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Comp. Arch

Availability Assignment

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My original intent was for the Database class could be used recursively. Any database can have a parent database, and/or child replicate database. This worked well in the sense that each of these types of databases use many of the same functions but it also meant that in every way they differ, I had to add a conditional statement to do the proper thing. I think the tradeoff in this case was worth it, and had this project been taken further it would've facilitated the transition of a replicate database into a primary database quite well. It also allows for as many layers of replicate databases you want.

But, it was quite late when I realized that each database would then need two threads, one for the server and one for the client. With not too much more time/effort I could add this functionality to my program but I've already spent too much time on it, and I have a great many other things yet to do.

There was also a lot of question regarding the degree of error checking necessary. I chose to mostly ignore errors beyond a message printed to the user. Since this seems to be a proof of concept assignment I thought that would be good enough. I'd rather spend more time on my presentation than spend even more time on things here I already know, especially when those features will likely go unused.

The ReadOnly copy of the datafile was not consistent in its formatting. It looked like it was supposed to be tab spaced but a few the lines were just space spaced. And there was an obvious typo at the very beginning. As such I copied the datafile myself, and all data files used by my program will be at the base directory of the running program.

'reset.bat' and 'reset.ps1' do the exact same thing. They will delete all data and log files present and copy over the original copies from the local folder. This way you can run the program many times and still reset the data files without having to do it manually. This helped a lot in testing!