

**Computer Science 3307A – Object-Oriented Design & Analysis  
2016-17 Fall Semester  
University of Western Ontario, London ON, Canada  
N6A 3K7**

**Scorpius  
Group: Team Scorpius**

## **User Guide**

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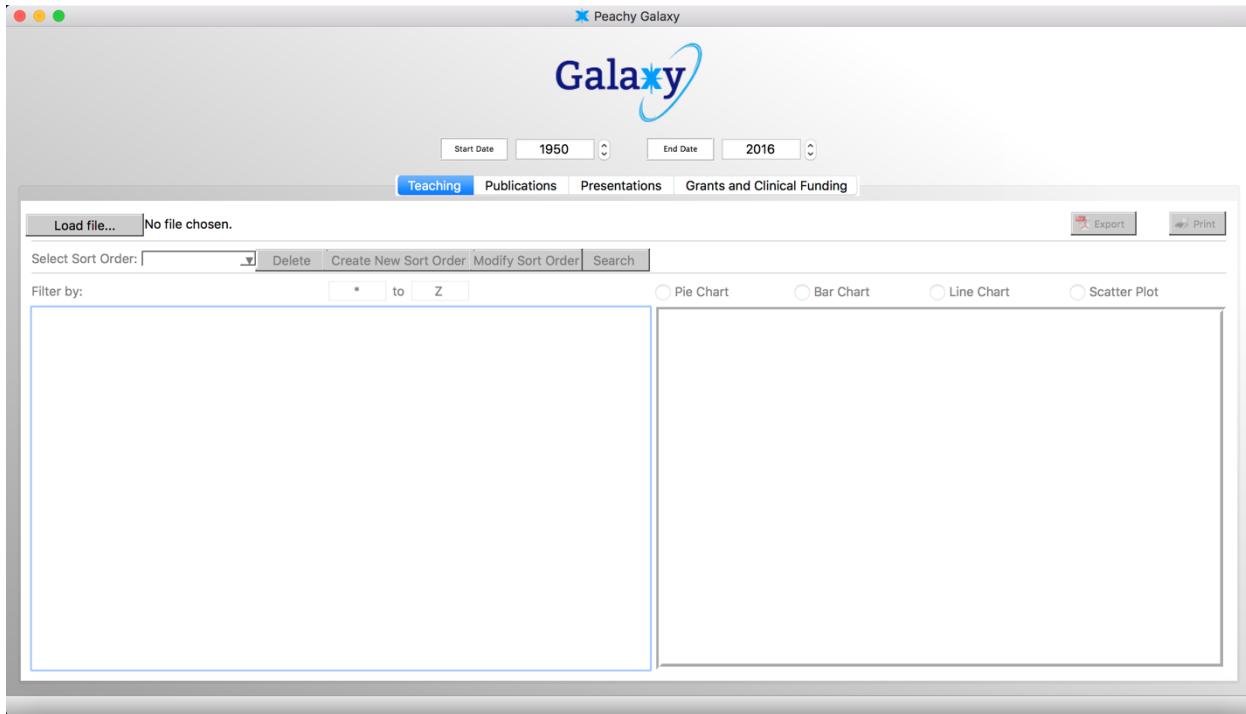
## **Introduction**

Welcome to The User Guide for the Scorpius program.

The pictures shown in this user guide are from the Mac OS version.  
But fear not, the same steps apply for the Windows version as well.

## Scenario 1: Loading Data

To load data, start by opening up the program. You should see something similar to below.



Now that the program is up and running, hit the button that says “Load file...”.

You will be prompted to load the data file.

\*If you have any errors in your data file you will receive a pop up asking if you'd like to fix the errors refer to Scenario 6 on how to handle this case. \*

Once done the program should look similar to the image below.



Congratulations, your data is now loaded in the table on the bottom left.

## Scenario 2: Viewing Data through graphs

To view the data, start by loading the data.

\* To load data, with the program refer to scenario 1 \*

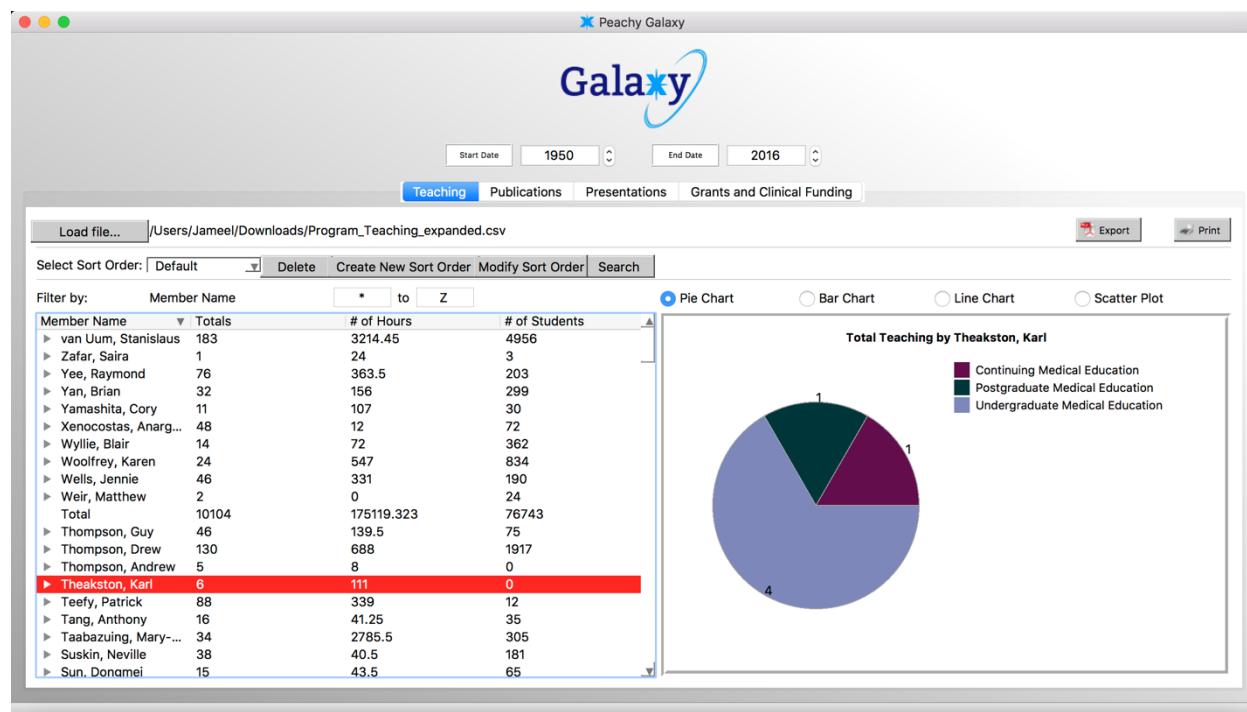
Once the data is loaded just click on an element in the table, and a pie chart should appear in the table beside the element table.

