in QGIS or in any other program most likely.

So make sure that they're all contained within the same directory, like these are here. Fortunately, they're all here, it's all ready to go, we don't have to do anything else.

So, in the next video, we're going to actually open up this data, and we're going to look at QGIS a little bit more deeply and just do some basic things with this data. Thanks!