

BASHBOOK

We extended our bashbook project to allow multiple users to connect to a server and run commands at the same time should they need to. This version of the project uses pipes to transfer information between the client and the server.

The system is made up of a client script – which sends the user input into a server pipe which is then read by the server which will determine which other scripts should be run depending on the arguments inputted – and the output is then processed through a pipe with a specific ID for each user using the client.

In this program – once a user is created – a folder with their ID is also made with a friends.txt folder and a wall.txt folder where the information for both the user's list of friends and the messages written on their wall can be stored respectively. It is possible for a user to write on another (existing) user's wall if and only if they are both on each other's friends list. In this program – we had made friendship symmetrical meaning if a user adds another user as a friend – they'll both be added to each other's friends lists. There is also a display feature made which displays all of the messages that are written on the given user's wall.

To fix the issue of synchronisation with the pipes, we implemented a locking strategy similar to the one displayed in lab 5.