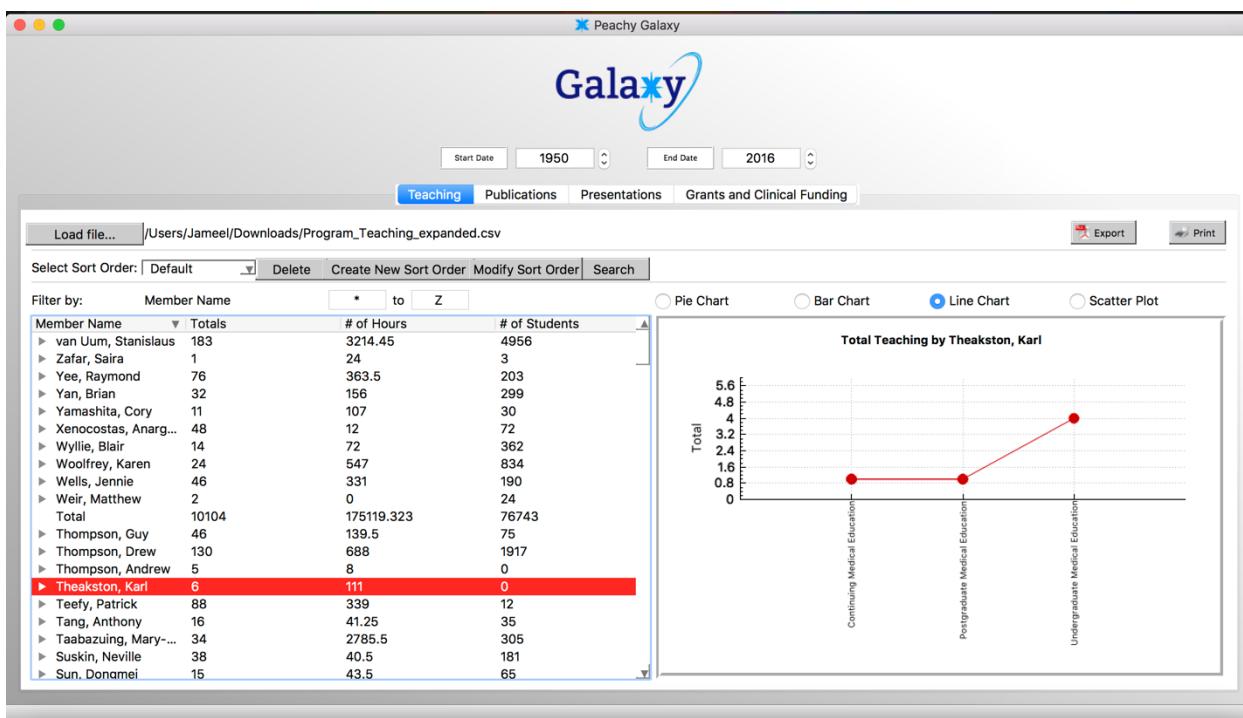
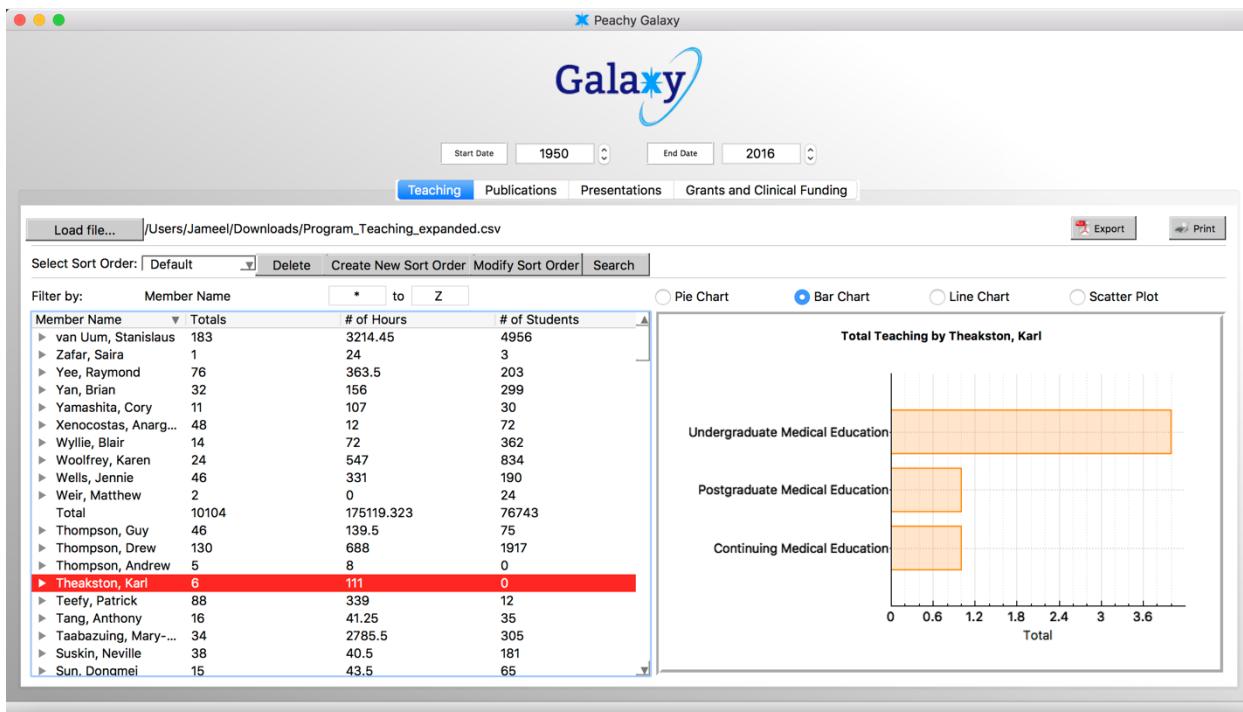
To change how the data is represented, just click the buttons above the graph.

