

Data Visualization

(Perform data cleaning tasks and graphically represent data from a spreadsheet)

Now that you have implemented a cloud-based development platform, established source control, implemented a database, and built a fully functional application, it is time to build meaningful visualizations that will allow your client to make data-driven decisions. In this final phase of your project, you will generate a report that shows client purchase trends over a two-year period.

Note: This exercise can be done using Python, Tableau or another bootcamp approved visualization client

1. Export the appropriate data from your populated database. (NOTE: the client would like to see client purchase trends over a two-year period.) If necessary, apply your own modifications to the RandomizedOrderdataTable.py file and run it to create more records for your Orders table. It will generate a comma-delimited text file named orderdata.csv. Alternatively, you may use the sample file, orderdata_test.csv.
2. Import the data into your visualization tool and view the information. Perform basic data cleaning tasks on the data. Examples of Python commands used to perform data cleaning operations can be found in the data_visualization.py script.
3. Create a chart to view the order data.
4. If you made any changes to your dataset, save them in a new CSV file so they can be used again without restarting the data cleaning process.
5. As a group, discuss and write down your answers to these questions:
 - a. What chart type did you choose to show these trends and why?
 - b. What color decisions did you choose for your visualizations and why?
 - c. What conclusions might your client derive from the visualizations you have chosen?