Flourish Basics: The Data Table, Importing Data, and Column Settings

In this video, I'm going to be talking about the data table in Flourish and some of the basic data editing and cleaning that you can do once your data has already been put into Flourish. Most of this is going to be down here in the data tab, but just so you know, this is the chart that we're working with. It's a stacked column chart that's showing a fake data set, I believe, about UK universities and their students by home country and year. So here is the data tab and here's the data table. We should all sort of be familiar with what it looks like already, but if not, here it is.

And the thing to keep in mind is that all the basic data editing and cleaning things that you can do in more advanced spreadsheet programs like Google Sheets and Excel, you can do in Flourish. So things like editing cells, you can see that changed over there, and dragging cells around, sorry, dragging columns around and deleting columns. So control click will give you this context menu which lets you remove or insert columns. Same with rows, so control click on the row and it'll give you remove row or insert row above or below. There's also a bunch of options for columns with this little carrot menu here. So if you click here, it opens up all of these options which include remove column and insert column, but also things like filter and sort A to Z and Z to A. Filter data option is an intense filter. It's going to filter out any row where the value is not in the range for that column, so you can't really undo it. So it's quite a permanent choice, so I would caution anyone about using that. But you can also swap rows and columns to transpose rows and columns, which is really useful if you're using a template which has a wide format and you have a sort of long - your data's sort of long when you insert it into Flourish. So you'd do that, click that, and you can see the preview change over here.

The last thing I want to talk about is inserting and uploading images. So a lot of Flourish templates like, for example, the line chart race and the bar chart race have an image column setting which lets you add an image to your lines or your bars. And what it asks for is a URL, so if you don't already have an image that you want that is on the Internet at a URL, you can control click on a cell, the cell in the image column and click upload file and then it'll let you upload, for example, whatever this is to Flourish to our servers and it'll give it a URL which you can then use to display the image in Flourish in your chart. This is something that a lot of people don't know about but is really useful for anyone who's using Flourish.

So I hope that that explained the basics of the data table and in further videos I'm going to be talking about other ways to use the data table. But this is definitely the basic stuff that you should know.

So the first real step in making a Flourish visualization of your own is inputting your own data and getting your own data into Flourish. So that's what this video is going to be about. So when you first open a new visualization, there's always going to be something here in this preview tab. You're always going to see some sort of chart because there's always going to be a sample dataset imported, or preloaded rather, into the template. And for now we're going to be working back in this data tab, but just so you know, you can see here that there's already data imported in. And if you go to the data tab, you can see again in here, here are our X and Y values. So that's what's drawing this scatter plot, which we can see here in the corner.

And to overwrite the sample data, all you have to do is click this big import your own data button. Flourish templates can take Excel files, CSV files, TSV files, and then also JSON and GeoJSON files for maps. In this case, I'm going to import this CSV file that I have locally on my computer. I'm going to click import again, and it also is always going to show you how many rows are imported. And if you're in a template that gets rid of rows, like throws rows out for any reason, it will also show you here how many rows have been thrown away.

So now that I've imported my data, I have to tell Flourish which columns to use and in what way, and what column corresponds to what type of data. So this is all done using this select columns to visualize panel over here on the right, and it has all of these column settings. If you scroll down, you can see all of them. There's quite a lot in this template because the scatter template is quite complicated. And in this case, there's only two required ones, X and Y, for a basic scatter plot. And so let's say that this was actually on here. This makes a bit more sense. So you saw how this switched over here. Basically, these settings are how you tell the template what kind of data is over here.

So in this case, we have each row as a neighborhood in the city of Chicago, and then each of these columns is a different type of hardship factor, like poverty and housing and unemployment rate. And what's being currently drawn on this map down on this plot down here is across the Y, across the X axis, we have this C column, households below the poverty line percentage, and then also a percentage across the Y axis we have crowded housing percentage, which corresponds over here. And in this case, we also have a name column so we can add this name column in here. But say, for example, I wanted to put the households below poverty line across the Y and credit housing across the X. All we would do is change these right here. You can see how it changes here in the preview.

Basically, all you're doing is telling the template what to read and what column is what kind of data. If you scroll down, like I said, there's a bunch of other options, but in this case, if we go back to the preview, you can see that it's plotting crowded housing and households below the poverty line. And then each of these dots is also showing that it's the name of the neighborhood. And there's no need to fill these extra column settings in, if you're not going to use them you can just leave them blank. And yeah, this is one of the trickiest parts of Flourish, so once you sort of understand this, I think you're pretty much on your way.