

Title of Project:

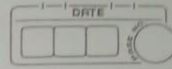
NetConnect : A Socket-Based LinkedIn Like System

Objectives of Project:

- 1) To create such system which gives a basic idea about how exactly a server-client Networking Model works.
- 2) To create such system which has primary functionalities of any social media system like LinkedIn using socket programming

Functionalities used in project

- 1) User Authentication:
 - Implementation of a secure user authentication system to validate user credentials during login.
- 2) User Registration & Profile creation:
 - Development of an intuitive registration process allowing users to create accounts with unique usernames & passwords.
 - Comprehensive user profile creation, enabling individuals to showcase their personal educational & professional details.
- 3) Search Functionality:
 - Inclusion of advanced search functionalities, allowing users to find connections based on various criteria such as name, institute, industry & more.



4) Homepage Navigation

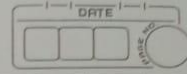
→ Creating on of a user-Friendly, homepage with distinct options, facilitating seamless navigation through the platform. To make UI, UX better we use ASCII Art Forms.

5) Socket-Programming

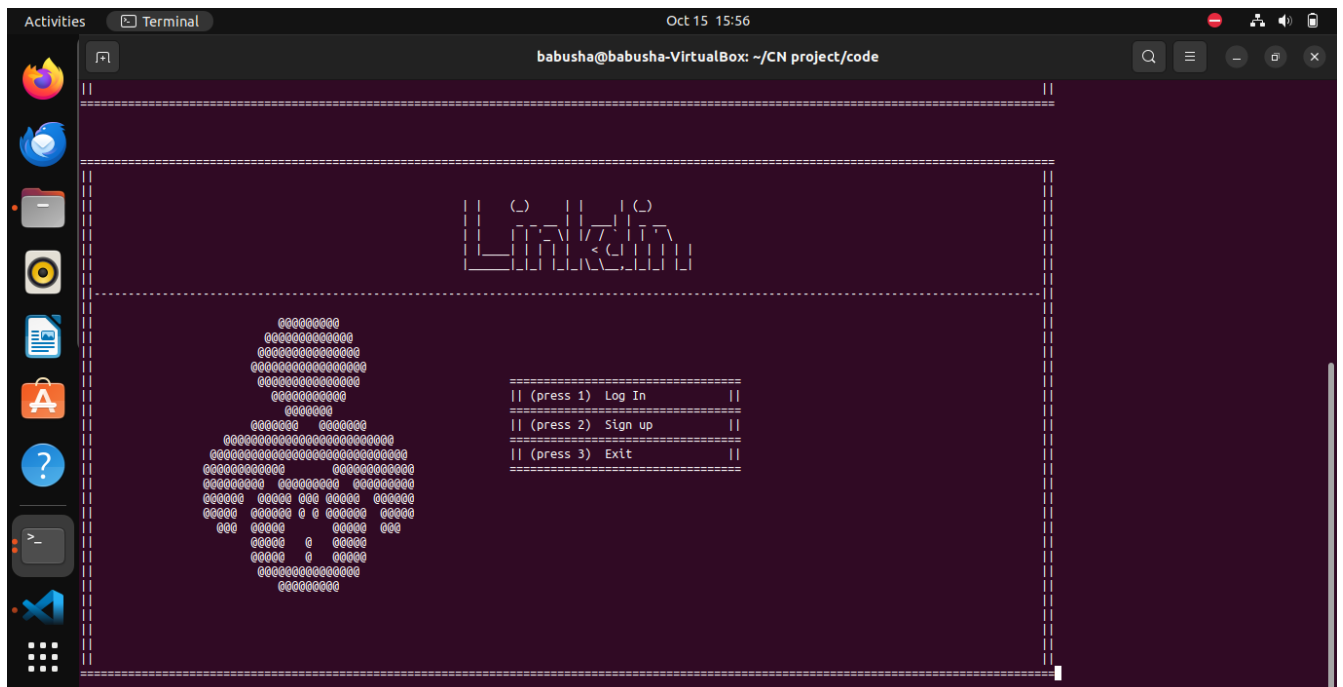
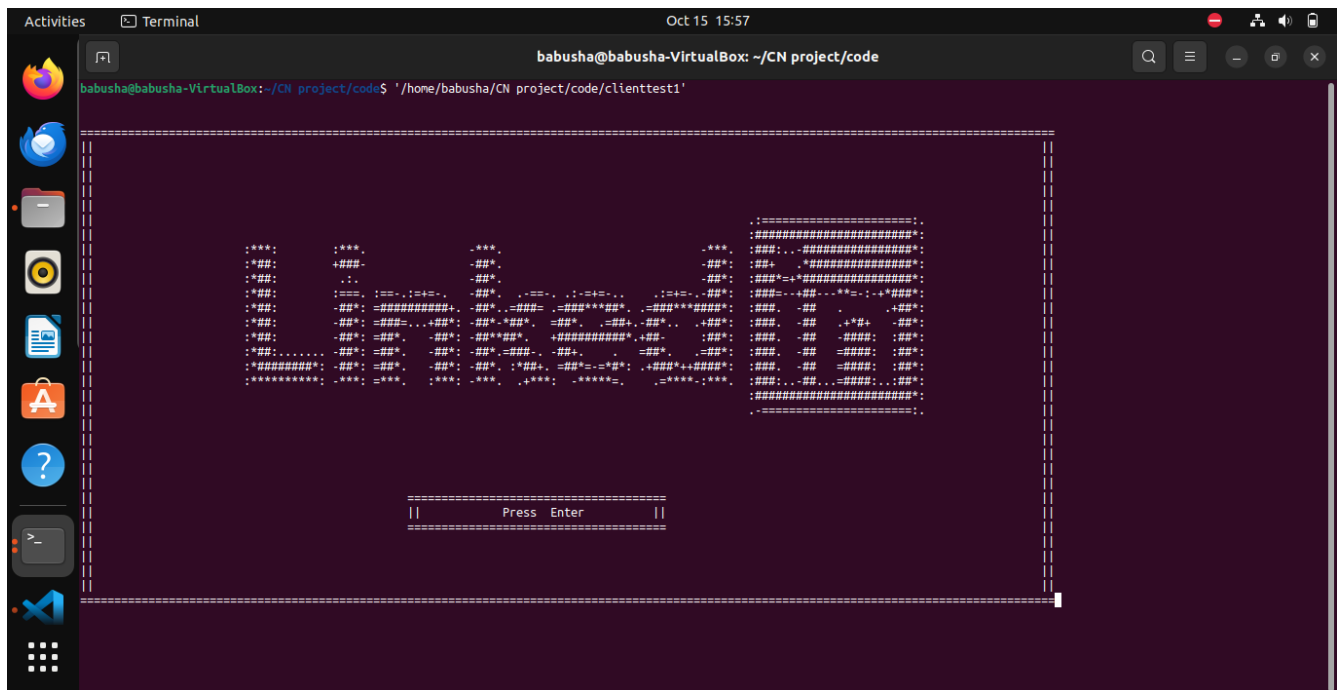
→ Utilization of Socket programming to establish communication between the server & clients & real-time data exchange.

Working of Project:

- 1) Here first we launch/bind our Server socket on localhost IP "127.0.0.1" & Port 5500
- 2) After launching server it is time to launch our client on same location.
- 3) As client connected to server launching page is display on client side after pressing Enter, client redirect to login & Registration page.
- 4) Now client Have 3 options on screen. Login, Register & Exit. Client can choose this by pressing 1, 2 & 3 resp with Enter
- 5) If client choose Registration option, it redirects to registration page on which there are some 7-8 Input Fields in which client want to enter it's data. After entering ~~the~~ data it store into a structure & this structure is send to Server at same time server receives the structure & store this User data into Userdata.txt File.



