

Community Information System A Tool In Social Media

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Abstract – Communication with a given cluster target system in social cultural atmosphere demand a means of information distribution with limited stress. Surfing the websites such as “My Space” and “Facebook” has become a prevalent phenomenon in the younger population. Nowadays, social network websites are the integral part of social, learning and working life for community (people with same goals, ideology. The implemented system is to be compiled into a single program from other units and finally tested as whole system. The work has modules. In each modules are require functions, it most return a value System testing is testing conducted on a complete integrated system to evaluate the system's compliance with its specified requirements. The Community Information System as a Social media platform is a graphical representation of members in a community in social network like twitter and Facebook. The community Information system collect user with common idea, market and recommendation. The system collected the products and price per units then automatically compute it and present the total cost of it to the customer.

Keywords – Community, Information System, Tool, Social Media.

I. INTRODUCTION

The work centers nature of utilizing interpersonal organization programming reflects fundamental down to earth data circulation esteems [1]. The goal of this examination is to enhance the correspondence inside a local area. Qualities and the reception of interpersonal organization programming, in view of the plan hypothesis of eminent information measure [2]. The aftereffects of this examination can add to the fields of data frameworks plan and informal community research. Data advancements have permanently changed the manner in which individuals impart. To the more youthful populace, particularly the age gathering of 18 to 23, email has been treated as an older style correspondence instrument [3]. Progressively, they have changed their correspondence stage to online interpersonal organization locales like Facebook and Myspace. Regularly, they sign on to these sites to stay in contact with companions or to peruse the data of the new individuals they met in the disconnected networks. Genuinely, the openness to interpersonal organization programming is amazingly high. In view of study from as abundant of 1440 first-year understudies, this study uncovered that 95% of school green beans had known about Facebook and 84% of them were Facebook 336members [4]. As of year 2008, Myspace contains 110 million dynamic clients [5] and Facebook claims in excess of 100 million dynamic clients and 6 million dynamic client gatherings (Facebook Statistics, 2008). Considering the accessibility of Myspace that began in 2003 and Facebook that began in 2004, individuals would astonish the speed of embracing interpersonal organization programming. An interpersonal organization comprises of a bunch of individual entertainers who interconnect through specific connections, like companionship, cooperating or data trade [6]. Informal organizations are kept up with through the collaboration among individuals. In its conventional type of interpersonal organization, individuals convey through eye to eye discussion, call, or mail. As data innovation progressing, online interpersonal organization programming gives another system that permits people to contact individuals they know, and to get to required data sources. The new type of informal community has defeated the existence furthest reaches of the customary organization [7][8].

An online interpersonal organization has three new attributes: (1) an organization includes a flighty arrangement of members, (2) all individuals share unstructured data, and (3) all individuals have developing data needs. These online interpersonal

organization attributes exceptionally look like to the qualities of rising information measures (EKPs). EKP plan hypothesis was proposed by [9] to contemplate information laborers' data necessities for data frameworks that help developing information measure. Rising information measures are hierarchical exercises that display three attributes in mix: (1) consultations with no best design or grouping, (2) information prerequisites incorporate both general and unsaid information conveyed across specialists and non-specialists, and (3) profoundly flighty entertainer set in term of occupation job or earlier information [10].

The point of this exploration is to foster a local area data framework as a web-based media utilizing program interface to convey. Make a local area data framework (Client/Server) that is carried out utilizing the attachment programming and python flask structure, clients are register to turn into an individual from the gathering of the stage, Login module, is to give each enlisted client admittance to its profile page for visiting with the group. The talk stage exist with a public arrangement of correspondence and not private situated framework and the data set is SQLite; it is the lightest data set that interface simple for data trade.

This investigation means to analyze the relationship of the data frameworks attributes and interpersonal organization application with regards to rising information measures. The estimations of the data qualities (i.e., self-sending, self-advancing, and activity capacity) that have been created in the past research [11] will be utilized to foresee the informal organization selection. This work will test causal model to more readily comprehend the connection between the data framework attributes and the appropriation of informal organization programming.

Correspondence inside a bunch local area in conventional idea draw in burn through on schedule and asset.

