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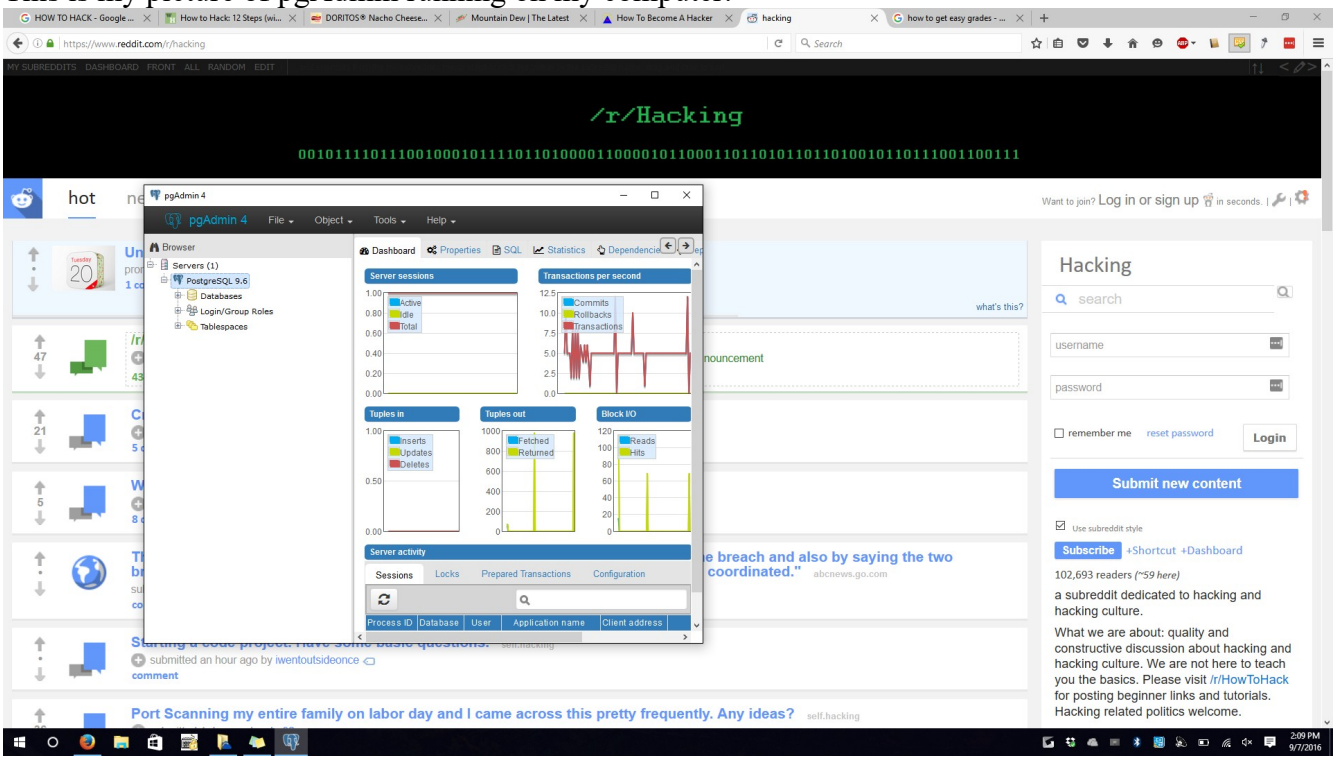
This is for database systems class with Alan

This is my picture of pgAdmin running on my computer:



Short essay: Data vs. Information -

Take for instance a database for the late p-ridge pizza in Poughkeepsie. This database would have data like phone numbers, pizza size, pizza type, order time, delivery location, price, delivery driver, etc.. The phone numbers are then associated with pizza size, type, delivery location, and the delivery driver, the driver is associated with delivery location and phone number. When looking at each piece of "data" separately you see irrelevant or meaningless numbers or letters. When you see a list of 867-5309, 125-7778, 898-9898, etc those numbers mean nothing. But when the numbers are associated and organized in a sense where they relate to the other elements of data they begin to transform from "data" to "information." The numbers now serve as an identifier for p-ridge to look at and see which number buys which pizza at which time and spends how much. Who orders pizza and never picks it up. When organized effectively these points of "data" become "information" that help p-ridge determine how to run their business well.

Short essay: Data Models -

The hierarchical data model organizes data in a tree in which there are children and parent records. Each child record has a single parent record. This model is extremely efficient but is limited in terms of scope due to it only providing one-to-many or one-to-one relationships. The network data model was similar to the hierarchical data model in many ways but it also added many-to-many relationships where one child record could have more than one parent records related to it. In comparison to the relational data model however, both the hierarchical and network model fall short. Relational data models used tables and (foreign and primary) keys to create a much more open model.

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Instead of being tied to parents and children the relational model uses keys to relate any table to another. Relational models are more dynamic than the other two and have a much easier time being applied to more complex databases. I believe XML data storage is a niche where in certain senarios it definitely has its benefits and uses, but overall a relational database can do more with just as much.