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LOGIN ID: anpavulu

Servicemap.c

The servicemap c file contains the struct myData structure where it can contains where it can contains the name and data . after running the servicemap.c file it can wait to receive messages from server and client where it can provide services. And display the message

Server.c

The server c file will accept the request from client like the account number then it read the data from the db21 file and searches for the record. If It finds the display the bank record details.

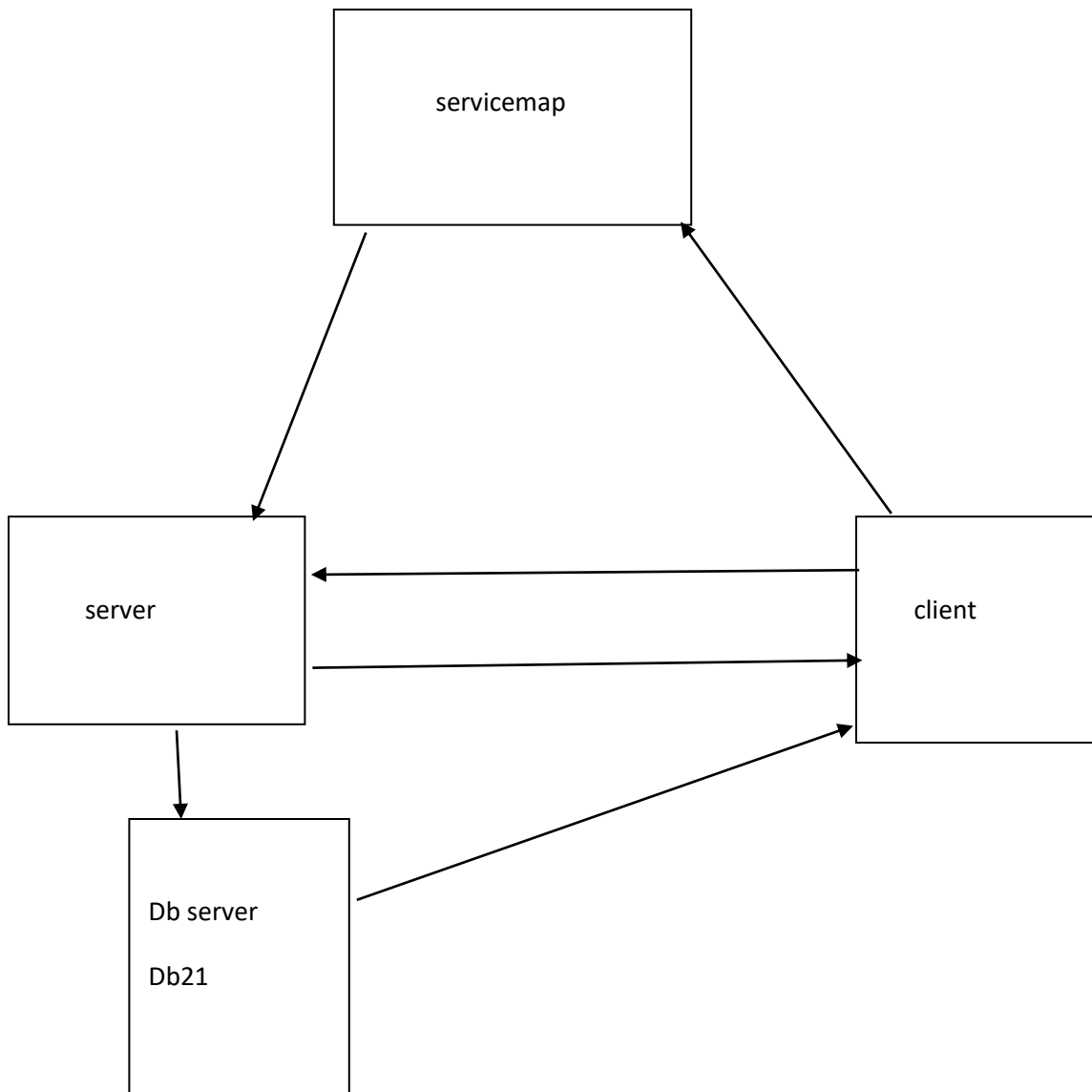
After getting the update query from the client then it can update the information in a update file .

Client.c

The client can register its information in service mapper file ok the port is connected then client the retrieve the records from the server then the client can receives the information.