1. Very costly expense of every SMS sent (SMS rating per page)
2. No freeness of articulation without thinking about the costs
3. Lack of LMS (Long Message Service), the messages are in every case short. The accompanying propelled the framework?

II. LITERATURE REVIEW

[12] Client and Server Chat is a minimal expense, low force, it utilizes Wi-Fi and area of interest advances expected to supplant the link associations between hand telephones, PDAs and other convenient gadgets the web visit application is an attachment text correspondence. The customer client register to turn into the enlisted client of the gathering. When a client isn't enrolled in the information base, the individual can't approach the stage, to visit with other approved people. The term visit room, or talk room, is essentially used to portray any type of coordinated conferencing, sporadically even no concurrent conferencing. The term would thus be able to mean any innovation going from ongoing on the web talk and online association with outsiders (e.g., online discussions) to completely vivid graphical social conditions.

Composing a talk application with well-known web applications stacks like Python Flask has customarily been hard. It includes surveying the worker for changes, monitoring timestamps, and it's a great deal slower than it ought to be. Attachments have customarily been the arrangement around which most ongoing visit frameworks are architected, giving a bi-directional correspondence channel between a customer and a worker. This implies that the worker can push messages to customers. At whatever point you compose a talk message, the thought is that the worker will get it and push it to any remaining associated customers as per [13] [14].

A customer is the less than desirable finish of a help or the requestor of an assistance in a customer/worker model kind of framework. The customer is frequently situated on another framework or PC, which can be gotten to by means of an organization. This term was first utilized for gadgets that couldn't run their own projects, and were associated with far off PCs that could through an organization. These were called moronic terminals and they were served by time-sharing centralized server PCs as per [15].

A customer can be a basic application or an entire framework that gets to administrations being given by a worker as indicated by [16].

A customer is a PC or a program that, as a component of its activity, depends on sending a solicitation to another program or a PC equipment or programming that gets to an assistance made accessible by a worker (which could conceivably be situated on another PC). For instance, internet browsers are customers that associate with web workers and recover website pages for show as per [16]. Email customers recover email from mail workers. Online talk utilizes an assortment of customers, which differ contingent

upon the visit convention being utilized. Multiplayer computer games or online computer games may run as a customer on every PC. The expression "customer" may likewise be applied to PCs or gadgets that run the customer programming or clients that utilization the customer programming. [17].

The Bluetooth radio uses one of these recurrence jumps each second. Recurrence bouncing is utilized to lessen impedance brought about by close by Bluetooth gadgets and different gadgets that utilizing a similar recurrence band. n. A few advancements utilized this band also. For instance Wi-Fi innovations like IEEE 8 channels at a given time as indicated by [18].

III. PROPOSED SYSTEM

The format of the construction course of action clarifies the whole handiness and operability of the framework. The construction was plan and done utilizing the Python system with some other progress language like bootstrap 4 for frontend. These applications after arrangement are had a go at utilizing a twofold concentration or more prominent stuff structure and Operating System from Windows XP or more. This application incorporate three basic modules: the utilitarian advancement of the modules are coupled together to for neighborhood application worker and customer through association openness. Individuals make account through register partner, and approach the local social event for data. The login module is utilized for approach the application neighborhood i.e the close by amassing board. The logout partner is utilized for sign-out of the visit pack. The progression for data correspondence measure is the online pass on association divider correspondence advancement. The design interfaces two or three gadget like the versatile, PC and iPad, and so on

3.1 USE CASE DIAGRAM

The use case diagram describe the activities of the new system in a web based platform. The actors are the community users. The activities explain users with common opinion in terms of business and work. It is an interaction between actors, trying to make the system functional. A direction of flow between the operators and the designed system.

