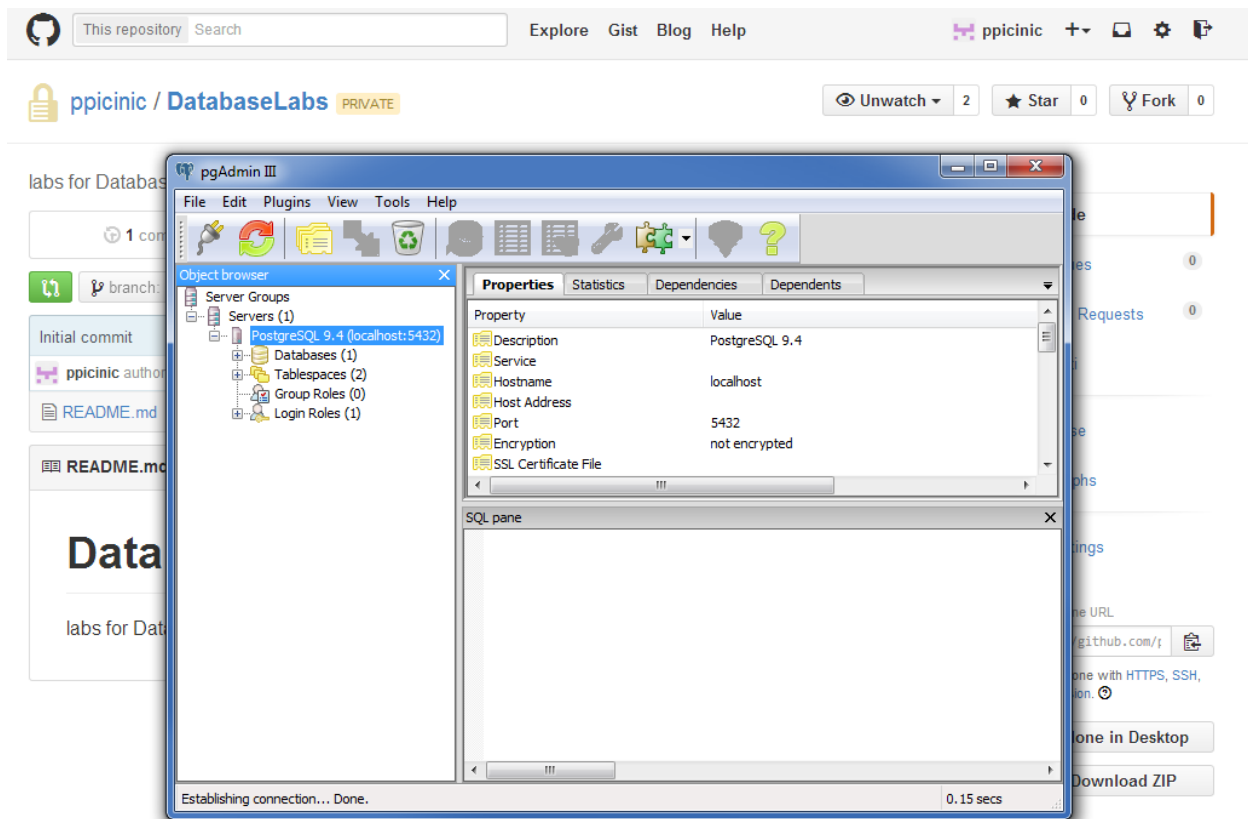Phillip Picinic

Database Management

1/28/15

Lab 1

Proof: Signed into my own Github account

Short Essay 1 – Data vs. Information

Data the raw binary information and values stored in a database. What makes the data become information is the context given to the data. For example, the number 52.57 is meaningless, but given the context that this is a stock price in USD, it becomes information in a data set. In relational databases, such as PostgreSQL, the values in the records are the data, and

the name of the columns is the data's context. In key-value store databases, such as MongoDB, the value of the pair is the data, and the key is its context.

Short Essay 2 – Data Models

Hierarchical and network pre-relational data models use a tree to represent data by building a hierarchy of the data. The efficiency is that the data is organized in a tree and has a tree data structures look up properties. Network takes a step above Hierarchical as it combines like data into the same nodes to reduce data repetition. These models however do not have the indexing capabilities and data organization that the relational model provides with tables.