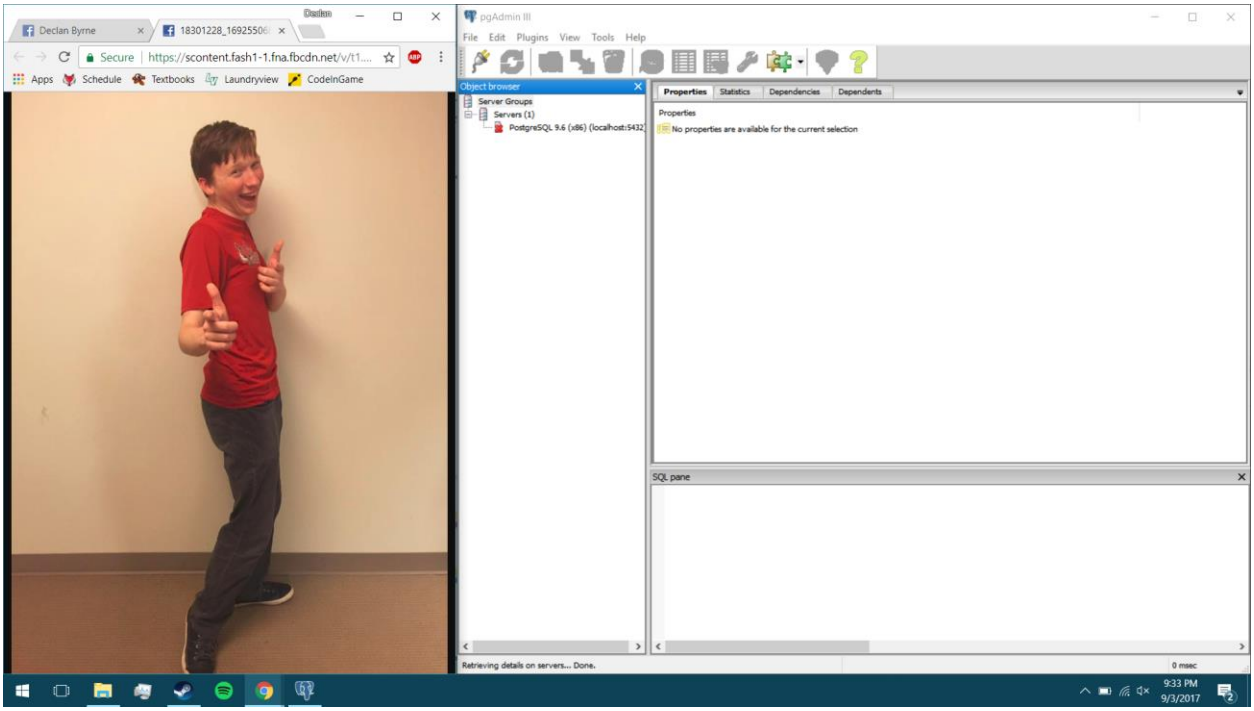
2. Data and information are very different. In brief, information is data that is given context. For example, let's say that there is a company, Starbucks for example. They would have a database with numerous fields containing data: Inventory, prices, employees and their wages to name a few. The elements in the fields would be data. The text strings, integers, and Booleans would all be considered data. However, when you figure out exactly what that data represents, that would be information. When you realize that the number (which would be data) represents an employee's wage in dollars, it becomes information.

3. There are many different data models. The Hierarchical data model is one of these models, and it is what the file directory in Windows and MacOS is modeled after. It is a system of folders, which contain files of data. It is a fairly logical system, but it does have its flaws. If you have multiple files containing the same data in different folders (which could be useful if the data is relevant to multiple things). However, this is an issue because not only is this data redundant, but if whoever is upkeeping the database isn't incredibly vigilant about updating data, then the two files could become inconsistent and have conflicting data. The network model is a similar concept, but the same file can be contained by multiple folders. This solves the issue of data redundancy, but it is very complicated to implement due to the nature of one file being contained by multiple folders. The relational model fixes these issues by putting data into a table of rows and columns, and different tables can relate to each other using foreign keys.



(This is the pgAdmin3 tool running on my computer, proved by the picture of me provided on the left)