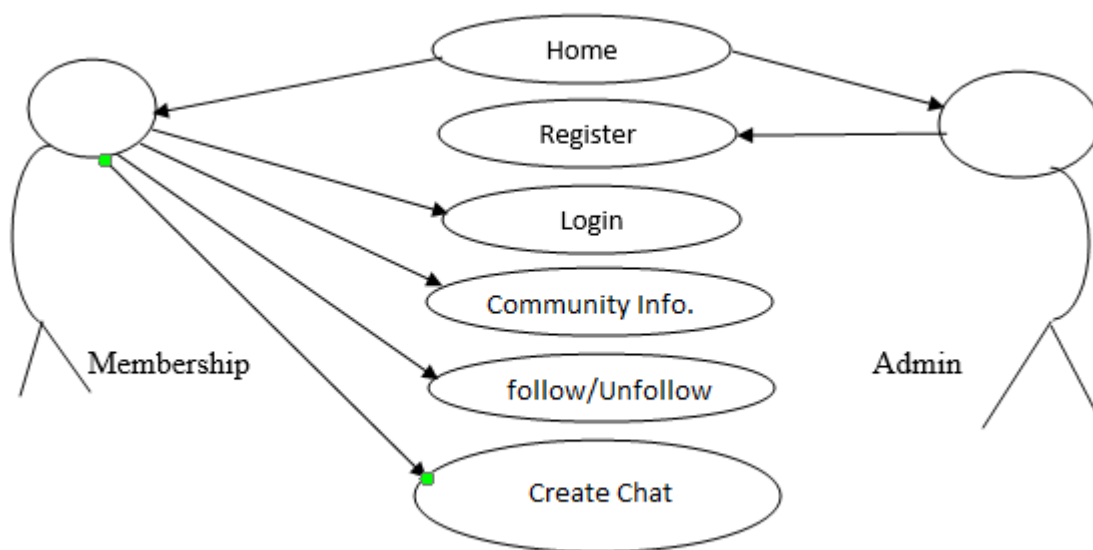


Figure 3.1 Actors Activities

The members in the community register and have access to the community chat box, where information is follow and unfollow. All members have equal right to create chat and share information.

3.2. FLOW CHART OF THE PROPOSED SYSTEM

A flowchart is a type of diagram that uses an algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows. This diagrammatic representation illustrates a solution model to a given problem. Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields.

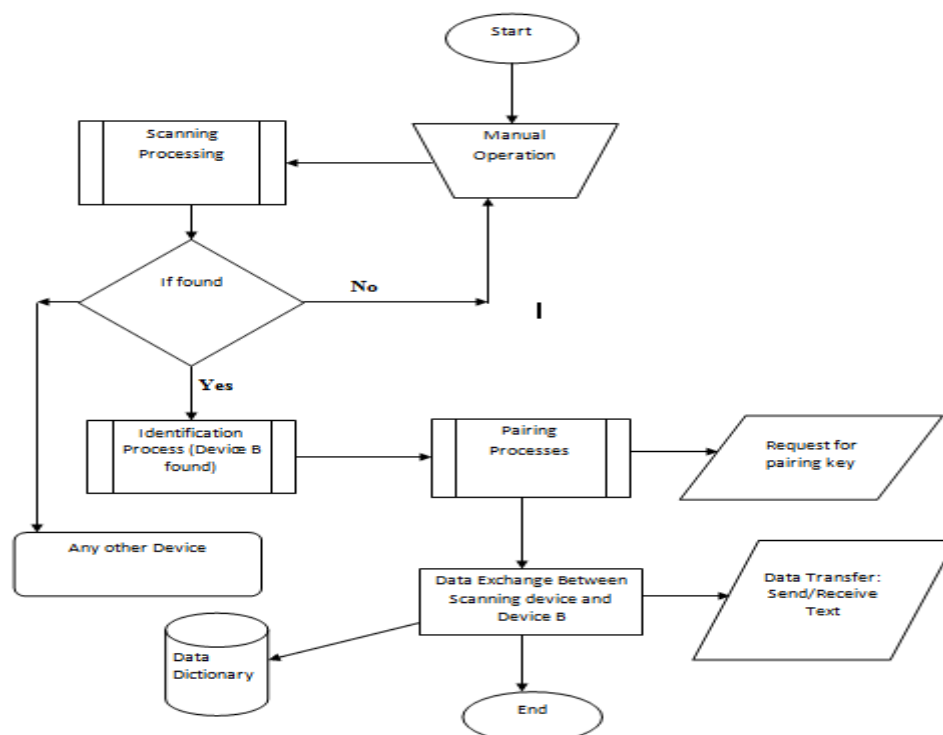


Figure 3.2 Actors flow

3.3 INTERFACE DESIGN

This describe the output of the community Information system on social media e.g twitter, Facebook. It show the community Information network between nodes and describe to which the member belong. Below is the designed system