- 6) After completion of registration, one last step is remaining that create id & password. So client redirect to create id password page.
- 7) Here client enter or create it's user id & password. For this process important point to be noted that client cannot create such username which is already present. After creating & pressing enter this data send to server & server store userID & password in user.txt file.
- 8) Now here registration process complete. Now clients redirect to login/register page again.
- 9) Client now suppose to login. So it redirect to login page where it enter it's credentials. this credentials send to server & after this server check this in user.txt give appropriate response that credentials are correct or not.
- 10) If credentials are correct or validate then client redirects to Homepage. on which Profiles of some users can be are displaying.
- 11) On 2nd option client can see it's complete profile details.
- 12) On 3rd option client can search multiple user on the who have already register on this system on the basis different filters & parameters. & gives complete Profile of that user.
- 13) At last on 4th option there is logout there client logout & redirect to login/Registration Page.



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Activities Terminal Oct 15 16:01 babusha@babusha-VirtualBox: ~/CN project/code

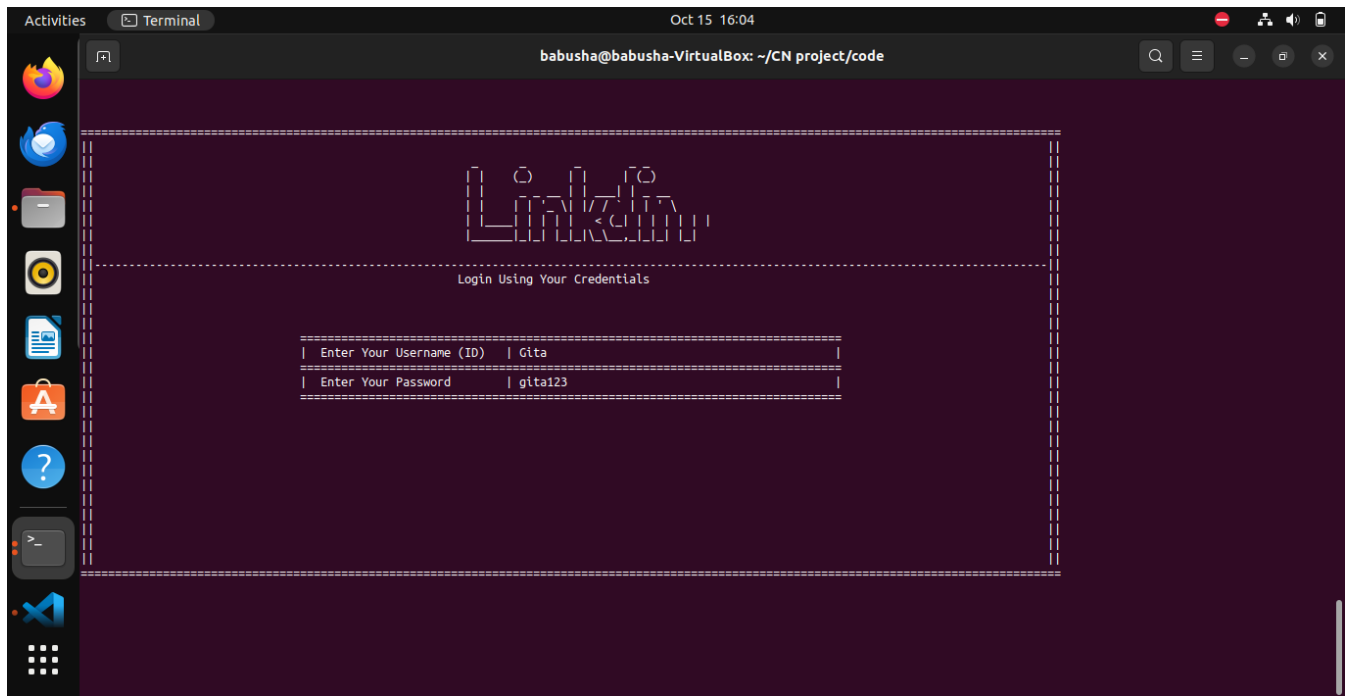
  ( )  | |  ( )
 L    |V|    <Gita
 L    |K|    L
  ( )  | |  ( )

