

Computer Networks

report

1. **Team members:** B07502027 聶家任, B07502028 吳宗翰.
2. **Defect:** Images can't be shown in chat room.
3. **Implementation detail:**
 - http response/request: We use the *http* package in the *JS* client to generate requests in http format, and use the socket in *C++* server to listen on the requests from users and send back http responses. (The *C++* server does the same thing in connection stage as phase 1!)
 - data base: The data base is set in the same folder in which server is established. Every time a new user occurs, the data base would add the user's directory. On adding a friend, a file which is their chatting history and a directory where their shared files are placed, would be generated in their directories. On removing a friend, their chatting histories and shared files are all deleted.
 - chat history: Chat history would contains lines like *A : Hi\n* and *B : hello\n* which specify me and friends' communications. And some lines like *AF :< filename > \n* mean the name of the file I have delivered.
 - download: We use the *JS* server to download files because of the security issue of the *JS* client that it cannot download files.
 - bonus (account system): Every name being logged in at the first time would set the password correspondingly, and the users and passwords' pairs are saved in the data base.
4. **Demo link:** <https://youtu.be/VK92SRfSbKc>
5. **Work division:** We works together in every part.