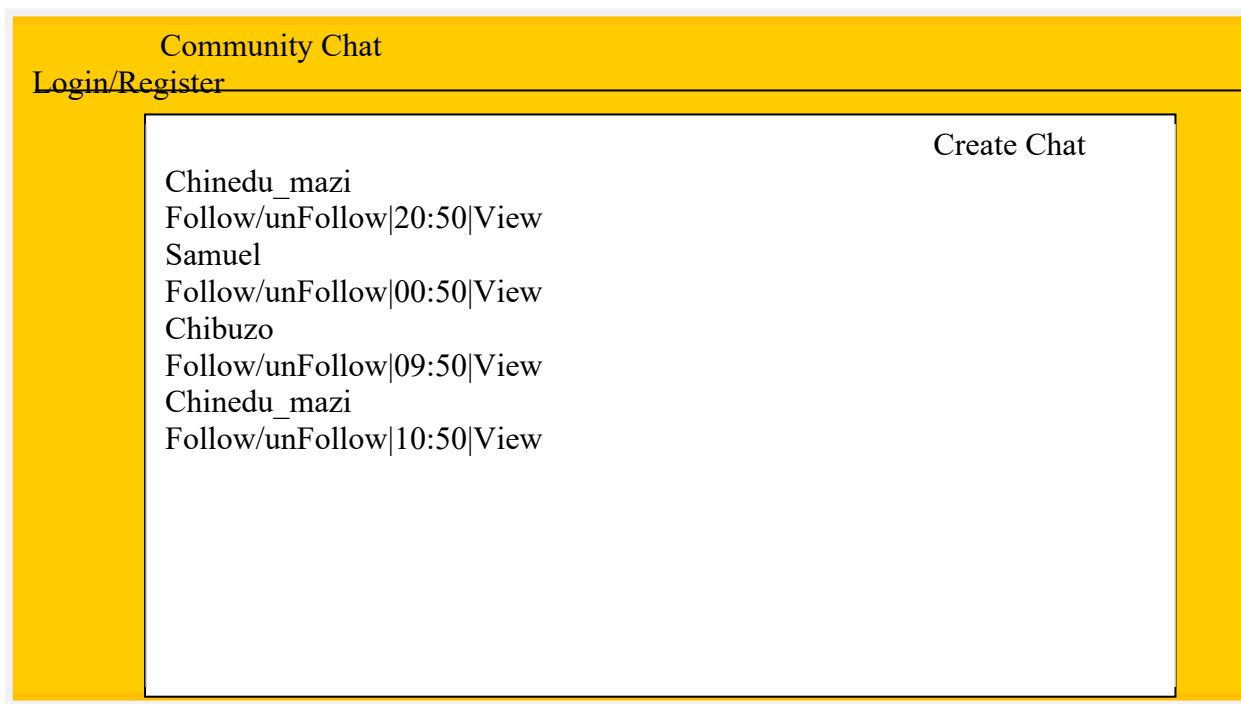


Figure 3.3 community Information Design

3.4 DATABASE STRUCTURE

The proposed system, it is designed to existing with a database model SQLite. The database was created to have a table schema Users. The database schema was structured to describe in a formal language supported by the database management system. The term "schema" refers to the organization of data as a blueprint of how the database is constructed.