=====
PROFILE CREATION
=====
| Enter Your Full Name |Gita| |
| Enter Your Email Address |gita@gmail.com|
| Enter Your Location/Country |pune/India|
| Enter Your Date of Birth |22/01/2004|
| Enter Your profile Headline |Hi_Hello|
| Choose profession => 1 | Student(press1) | IndustryEmployer(press2) |
| Enter Your Institute name |PCCOE|
| Enter Your course details |Btech-IT|
| Enter Your Education info |Currently_in_SY|
| Enter Your skills |C,C++,Java|
| Enter Your Certifications |simplylearn|
| Enter Your Volunteer Exp |no|
| Enter Languages you speak |Hindi,English,Marathi|
| Enter Your Projects info |Linear_sieving_machine,salonpro|
=====
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Activities Terminal Oct 15 16:03 babusha@babusha-VirtualBox: ~/CN project/code

  ( )  | |  ( )
 L    |V|    <Gita
 L    |K|    L
  ( )  | |  ( )

=====
One Last step to Go! Create Your UserID & Password For Login
=====
| Enter Your Username (ID) | Gita|
| Set Your Password | gita123|
| Confirm Password | gita123|
=====
```



```
Activities Terminal Oct 15 16:14 babusha@babusha-VirtualBox: ~/CN project/code

=====
| LinkedIn.. || Home (press 1) Profile (press 2) Search (press 3) Logout (press 4) || (Welcome Gita!) |
=====

|| Serial Number : 2
|| Name : Gita
|| Email : gita@123
|| DateOfBirth : 22/01/2004
|| Country : Pune/India
|| Headline : HII
|| Institute/Industries : PCCOE
|| Student/Employee : Btech-IT
|| Education : Currently_in_SY
|| Skills : C,C++,Java
|| Certifications : Simplylearn
|| Volunteer : no
|| Language : Hindi,English,Marathi
|| Project : Salonpro
|| UserName : Gita
||

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```
Activities Terminal Oct 15 16:15 babusha@babusha-VirtualBox: ~/CN project/code

=====
| LinkedIn.. || Home (press 1) Profile (press 2) Search (press 3) Logout (press 4) || (Welcome Onkar!) |
=====

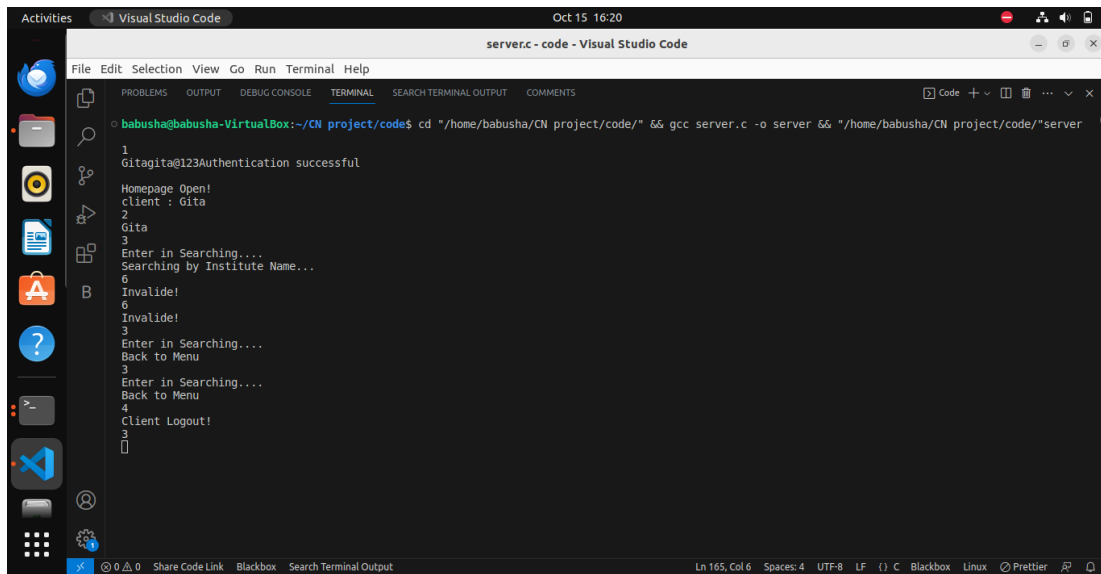
This is Search By using Following Options