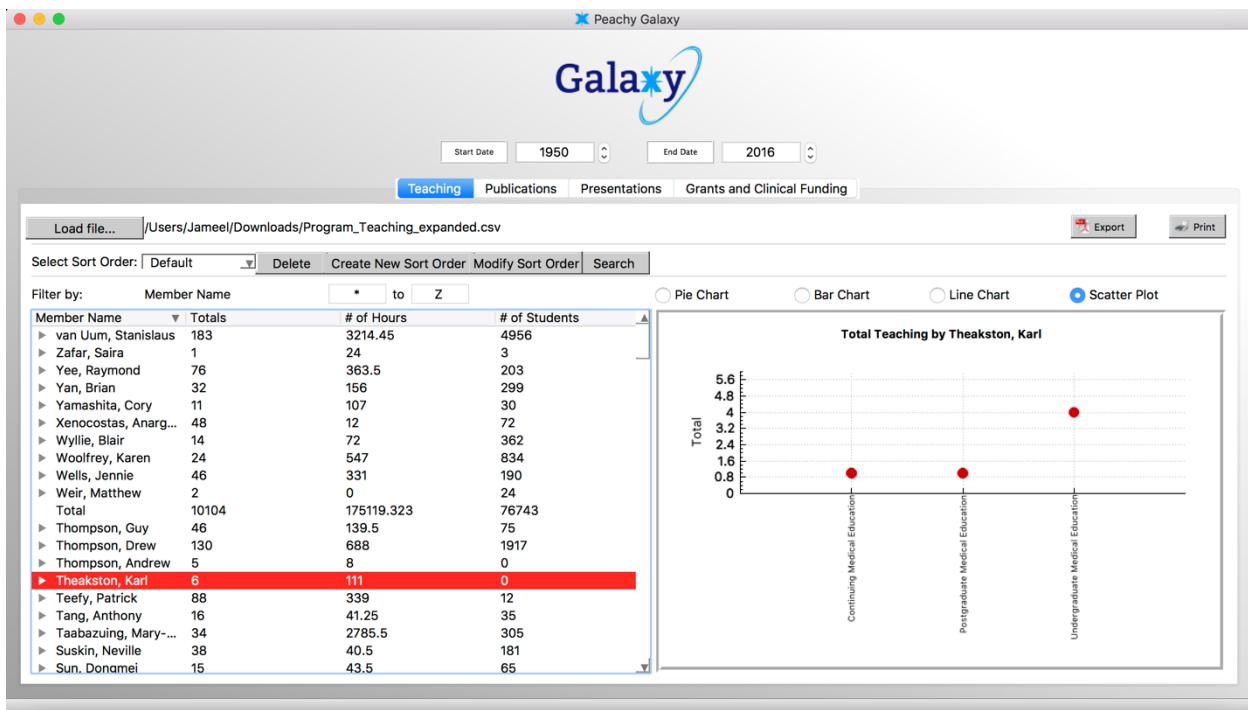
You can view the data through 4 different graphs

- Pie Chart
- Bar Chart
- Line Chart
- Scatter Plot

The images below and on the next page show how the data for Karl Theakston would be represented in each graph.





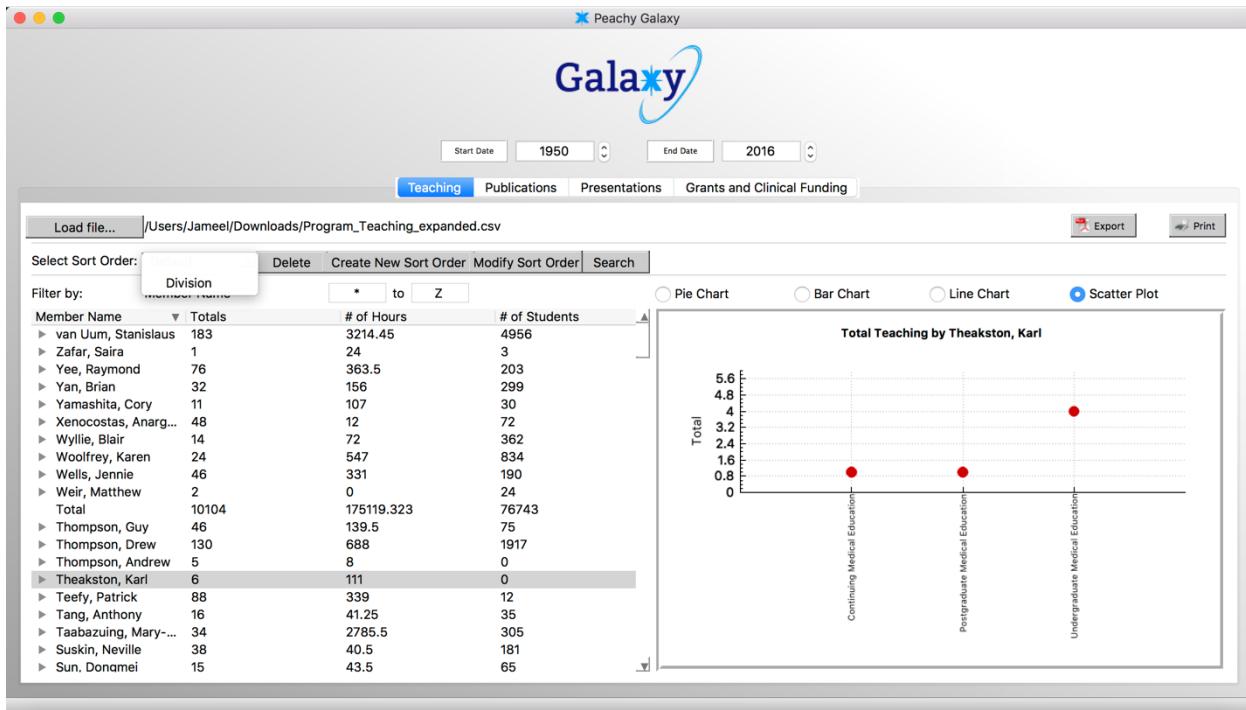


### Scenario 3: Viewing Data by Division Sort

Start off by loading data into the program.