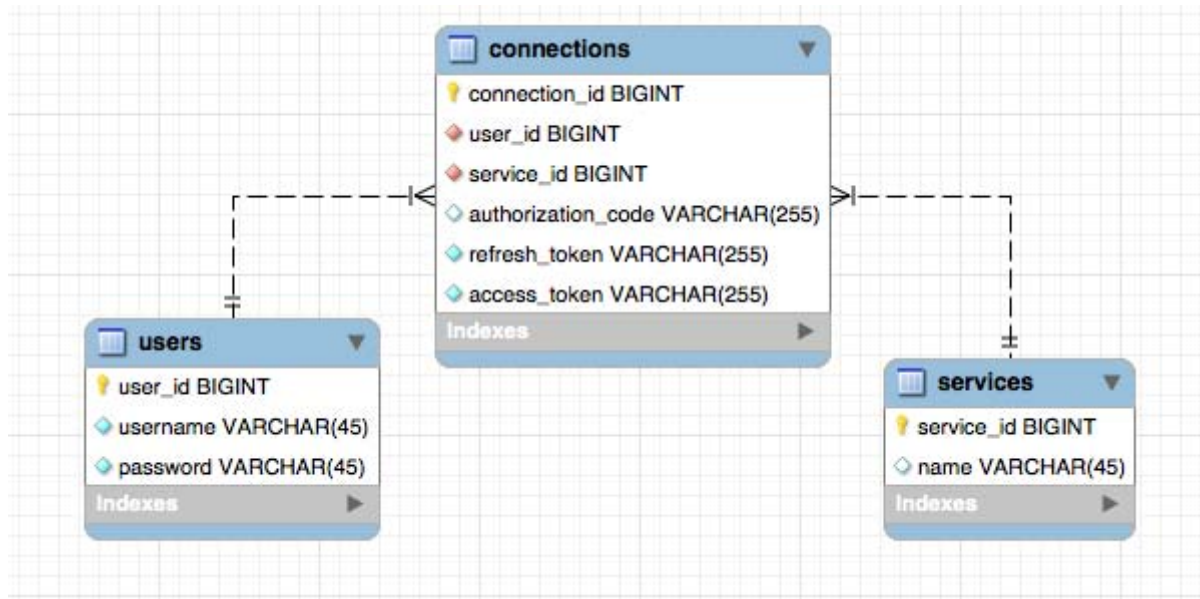


Figure 3.4 Database Design

3.5 FEATURE AND CHOICE OF IMPLEMENTATION LANGUAGE

Flask is a lightweight WSGI web application framework. It is designed to make getting started quick and easy, with the ability to scale up to complex applications. It began as a simple wrapper around Werkzeug and Jinja and has become one of the most popular Python web application frameworks. Flask offers suggestions, but doesn't enforce any dependencies or research layout. It is up to the developer to choose the tools and libraries they want to use. There are many extensions provided by the community that make adding new functionality easy. It is a cross platform language designed to connect to several other platform. Example ability to link to a Arduino microcontroller and temperature sensor. This makes it more advantage to be used for this implementation and its design. Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions. However, Flask supports extensions that can add application features as if they were implemented in Flask itself. Extensions exist for object-relational mappers, form validation, and Upload handling, various open authentication technologies and several common framework related tools. Extensions are updated far more frequently than the core Flask program. Applications that use the Flask framework include Pinterest, LinkedIn, and the community web page for Flask itself. SQLite is an embedded SQL database engine. Unlike most other SQL databases, SQLite does not have a separate server process. SQLite reads and writes directly to ordinary disk files. A complete SQL database with multiple tables, indices, triggers, and views, is contained in a single disk file. The database file format is cross-platform - you can freely copy a database between 32-bit and 64-bit systems or between big-endian and little-endian architectures. These features make SQLite a popular choice as an Application File Format. SQLite database files are a recommended storage format by the US Library of Congress. The automated purchase system uses the SQLite database file model for local storage of information. **Bootstrap** is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components. The world's most popular framework for building responsive, mobile-first sites, with BootstrapCDN and a template starter page. The bootstrap is a frontend library design to build for automated purchase system. Through the interface customer get to interact with the system.

IV. RESULT AND DISCUSSION

4.1 COMMUNICATION INFORMATION SYSTEM AS END-TO-END ENCRYPTION

All data flows through the internet from point to point. Hackers and governments usually get into this data by intercepting the connection. To avoid this, messages and files can be rendered in a code. Coding data, such as Whatsapp messages, is called encryption. To crack the code and unlock the encryption, you need a key. End-to-end encryption, as the name implies, leaves the key to the code at either end of a communication so that only the sender and receiver can ever crack it. In other words, messages sent by one person to another can only be seen by those two individuals. Everyone else, can still intercept the message but it will be nothing more than gibberish.