=====
|| 1. Search by Name || 2. Search by Institute Name || 3. Search by Company Name ||
|| 4. Search by Projects || 5. Search by Skills || 6. Back to Menu ||
=====

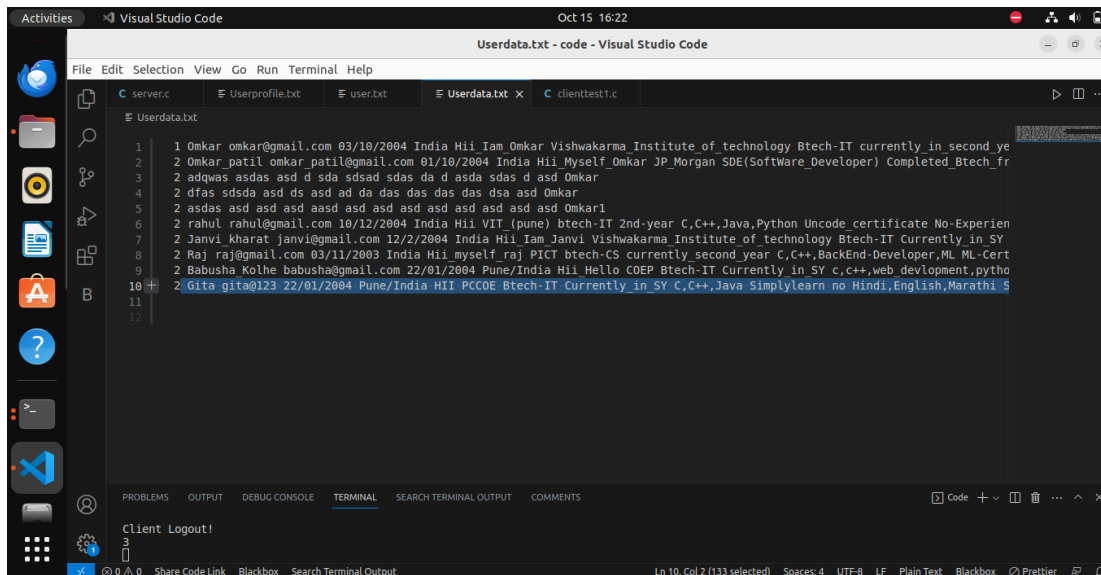
Enter your choice: 2
Enter Name to search: PICT

|| Serial Number : 2
|| Name : Raj
|| Email : raj@gmail.com
|| DateOfBirth : 03/11/2003
|| Country : India
|| Headline : Hi_i_myself_raj
|| Institute/Industries : PICT
|| Student/Employee : btech-CS
|| Education : currently_second_year
|| Skills : C,C++,BackEnd-Developer,ML
|| Certifications : ML-Certification_by_coursera
|| Volunteer : NO-Experience
|| Language : Marathi,Hindi,English
|| Project : IC-Tester,Society_management
|| UserName : Raj
||