Next, you're going to click where it says default. (To the right of Select Sort Order:)

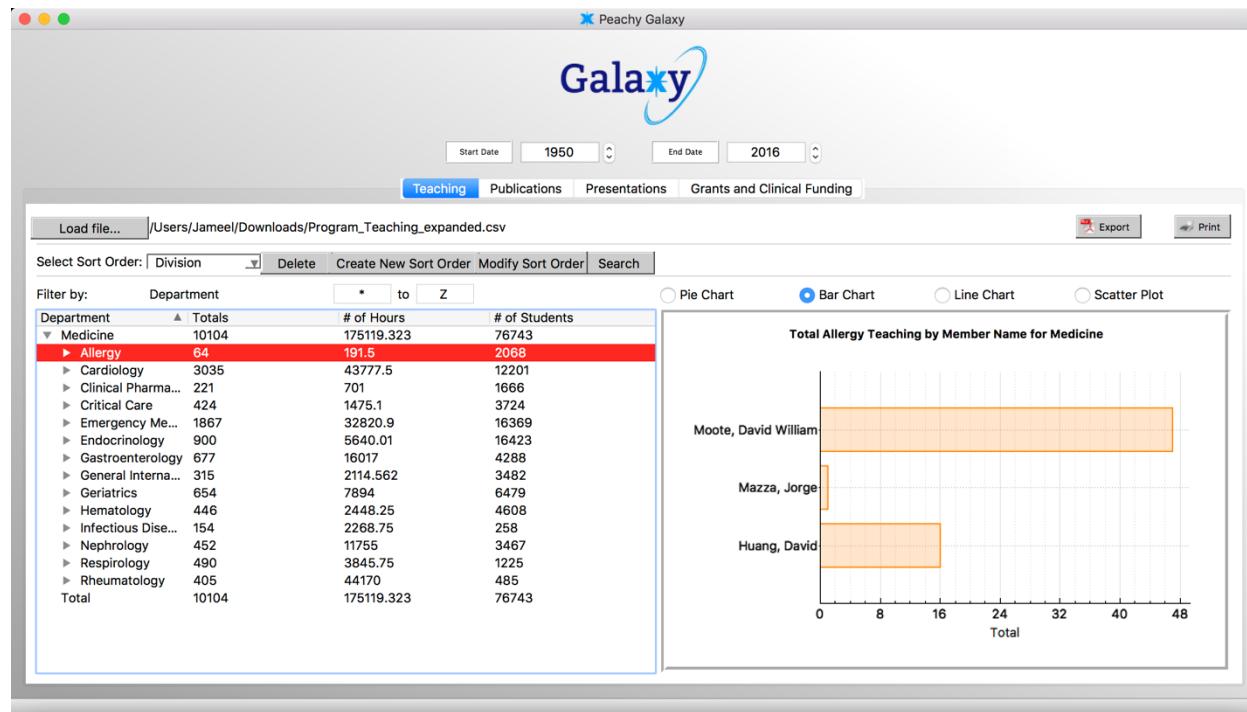
You should see something similar to below.



Currently, we are viewing the data using a default sort order.

If you were to click Division, the data will be sorted by division.

Below is an image of what sorting by division gives us using the sample data we've loaded.



In the data we're using, all elements belong to the Division of "Medicine", and is then broken down even further.

## Scenario 4: Viewing data by a User Selected List

Like usual we start by loading data in the program.  
You should see something similar to below

The screenshot shows the Peachy Galaxy application interface. At the top, there is a navigation bar with tabs for 'Teaching', 'Publications', 'Presentations', and 'Grants and Clinical Funding'. Below the navigation bar, there are date filters for 'Start Date' (set to 1950) and 'End Date' (set to 2016). A file path 'Load file... /Users/Jameel/Desktop/cs3307-scorpius-master-1/Project Information/Sample Data/Teaching\_sample.csv' is displayed. There are also 'Export' and 'Print' buttons. A 'Select Sort Order' dropdown is set to 'Default'. The main area contains a table with four columns: 'Member Name', 'Totals', '# of Hours', and '# of Students'. The 'Member Name' column is currently sorted in ascending order. The data in the table is as follows:

Member Name	Totals	# of Hours	# of Students
Baggins, Bilbo	14	180.5	165
Dragon, Smaug	14	105.5	165
Harper, Stephen	15	182.5	165
Larson, Gary	15	182.5	165
Malcomson, Paul	14	105.5	165
Parker, Peter	15	182.5	165
Schwarzenegger, A...	15	182.5	165
Smith, Drew	15	182.5	165
Snuffleupagus, Mr	14	172	165
Strangelove, Dr.	13	164.5	121
Total	144	1640.5	1606

On the right side of the table, there are four chart selection buttons: 'Pie Chart' (selected), 'Bar Chart', 'Line Chart', and 'Scatter Plot'.

To sort by a user selected list, just click the header of any row in the table.  
This will sort the lists by either an ascending/descending value  
For our example, we selected to sort by the Member Name column.  
Below you can find an image of what the table now looks like.

This screenshot shows the same Peachy Galaxy application interface as the previous one, but with a different sorting order. The 'Member Name' column header has been clicked, causing all rows to be sorted in descending order. The data in the table is now:

Member Name	Totals	# of Hours	# of Students
Total	144	1640.5	1606
Strangelove, Dr.	13	164.5	121
Snuffleupagus, Mr	14	172	165
Smith, Drew	15	182.5	165
Schwarzenegger, A...	15	182.5	165
Parker, Peter	15	182.5	165
Malcomson, Paul	14	105.5	165
Larson, Gary	15	182.5	165
Harper, Stephen	15	105.5	165
Dragon, Smaug	14	105.5	165
Baggins, Bilbo	14	180.5	165

We next click on the “# of Hours” header to sort elements by the “# of Hours” they work. Below is an image of how the data looks like after we sort by “# of Hours”

The screenshot shows the Galaxy web interface with the title "Galaxy" at the top. Below the title are date filters: "Start Date" set to 1950, "End Date" set to 2016, and a dropdown menu between them. Below these are tabs: "Teaching" (which is selected), "Publications", "Presentations", and "Grants and Clinical Funding". A file path "Load file... /Users/Jameel/Desktop/cs3307-scorpius-master-1/Project Information/Sample Data/Teaching\_sample.csv" is shown, along with "Export" and "Print" buttons. A "Select Sort Order" dropdown is set to "Default". Below this is a "Filter by:" dropdown set to "Member Name" and a search bar with the letters "\* to Z". The main content area displays a table:

Member Name	Totals	# of Hours	# of Students
► Malcomson, Paul	14	105.5	165
► Dragon, Smaug	14	105.5	165
► Strangelove, Dr.	13	164.5	121
► Snuffleupagus, Mr	14	172	165
► Baggins, Bilbo	14	180.5	165
► Smith, Drew	15	182.5	165
► Schwarzenegger, A...	15	182.5	165
► Parker, Peter	15	182.5	165
► Larson, Gary	15	182.5	165
► Harper, Stephen	15	182.5	165
Total	144	1640.5	1606

