Hello everybody! I'm going to continue what we did last time. Last time we downloaded data from natural order, which is basically our country shapefiles, that's a shape of every country in the world as in the shape files. We downloaded that, so now we're actually going to open it in QGIS now, so go ahead and open that directory with the shapefile files in there like we did last time.

As you can see I have mine open right here and go ahead and I'm going to show you a couple different ways that you can open things in QGIS. From here on out you can decide how you want to open things. There's just a couple pretty simple options that I'll show you.

So the first one is using this layer panel at the very top here. Go ahead and click layer and then go over to create or add layer and go ahead and do add vector layer and now you're gonna get this little menu and you're going to want to actually find this Vector data set which is our shapefile.

Go ahead and click the little three arrows and you will open up your file directory and go ahead and wherever you've stored it at whether it's on your desktop or some folder or thumb drive just go ahead and navigate to there and actually click on the shapefile file.

And then make sure you are clicking on the dot SHP file, that is important, and make sure all the other files that we talked about in the last course or in the same directories. We need all of those, so then go ahead and open, and then you'll be ready to go hit add not close like I often do, add right here and then after you click add on you should already see some shapes popping up kind of in the background here.

Go ahead and hit close and here we go, we have successfully loaded in our shapefile into QGIS, which is great. So as you can see we're now looking at every country the way the shape file is broken up is is every country has its own shape in the shapefile. So that you look at the data which we will, you'll see every country is represented.

So the second way you can open up layers in QGIS is actually dragging them into the program. So that's what we're going to do. Now, I've got my country's shapefile directory open here as you can see, and I'm actually just going to drag it all the way up here in to QGIS, and it will go ahead and add another layer on into the program here. It's the same layer that we added before so it's named the same, but that's two different ways you can open it.

Now that we've opened both of them. We definitely want to remove one of them because it gets confusing to have two of the same layers here. So go ahead and right click on one of them and go down to remove layer. You will get this little warning sign here. We do want to remove it. So just go ahead and okay. So now we're back to having just one representation of the countries in our QGIS program. So those are the two ways you can open uh shapes going forward. I'll probably be using the menu for most of this, but feel free to use whichever you prefer.

Okay, so now that we have shapes open we can actually look at some data and do some things with it. So go ahead and the first thing I'm going to show you is just basically all of the properties of the shapefile.

So if you think of this as a table, every row is going to be a country because we have a shape for every country in the program, so every row is going to represent a country and so, to show you what that actually looks like, go ahead and right click on the shape within the layers panel, open attribute table is what you want to go to, go ahead and click on that and you'll see we now have a spreadsheet, like I said, a representation of the data in a spreadsheet form and you'll see here quickly, you seek Colombia, Ecuador, Honduras, we have all of our countries represented in this spreadsheet here and this is all of the data that's behind each one of these shapes.

So you may only see just the actual shape of the country, but there's a lot of data about that country behind the scenes which we will be using in later videos to actually create color maps and some other things.

So there's a few things you can do in this attribute table view, you can kind of sort things, you can click on the header row as you can see, if I alphabetize it and now I'm seeing the countries that start with A at the very top and click it again, and now you see the Z and then you can kind of scroll left and scroll right and see all of that data that's in there.

A lot of it, like 98% of it we won't be using in this class, but there are a couple columns that I will point out later, that we will be using. So go ahead and look at that if you want. Again, this is from Natural Earth, so they've added a lot of things in here, so go ahead and peek around if you want. So go ahead and close that out for now.

Second thing I will show you is the properties panel. So go ahead and right click on that shape again, open up properties, and this is where we get a little weak. There's a lot more things we can do in here related to the data in terms of styling, joining data.

I'll point out first though this information panel that has a little bit of information on what fields are all in there, what type they are. So for strings or integers or strings are like words, integers are numbers, and you can see that there's a lot of Natural Earth is at a lot of columns to this shapefile. Like I said, we only use like a couple of these, but it's good to know they're all there. So go ahead and look at all through that.

The second menu option here is a symbology. This is where using to color things on the map. We won't be doing this in this video, but we will next week. Some of the videos in next week's course will be touching on how to color things on the map.

The last thing I want to show here is this joints panel, which we will be using in a later week to actually join data, and I'll explain what that means, and how to do it, and why you'd want to do it, but for now just note that that's that's there.

And there's like I said, a lot of other things you can do in here, you can add a legend, you can look at some other things, and go look at variables, some other things, but those are the big ones, especially for an intro class. Those are the the definitely the ones you want to get familiar with, but feel free again to poke around if you want, so I'm going to cancel out of that for now.

One last thing I'm going to show you how to do here is just kind of like do some easy selecting of countries. So go ahead and see this top menu, there's this little arrow button next to this yellow box. Go ahead and click on that. This is the select features by area or single click button. Go ahead and select that, and I am now able to select certain features on the map. So right now I'm clicking on the United States, and you can see how it turns yellow, and click over here. Click over here. Click on whatever country I want and it will select.

One cool thing about this is that if you if you select a country on the map with your mouse button, you can actually just show that data in that attributes table. So this is kind of a way to filter. So the way you would do that is go ahead and right-click in the layers panel, go to open attribute table.

You'll see the full table pulled up now of all the countries. A way to filter to just what's selected on the map is to go down to this little button in the bottom left corner, change show all features to show selected features and you'll now see that we have just a table of one row of Brazil, which is the only country selected on the map.

And if I were to select more countries, you'll see that this table now shows more countries. So I've now selected Brazil's as well as many countries in Africa and looks like a couple over Europe and you will see that those are now selected. We have 31 countries selected, I'll show you one more here. Let's go ahead and just select the United States and Canada, go ahead and toggle that menu back and you'll see that just United States and Canada are selected when I have this show selected features picked.

So right now we have country selected, if you want to go back to being able to pan the map and not actually select countries go ahead and click this little white mouse hand on the top left corner here that's stands for pan map.

Go ahead and click on that and you'll now be able to move the map around again. You can just toggle between those selecting and pinning if you want. I just know that if you like, well, I want to move the map around again. That's how you do it. Go back to that pan map little button up at the top left.