WRITE 2 PROGRAMS-

~~Client~~

~~Server~~

~~Matching Port Numbers~~

~~Client cannot connect w/out IP input~~

~~SQLITE Database~~

~~2 Tables, Initially EMPTY~~

~~Table 1: Users~~

~~Table 2: Pokemon\_cards~~

~~Each User record in the users table should have the following fields:~~

~~• ID int NOT NULL AUTO\_INCREMENT,~~

~~• email varchar(255) NOT NULL,~~

~~• first\_name varchar(255),~~

~~• last\_name varchar(255),~~

~~• user\_name varchar(255) NOT NULL,~~

~~• password varchar(255),~~

~~• usd\_balance DOUBLE NOT NULL,~~

Teacher put usd\_balance 2x, but SQLITE says invalid with same name. No balance in Pokemon\_cards->Must have meant that since need balance

~~Each Pokemon record in the Pokemon\_Cards table should have the following fields:~~

~~• ID int NOT NULL AUTO\_INCREMENT,~~

~~• card\_name Text NOT NULL,~~

~~• card\_type Text NOT NULL,~~

~~• rarity Text NOT NULL,~~

~~• count Integer,~~

~~• owner\_id Text,~~

~~+ CARD BALANCE!~~

COMMANDS-

~~LOGIN~~

~~BUY~~

~~SELL~~

~~BALANCE~~

~~LIST~~

~~SHUTDOWN~~

~~QUIT~~

BUY: (\*Works! But need to have all info from table)

c:BUY card\_name card\_type rarity card\_price quantity user\_id

S: Received: echoed

c: 200 OK

to\_c: BOUGHT: New Balance: quantity card\_name. User USD balance card\_price

SELL: (WORKS! But need to remove from table once sold-> i.e delete where card\_balance = 0.0)

c: SELL card\_name quantity card\_price user\_id

s: Received: echoed

c: 200 OK

to\_c: SOLD: New balance: quantity card\_name. User's balance USE usd\_balance

LIST: (Works! But need owner\_id as input, once logged in wasn’t requiring them to keep putting their id)

c: LIST owner\_id

s: Recieved: echoed

c: 200 OK

to\_c: The list of records in the Pokémon cards table for current user, user user\_id

BALANCE:

c: BALANCE owner\_id

s: Recieved: echoed

c: 200 OK

to\_c: Balance for user first\_name last\_name: usd\_balance

SHUTDOWN: (WORKS!)

c: SHUTDOWN

s: Received: echoed

c: 200 OK

~~QUIT: (WORKS!)~~

~~c: QUIT~~

~~c: 200 OK~~

Error for input-> "400 invalid command"

"403 message format error"

+ what the error is (what incorrect input)

-Not enough USD balance

User user\_id doesn't exist (for selling to wrong user)

->Have to edit but done. Right now I have it outputting everything for format and invalid commands as the same to just have something initially

After BUY and SELL the Pokemon Cards table and Users table should be updated

~~• Both the server and client should be able to run on any UMD login servers.~~

• Make sure that you do sufficient error handling such that a user can't crash your server.

For instance, what will you do if a user provides invalid input?

~~• The server IP address should be a command line parameter for the client program.~~

~~• The server should print out all messages received from clients on the screen.~~

• When the previous client exits, the server should allow the next client to connect.

• Include a README.docx file in your submission with all instructions about the development environment and how compile and run instructions in details.

• Record and submit a less than 10 minutes video showing that your project is running as expected in all cases above. This is like what you would demo in an on-campus class setup. Make sure the command line font is large enough to be read.