The client can also update the query where the server can receive and change the results and forward the formation to client

Design/Impementation



First, the communication between client and server I used tcp socket and udp program

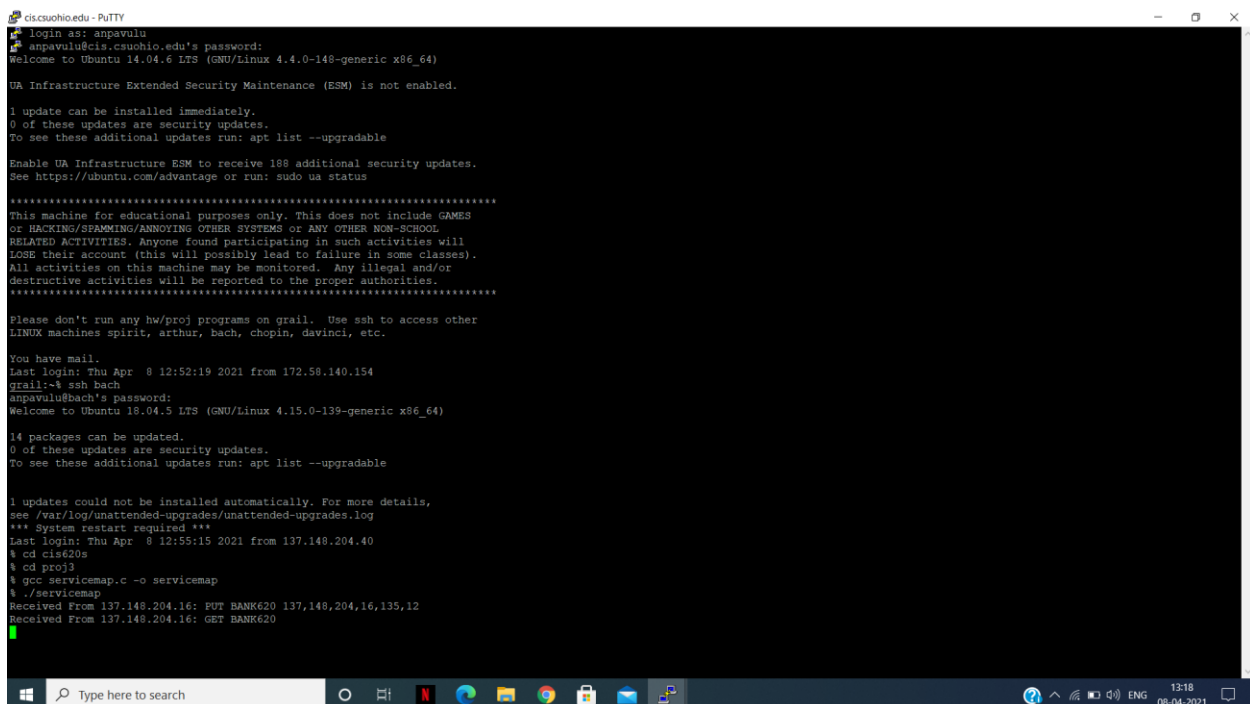
Second, client to service map udp broad cast messaging

Working when we run servicemap executable map then we open second terminal of other server to run the server then it will port registration message and then we open another terminal and run client program we get the service request from the servicemap of Getbank620.

When ever the query request from the client it goes to the server there is db21 file we need to establish connection and there will be record in that file whenever we given number as argument it check with database information in the server and it send the record information like that we can get information and updated the record information.

DEBUGGING/EXPERIENCE:

./servciemap



```
discushio.edu - PuTTY
login as: anpavulu
anpavulu@discushio.edu's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.4.0-148-generic x86_64)

UA Infrastructure Extended Security Maintenance (ESM) is not enabled.

1 update can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Enable UA Infrastructure ESM to receive 188 additional security updates.
See https://ubuntu.com/advantage or run: sudo ua status

*****
This machine for educational purposes only. This does not include GAMES
or HACKING/SPAMMING/ANNOYING OTHER SYSTEMS or ANY OTHER NON-SCHOOL
RELATED ACTIVITIES. Anyone found participating in such activities will
LOSE their account (this will possibly lead to failure in some classes).
All activities on this machine may be monitored. Any illegal and/or
destructive activities will be reported to the proper authorities.
*****

Please don't run any hw/proj programs on grail. Use ssh to access other
LINUX machines spirit, arthur, bach, chopin, davinci, etc.

You have mail.
Last login: Thu Apr  8 12:52:19 2021 from 172.58.140.154
grail:~$ ssh bach
anpavulu@bach's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-139-generic x86_64)

14 packages can be updated.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

1 updates could not be installed automatically. For more details,
see /var/log/unattended-upgrades/unattended-upgrades.log
*** System restart required ***
Last login: Thu Apr  8 12:55:15 2021 from 137.148.204.40
% cd cis620s
% cd proj3
% gcc servicemap.c -o servicemap
% ./servicemap
Received from 137.148.204.16: PUT BANK620 137,148,204,16,135,12
Received From 137.148.204.16: GET BANK620
```

./server

```
ciscuohio.edu - PuTTY
Welcome to Ubuntu 14.04.6 LTS (GNU/Linux 4.4.0-148-generic x86_64)

UA Infrastructure Extended Security Maintenance (ESM) is not enabled.

1 update can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Enable UA Infrastructure ESM to receive 188 additional security updates.
See https://ubuntu.com/advantage or run: sudo ua status

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*****

Please don't run any hw/proj programs on grail. Use ssh to access other
LINUX machines spirit, arthur, bach, chopin, davinci, etc.

You have mail.
Last login: Thu Apr  8 13:14:11 2021 from cpe-75-185-195-18.cinci.res.rr.com
grail:~$ ssh bach
anpavulu@bach's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-139-generic x86_64)

14 packages can be updated.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

1 updates could not be installed automatically. For more details,
see /var/log/unattended-upgrades/unattended-upgrades.log
*** System restart required ***
Last login: Thu Apr  8 13:14:22 2021 from 137.148.204.40
% cd cis620s
% cd proj3
% gcc server.c -o server
% ./server
socket has port 34572
Registration OK from 137.148.204.16
34572
Service Requested from 137.148.204.16
database Operations 2000
Service Requested from 137.148.204.16
database Operations 2001
```