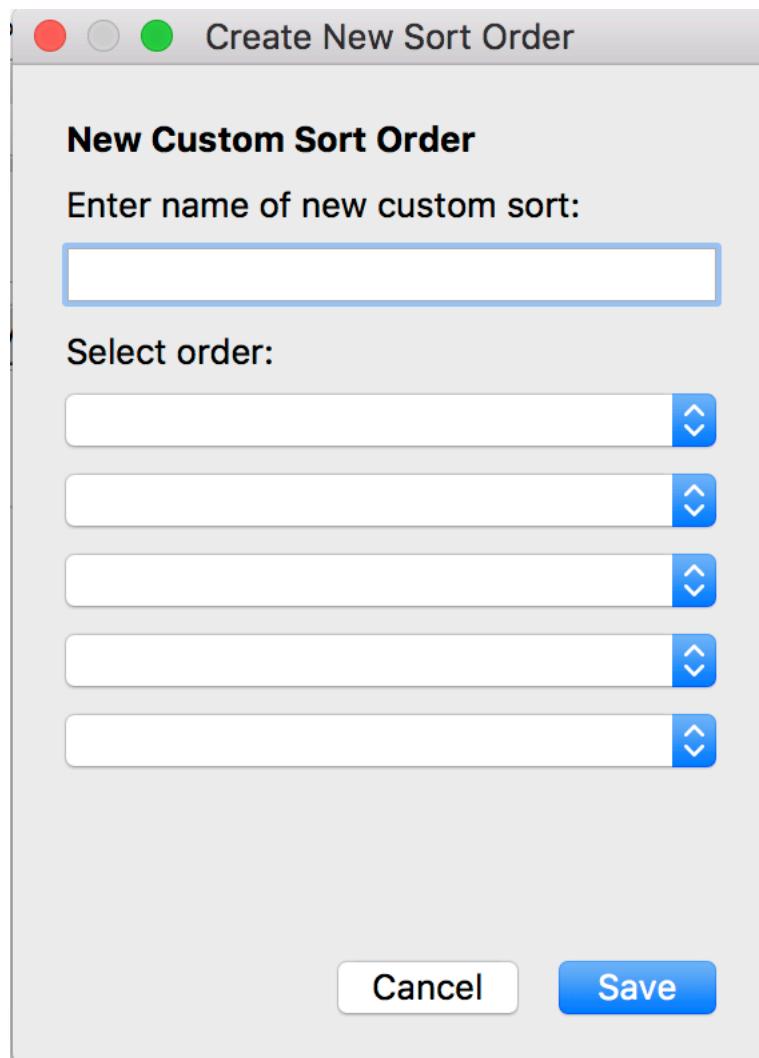
Below the table are four chart selection buttons: "Pie Chart" (selected), "Bar Chart", "Line Chart", and "Scatter Plot". The right side of the interface is a large, empty white area.

### **Scenario 5: creating a new sort order and editing it**

To start we're going to load data in the program.

Now, once you've loaded up the data, you are going to click "Create New Sort Order".

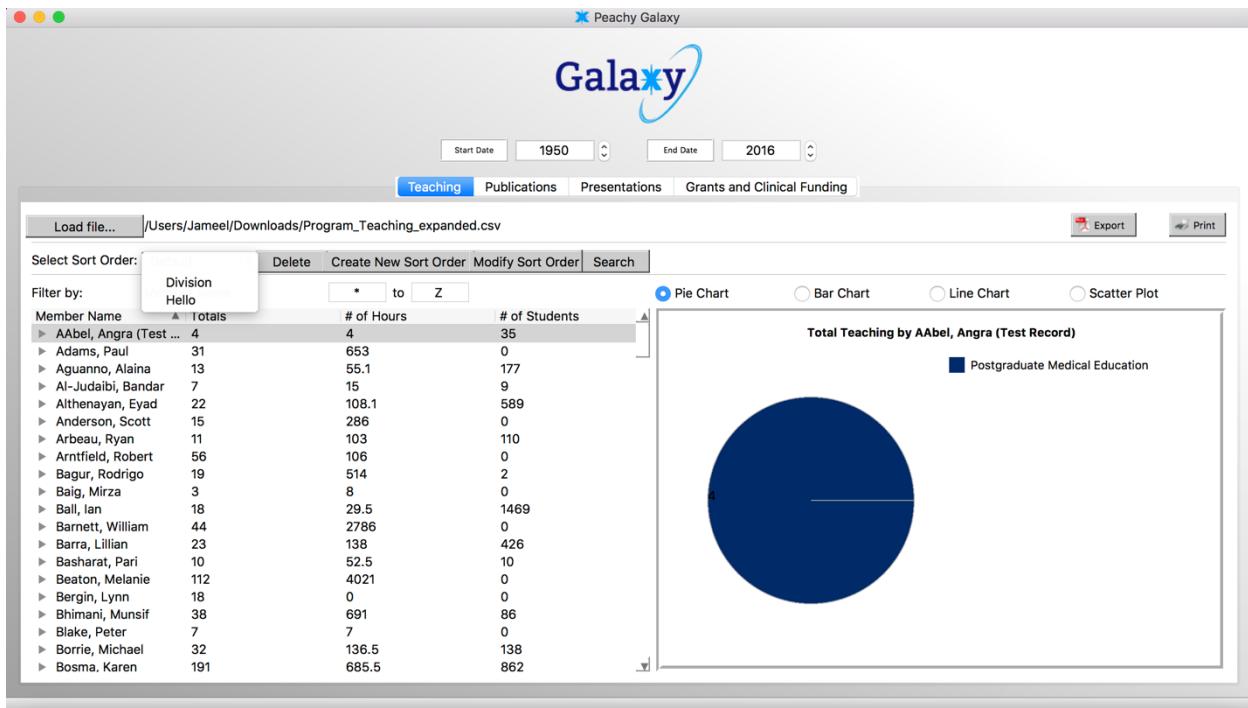
A Pop-up like the image below should appear.



Fill in the categories to accommodate your needs.