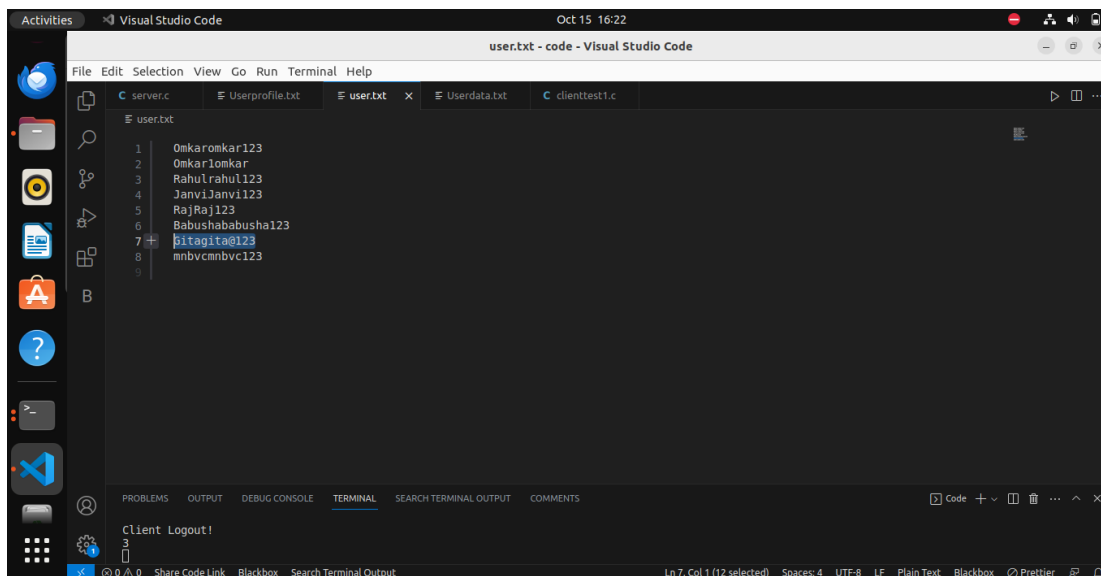
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```
server.c - code - Visual Studio Code
File Edit Selection View Go Run Terminal Help
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL SEARCH TERMINAL OUTPUT COMMENTS
babusha@babusha-VirtualBox:~/CN project/code$ cd ~/home/babusha/CN project/code/ && gcc server.c -o server && ./server
1
Gitagita@123Authentication successful
Homepage Open!
Client : Gitagita
2
Gita
3
Enter in Searching....
Searching by Institute Name...
6
Invalide!
6
Invalide!
3
Enter in Searching....
Back to Menu
3
Enter in Searching....
Back to Menu
4
Client Logout!
3
[]
Ln 165, Col 6 Spaces: 4 UTF-8 LF () C Blackbox Linux Prettier
```



```
Userdata.txt - code - Visual Studio Code
File Edit Selection View Go Run Terminal Help
C server.c Userprofile.txt user.txt Userdata.txt clienttest1.c
Userdata.txt
1 1 Omkar omkar@gmail.com 03/10/2004 India Hii Iam Omkar Vishwakarma Institute of technology Btech-IT currently in second ye
2 2 Omkar patil omkar_patil@gmail.com 01/10/2004 India Hii Myself Omkar JP Morgan SDE(Software_Developer) Completed Btech_fr
3 3 adqwas asdas asd d sda sdsad sda da d asda sda d asd Omkar
4 4 2 dfrs sdsda asd ds asd ad da das das das dsa asd Omkar
5 5 2 asdas asd asd asd aasd asd asd asd asd asd asd Omkar1
6 6 2 rahul rahul@gmail.com 10/12/2004 India Hii VIT (pune) btech-IT 2nd-year C,C++,Java,Python Uncode certificate No-Experien
7 7 2 Janvi kharat janvi@gmail.com 12/2/2004 India Hii Iam Janvi Vishwakarma Institute of technology Btech-IT Currently in SY
8 8 2 Raj raj@gmail.com 03/11/2003 India Hii myself raj PICT btech-CS currently second year C,C++,BackEnd-Developer,ML,ML-Cert
9 9 2 Babusha Kolhe babusha@gmail.com 22/01/2004 Pune/India Hii Hello COEP Btech-IT Currently in SY c,c++,web development,pytho
10 10 2 Gita gita@123 22/01/2004 Pune/India Hii PCCOE Btech-IT Currently in SY C,C++,Java Simplylearn no Hindi,English,Marathi
11
12
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL SEARCH TERMINAL OUTPUT COMMENTS
client Logout!
3
[]
Ln 10, Col 2 (133 selected) Spaces: 4 UTF-8 LF Plain Text Blackbox Prettier
```



```
user.txt - code - Visual Studio Code
File Edit Selection View Go Run Terminal Help
C server.c Userprofile.txt user.txt Userdata.txt clienttest1.c
user.txt
1 Omkaromkar123
2 Omkar1omkar
3 Rahulrahul123
4 JanviJanvi123
5 RajRaj123
6 Babushababusha123
7 Gitagita@123
8 mnbcnmnbvc123
9
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL SEARCH TERMINAL OUTPUT COMMENTS
client Logout!
3
[]
Ln 7, Col 1 (12 selected) Spaces: 4 UTF-8 LF Plain Text Blackbox Prettier
```