./client

```
ciscuohio.edu - PuTTY
anpavulu@cis.csuohio.edu's password:
Welcome to Ubuntu 14.04.6 LTS (GNU/Linux 4.4.0-148-generic x86_64)

UA Infrastructure Extended Security Maintenance (ESM) is not enabled.

1 update can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Enable UA Infrastructure ESM to receive 188 additional security updates.
See https://ubuntu.com/advantage or run: sudo ua status

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destructive activities will be reported to the proper authorities.
*****

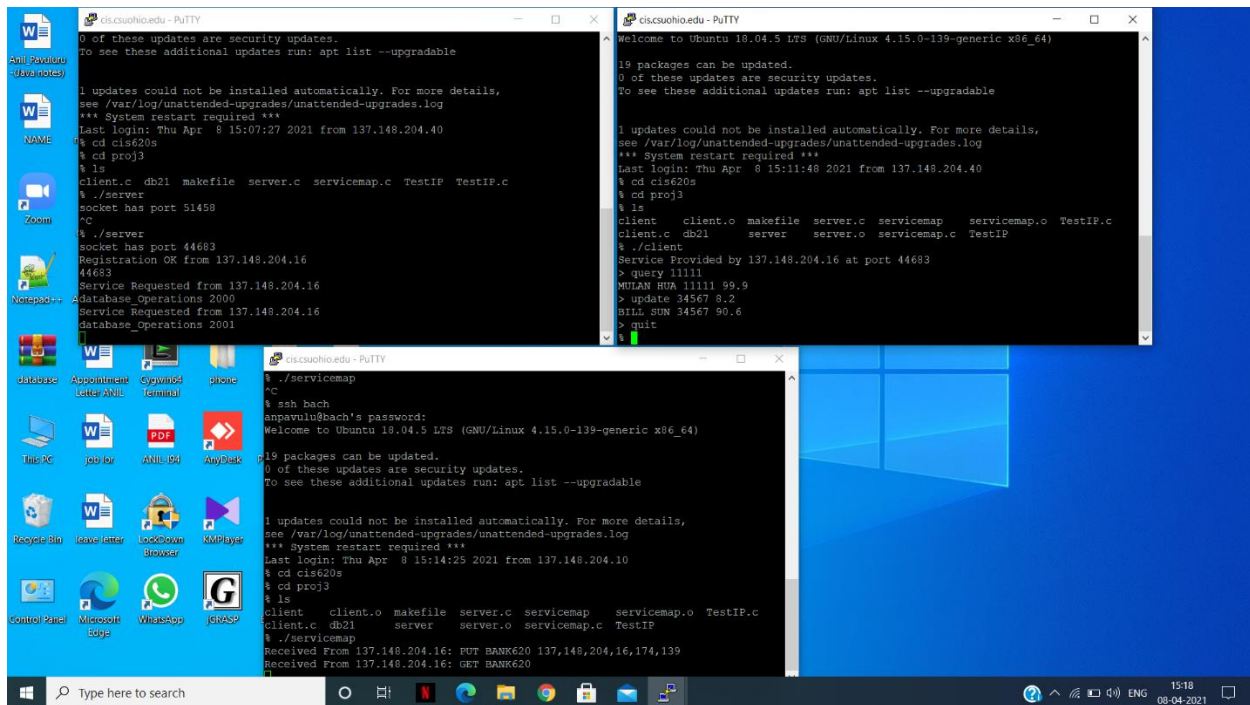
Please don't run any hw/proj programs on grail. Use ssh to access other
LINUX machines spirit, arthur, bach, chopin, davinci, etc.

You have mail.
Last login: Thu Apr  8 13:15:28 2021 from cpe-75-185-195-18.cinci.res.rr.com
grail:~$ ssh bach
anpavulu@bach's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-139-generic x86_64)

14 packages can be updated.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

1 updates could not be installed automatically. For more details,
see /var/log/unattended-upgrades/unattended-upgrades.log
*** System restart required ***
Last login: Thu Apr  8 13:15:36 2021 from 137.148.204.40
% cd cis620s
% cd proj3
% gcc client.c -o client
% ./client
Service Provided by 137.148.204.16 at port 34572
> query 11111
MULAN HUA 11111 99.9
> update 34567 8.2
BILL SUN 34567 82.4
> quit
```

Output:



When I taken the same server ip address for client and server it was coming some thing where I am taken different server Arthur for servermap,(137.148.204.17) brahms for server degas(137.148.204.29) for client I get the ipaddress correctly and given in the code also it was not able establishing the connection.

Project status: NOT WORKING