For our example, we randomly selected how the order would work and called it "Hello"

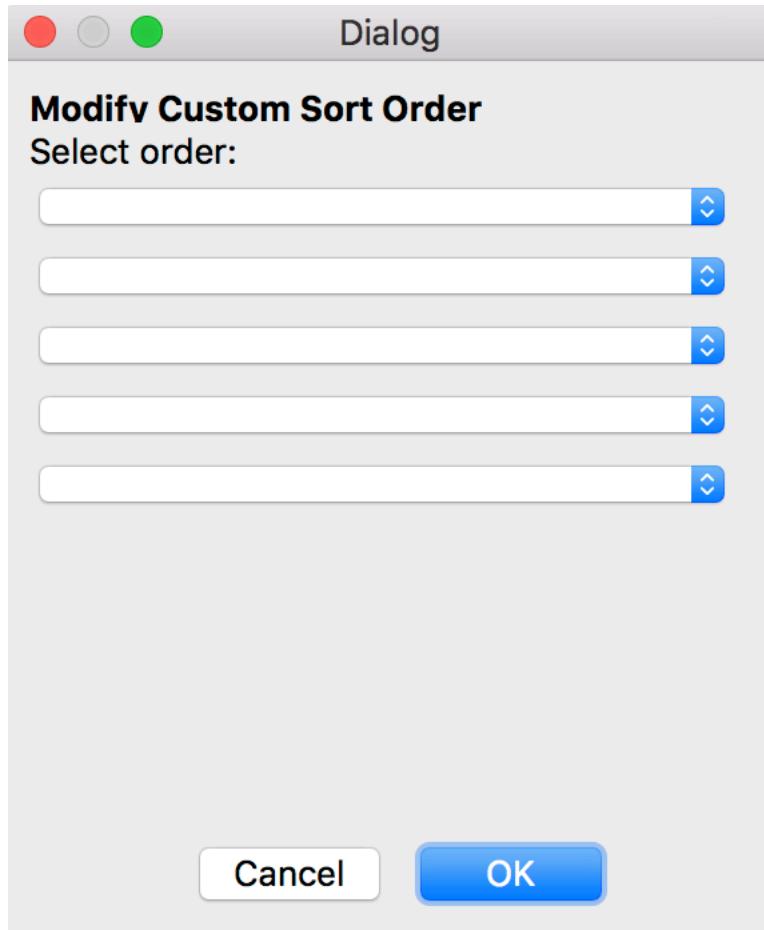
To use the newly created custom sort order, just click where "default" and "division" are located. You should now see your custom sort order there.



Click on the custom sort order you created to see it work its magic.



To modify a sort order, just hit the “Modify Sort Order” button and a pop-up like the image below should appear.



To modify the sort order, just select the new order in how the sort is performed and click OK.

\* You cannot change the name of your sort order. \*

To Delete a sort order, make sure it is currently selected and then hit the “Delete” button.

You will be asked if you’re sure you want to delete the sort order, click yes to confirm your desire to delete it.

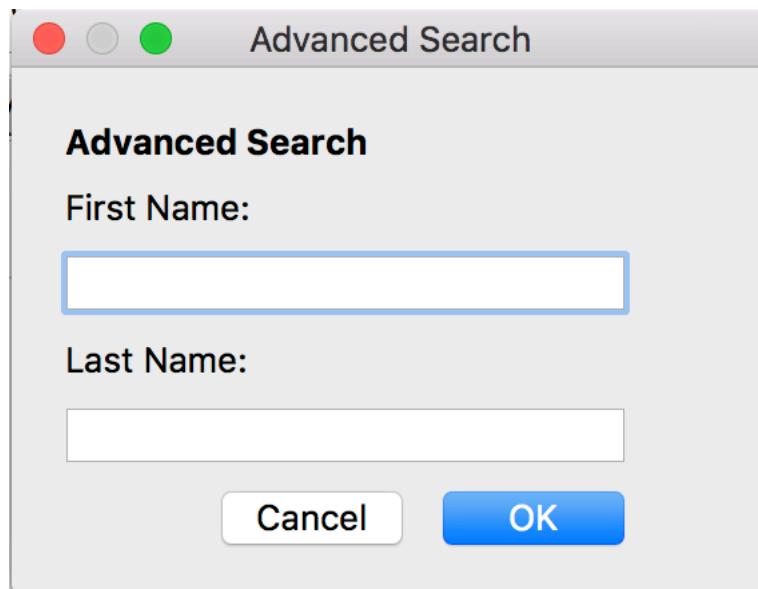
## Scenario 6: Advanced Searching

As per usual, we start by loading data into the program.

Once you have loaded the data you will see something like below.

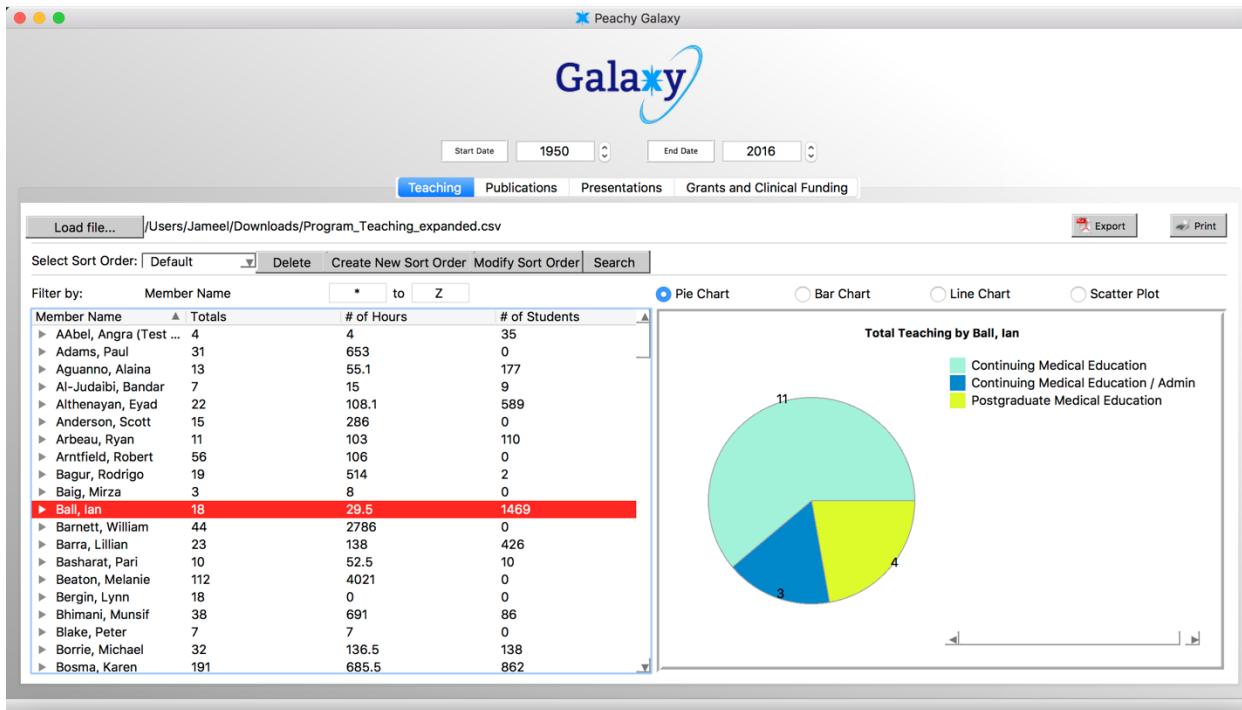


From here, you're going to click the “Search” button, the image below should look like the pop-up you received.