Algorithm of End-to-End encryption

There are two imaginary users – ENYIOMA and MADUBUEZI taking part within this end-to-end encrypted example communication flow.

There's an imaginary end-to-end encrypted app called 'ALGORITHM FOR END TO END ENCRPTION.



Figure 4.1

ALGORITHM FOR THE FLOW

1. MADUBUEZI registers with the 'Calculation FOR END TO END ENCRPTION application and consequently gets two keys:
 - 1.1 Public Key – this key is something MADUBUEZI can impart to individuals she needs to have the option to get secure scrambled messages from (this key is protected to impart to anybody)
 - 1.2 Private Key – this is a private key that MADUBUEZI ought not impart to anybody; it is utilized to unscramble messages MADUBUEZI gets (the messages encoded with the Public Key) and is put away locally on her gadget (just MADUBUEZI approaches this key)
2. MADUBUEZI adds ENYIOMA as her contact inside the 'Calculation FOR END TO END ENCRPTION application. The 'Calculation FOR END TO END ENCRPTION application consequently send ENYIOMA MADUBUEZI's Public Key after the companion demand was affirmed by ENYIOMA.
3. Being MADUBUEZI's contact, ENYIOMA makes an instant message which naturally gets encoded by 'Calculation FOR END TO END ENCRPTION application with MADUBUEZI's Public Key and is shipped off MADUBUEZI.
(Now the message ENYIOMA's sent is encoded and must be decoded with MADUBUEZI's Private Key)
4. MADUBUEZI gets the message sent by ENYIOMA and encoded with her Public Key.
5. The 'Calculation FOR END TO END ENCRPTION application consequently unscrambles ENYIOMA's message with MADUBUEZI's Private Key so MADUBUEZI can at long last peruse and get it.

The messages sent by MADUBUEZI to ENYIOMA are following a similar stream as

The framework was plan and executed utilizing the Python system with some other improvement language like bootstrap 4 for frontend. These applications after accumulation are tried utilizing a double center or more equipment framework and Operating System from Windows XP or more. This application comprise of three significant modules: the useful movement of the modules are coupled together to for local area data visit application worker and customer through attachment availability. The client make account through register connect, and approach the visit bunch for data trade. The login module is utilized for approach the application local area talk dashboard. The logout interface is utilized for sign-out of the visit bunch local area. This paper center around advancement of constant talking android application for information trade (Text) in an ongoing interaction. The constant visiting application expect client to enlist on the stage and login module permit client to approach the talk bunch. When a client the is enlisted, the client can talk (send and get message). The applications execute on a program and made noticeable on various client framework when runned on this host ip 0.0.0.0 and any port. This people group Information in an organization is quite possibly the main undertakings in network examination. The client's login after an appropriate record has been made, to the dashboard. In a huge scope organization, for example, an online informal community like twitter, Facebook and so forth, test text with a large number of hubs and edges. Data people group in such organizations turns into a titanic assignment. The following are screen captures:

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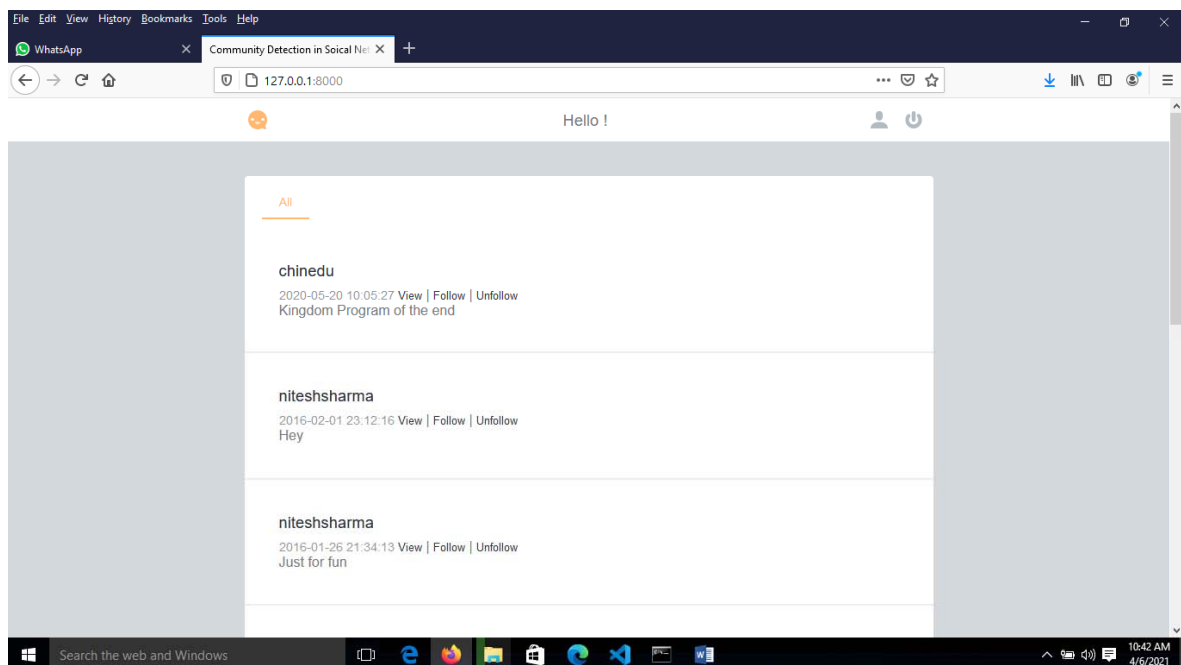


Figure 4.2 Communication Chat Board

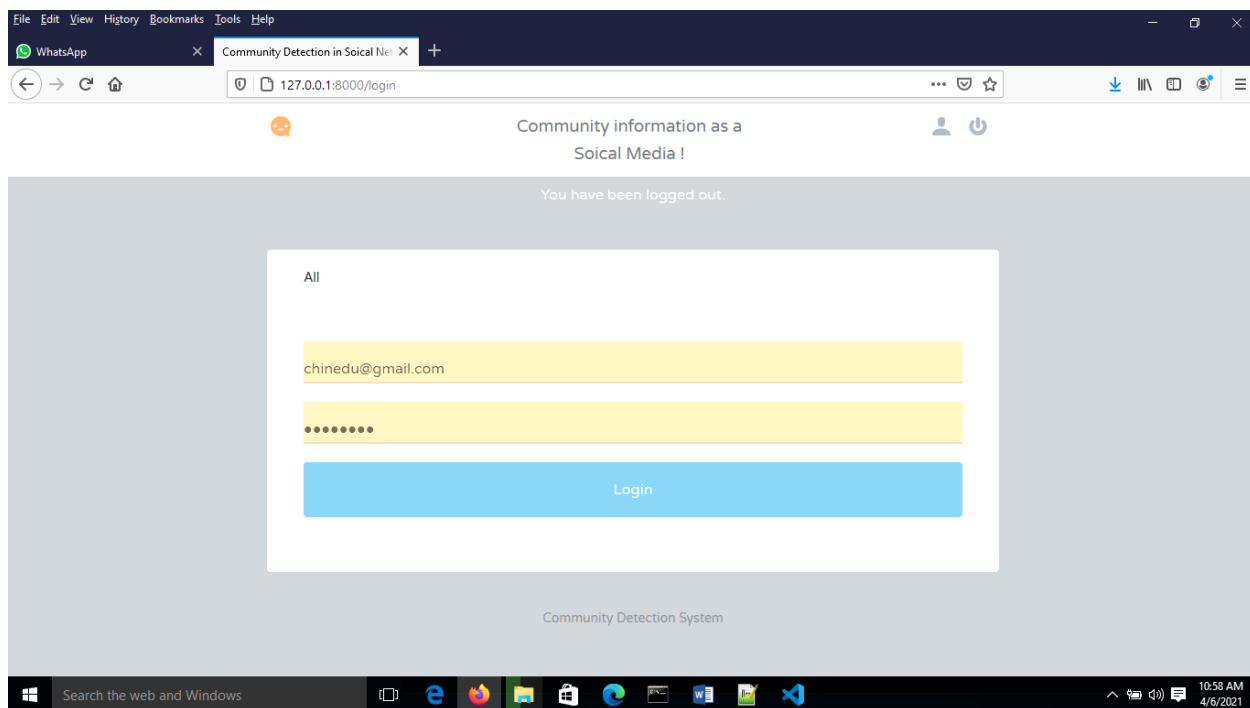


Figure 4.3 Community Login Page

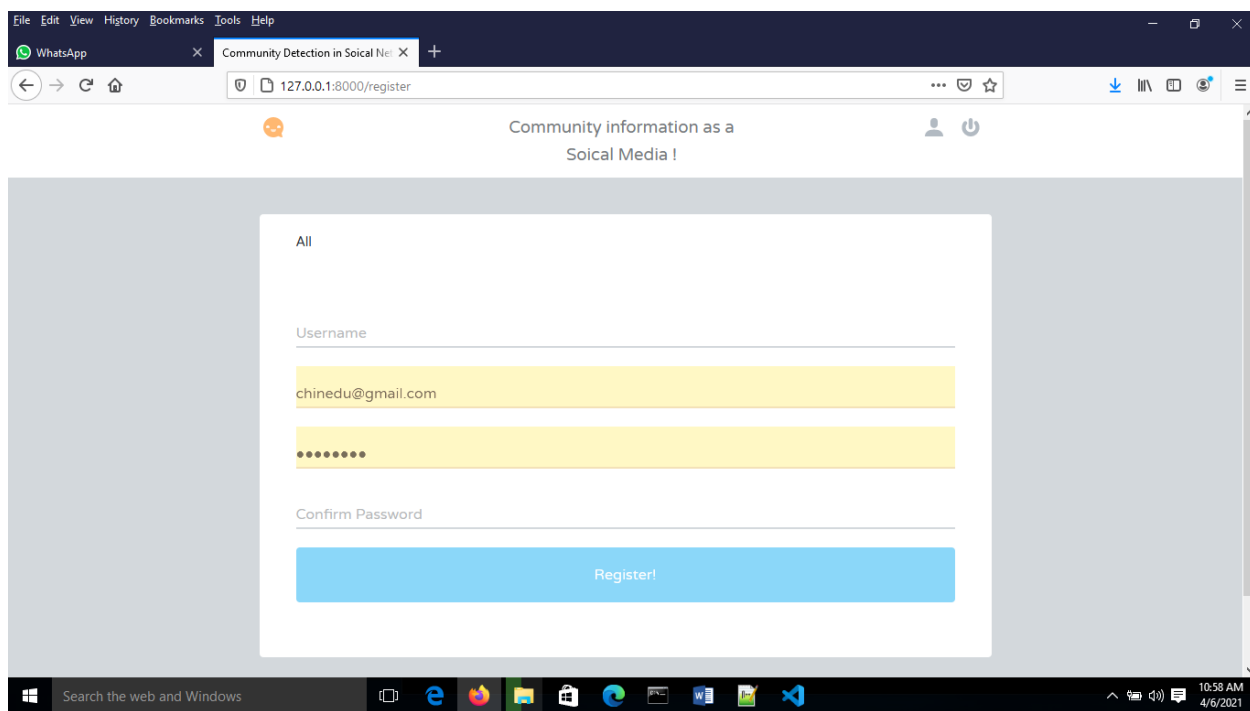


Figure 4.4 Community Registration Page

V. SUMMARY

The system was design and implemented using the Python framework with some other development language like bootstrap 4 for frontend. These applications after compilation are tested using a dual core or more hardware system and Operating System from Windows XP or more. This application consist of three major modules: the functional activity of the modules are coupled together to for community information chat application server and client through socket connectivity. The user create account via register

link, and have access to the chat group for information exchange. The login module is used for have access to the application community chat dashboard. The logout link is used for sign-out of the chat group community.

VI. RECOMMENDATIONS

This research work revealed a communication system that is cheap and affordable. This system is also operational with low power consumption at a limited distant. This system is recommended to be used by an organization trying to achieve intranet safe and lower cost communication platform.

VII. CONCLUSION

The system is ready to be used by any device available with enable Bluetooth technology and the android Bluetooth chat app. It runs under an android operating system platform as the host engine or machine. The can be functional with a lower powered mobile phone at a limited distance.

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