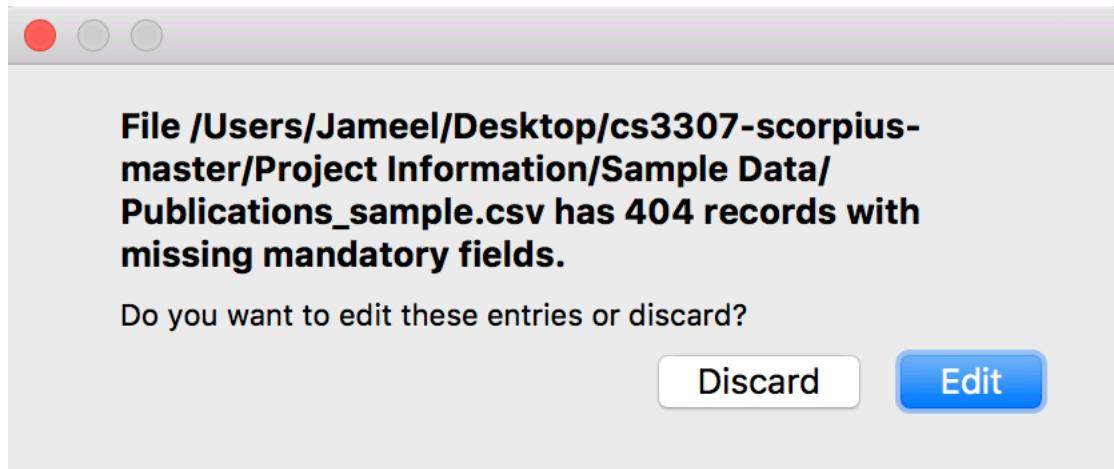
Fill in the First and Last name of the person you are searching for, and if there are any matches it will highlight it in the data for you to see.

In our case for this example, we searched for Ian Ball and below is what we got in return.



## Scenario 7: Navigation of Erroneous Errors

If you have errors in your data set that you're loading, you will receive a message like below



By hitting Edit, you are allowed to edit the data file right away and fix any errors that may appear.

Below is an image of what the editing window looks like.

Edit Erroneous Fields								
	Record Info	.last Modified Use	.last Modified Date	ID	Member Name	Primary Domain	Publication Status	Pub
1	1	Malcomson, ...	6/24/2015 3:...	93725	Malcomson, ...	Family Medi...	Published	199
2	1	Malcomson, ...	6/24/2015 3:...	93724	Malcomson, ...	Family Medi...	Published	170
3	1	Malcomson, ...	6/24/2015 9:...	93701	Malcomson, ...	Family Medi...		123
4	1	Malcomson, ...	6/24/2015 9:...	92725	Malcomson, ...	Family Medi...	Submitted	
5	1	Malcomson, ...	6/4/2015 10:...	89977	Malcomson, ...	Family Medi...	Published	123
6	1	Malcomson, ...	6/3/2015 1:1...	93304	Malcomson, ...	Family Medi...	Published	123
7	1	Malcomson, ...	6/2/2015 9:1...	93265	Malcomson, ...	Family Medi...	Published	20'
8	1	Malcomson, ...	6/2/2015 9:0...	93264	Malcomson, ...	Family Medi...	Published	20'
9	1	Malcomson, ...	4/29/2015 11...	92726		Family Medi...	Accepted / I...	
10	1	Malcomson, ...	3/9/2015 10:...	91903	Malcomson, ...	Family Medi...		
11	1	Malcomson, ...	3/9/2015 10:...	91902	Malcomson, ...	Family Medi...		
12	1	Malcomson, ...	11/7/2014 11:...	89913	Malcomson, ...	Family Medi...	Published	161
...								

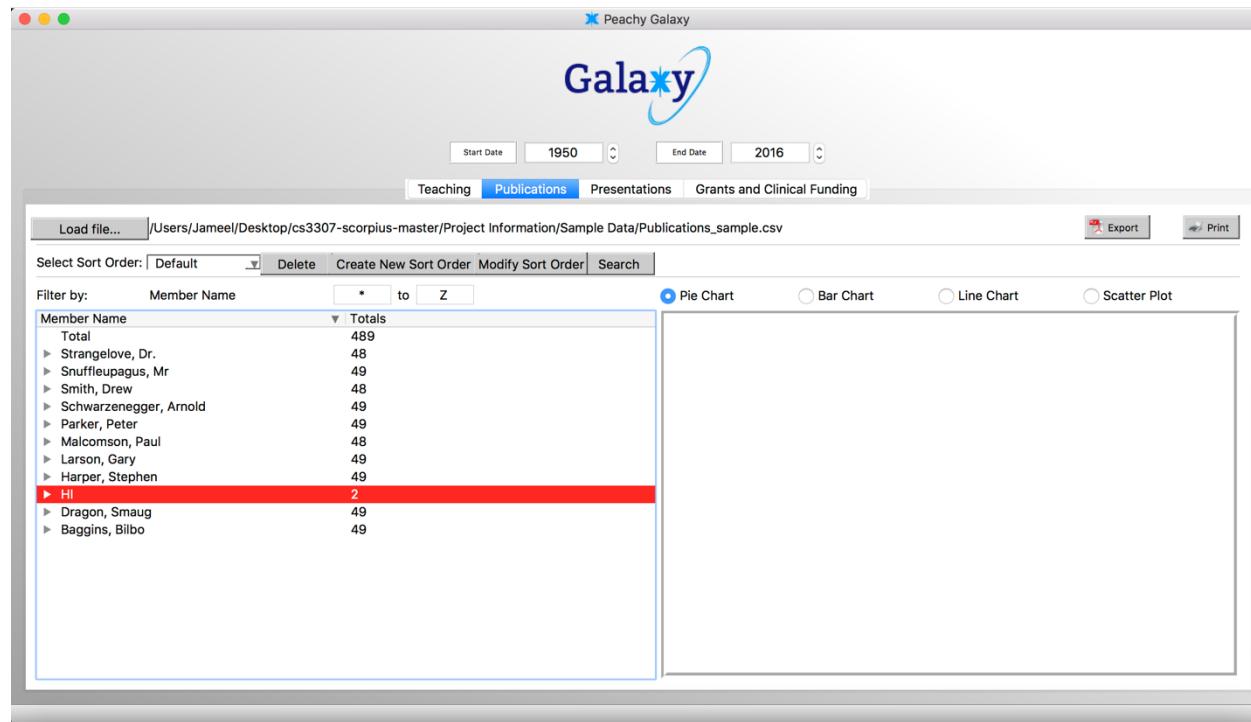
At the bottom of the window are three buttons: "Find Next", "Save", and "Cancel".

Any spots that are red mean that they need to be filled in.

If you hit the “Find Next” button, you will go to the next error.

By clicking “Save” your changes are added to the data displayed, and are saved in a file called “test.csv”

For our example, we’ve put “Hi” in the Member Name category for 2 spots, below is what we get by clicking save after editing the file.

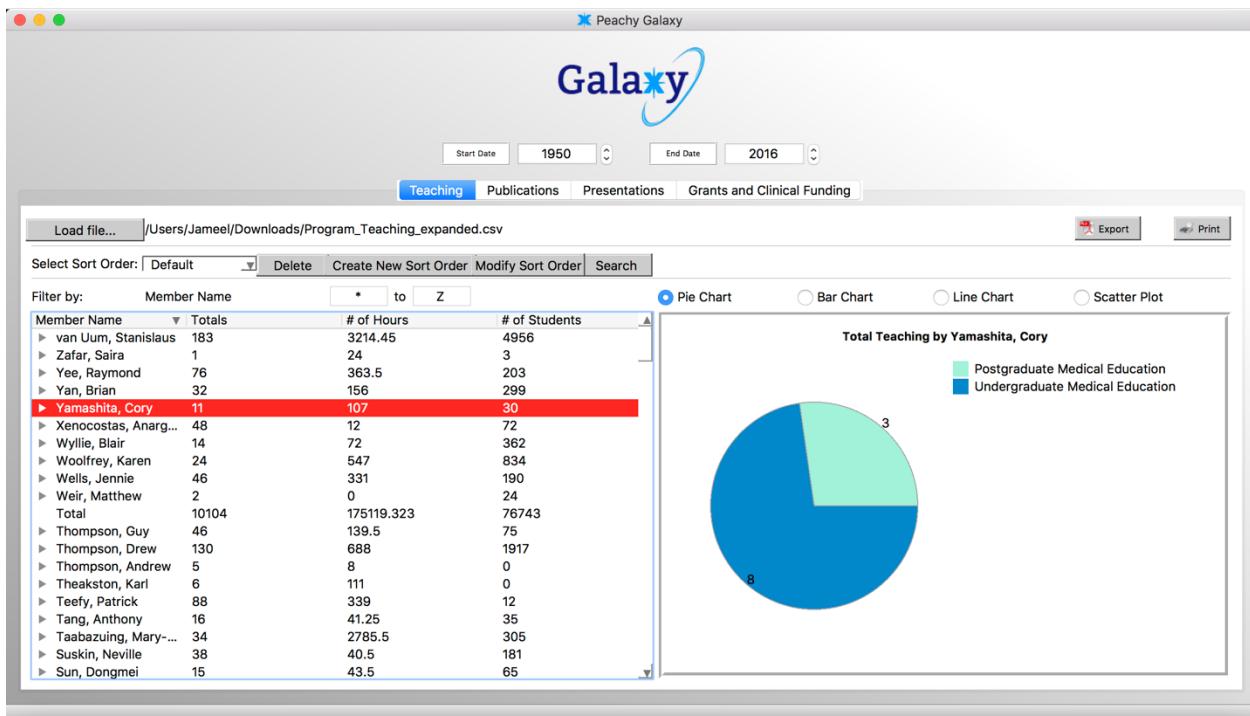


## Scenario 8: Exporting and Printing an element's data

In order to export and print an element's data, we start by loading the data.

Next click on the element you want to export/print.

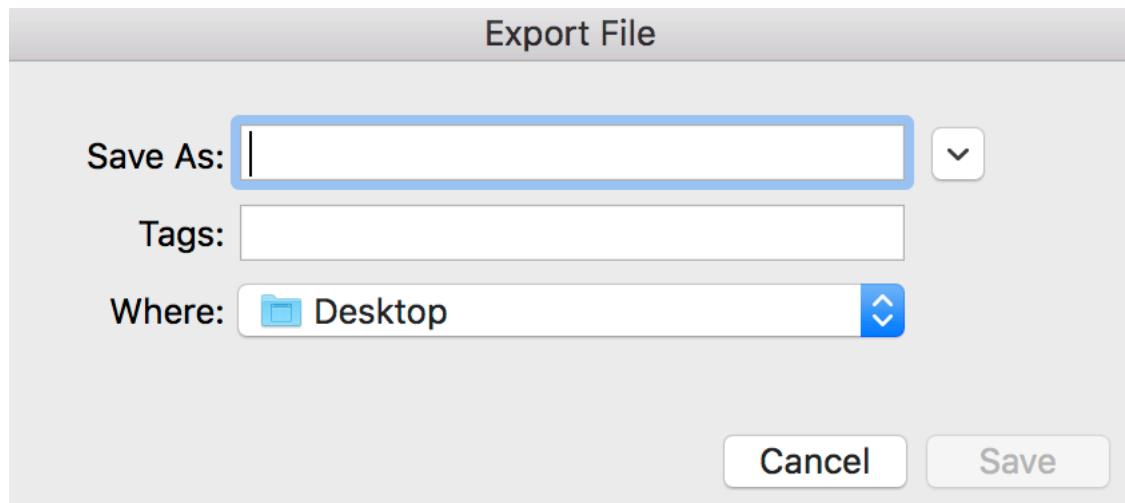
Choose the desired graph you want the data to be shown as.



By clicking Export, you receive a pop-up like below.

Fill in the “Save As:” part and hit save.

Just like that your data is saved as a PDF file which can be found in the location specified by “Where:”.



By hitting the print button, you get a pop-up like below

Hit “Print” to print out the data you selected.

