



## Tracking IP Address and Details of Unidentified Participants While Academic Sessions

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### ABSTRACT

On-line training is a platform of video recordings or lectures with route reading. they're normally performed using a digital portal via which college students gather reading materials, have interaction with instructors and classmates. after we observe pupil misbehaviors encountered at some stage in online guides [16], to become aware of the most not unusual and disruptive scholar or intruder misbehaviors from instructors' attitude and to put forth teachers' recommendations about right behaviors or block their participation thru IP trackback [7].IP Address is a protocol that allows information to transfer between devices on a network. In this paper, we identify the miscreants joined in the educational consultation and notify the info to the teacher by using tracing the IP address of the unidentified participant. among this newsletter mining could be very critical in on line academic periods. textual content mining additionally referred because the manner of deriving records from textual content. A on-line instructional platform provides precious consumer-generated information by publishing and sharing contents. Identifying malicious contents from big text-streams is a vital trouble in academics' due to the fact many users warfare with statistics overload. We recommend Lexical statistics analysis of textual content mining techniques with fuzzy [4] key-word match technique from machine getting to know procedures are used for solving this hassle. We develop a prototype gadget with Streaming a recorded video, pick out the unauthorized player from statistics, tracing the IP address of unauthorized individuals.

**Keywords:** IP address, Distance Learning, Fuzzy-Ranking, IP Blocking

## I. INTRODUCTION

When the COVID-19 epidemic broke out, online studying have become the new standard in institutions and classrooms all over the world arena have been compelled to shut their doorways. by means of 29 April, 2020, extra 1.2 billion youngsters throughout 186 nations had been influenced by using Closures of schools. After schools began to shift to emergency remote learning, it became evident that many students were no longer prepared for the full-time, virtual education that was now required. Parents and teachers in countries like the United States were concerned that pupils would fall behind academically if they did not have the technology required, which included laptops and a stable internet connection. what is extra, many instructional establishments did no longer have right cyber protection[11] measures in place, putting on-line lecture rooms at improved dangers of cyber attacks. it's miles essential to pick out the malicious contributors in digital magnificence rooms. Distance-Learning with different home than normal classroom settings where a schoolteacher has full control of their terrain. When sharing in online literacy in a virtual classroom, there have been numerous cases where virtual classrooms have been commandeered despite erected in-security features. From first grade to high academy, there have been adding incidents of hacking into colorful videotape conferencing platforms which oppressively disrupts the academy day in further ways than one. Ten's a list of redundant measures to take to insure that pupil and schoolteacher accounts are safe and continue productively distance literacy. The first step in guarding a virtual classroom is for each academy to produce and assign a Google account for each pupil. This can be done by using an dispatch and word handed by the academy to make sure each word is unique and defended. This helps preceptors to use the Google Meet staying room point and have full control over the specific accounts suitable to pierce that meeting.It's important to reiterate to scholars to noway partake their watchwords with musketeers to make sure security is maintained.

## II. LITERATURE SURVEY

### 2.1. Distance-Learning Vs Schooled

Many students treasure their academic knowledge and find it interesting. Students attend college to develop lifelong friends and gain a strong sense of responsibility and independence, in addition to working for a degree and a preferred career. However, many college students have been disrupted or even suspended as a result of recent events. With most schools closed for the rest of the year, college students have shifted their focus away from academics and onto visual arts classes or grades. Online learning has exploded among college students as a result of distance learning. However, as more students complete their coursework at home and engage in online activities, the demand for enhanced security grows.

### 2.2. Video Presentations

Many teachers and schools are using online video conferencing solutions to conduct practical courses as a result of the transition to distance learning. Many of these tools, on the other hand, have shown to be ineffective. Many users have been discovered to broadcast their meeting connections on social media platforms like as Twitter, as we've previously stated. This might allow an attacker to simply click on one of these links to insert unwanted content into an online conversation or group meeting. As a result, students may waste time that may

be better spent on their study. While some schools have outlawed the use of certain online conferencing programmes for reading grades, regardless of whether their school has set restrictions, it is critical that kids are regularly taught on the numerous safety issues associated with video lectures.

### **2.3. Home Networks and Connected Devices**

Many colleges and institutions have requested students to leave campus until the conclusion of the academic year. Out-of-school indicates that pupils may no longer have access to the campus's facilities and school networks. Although many students currently do their assignments on their personal devices, this predicament makes them the only alternative. Furthermore, for people who have made the move to working from home, the use of personal objects on home networks may pose a number of security risks. Students transition from workplace networks to setting up residential Wi-Fi, which is commonly vulnerable to crooks due to weak passwords. If a criminal acquires access to a student's home network, they can take advantage of additional Wi-Fi-connected devices.

### **2.4. Safeguard Your Online Class**

So, what can students do to ensure that the acceptance of grade readings does not obstruct their path to a degree? A smart place to start is by taking online safety seriously. Here are some suggestions for making home reading go as smoothly as possible.

### **2.5. Encrypted Online Conference Tool**

Is the video conferencing software you're thinking about employing encryption in the end? Only meeting participants will be able to decode encrypted conference content as a result of this. Also, study the privacy rules on the video conference programme list to determine which one is the most secure and matched to your needs.

### **2.6. Use VPN**

Use your VPN to send and receive data while encrypting or encrypting your data so that others cannot read it. VPNs also prohibit thieves from accessing other devices connected to your Wi-Fi network, which helps to safeguard your network [8].

### **2.7. Password Security.**

Take the effort to create different, more complicated passwords for your devices and home network [14]. Many users, notably students, use the same or a similar password across many accounts. This means that if a criminal acquires just one password, his entire personal information is suddenly exposed. As a result, splitting your passwords is critical to ensuring that cyber crooks cannot obtain access to all of your accounts at once if a single password error is compromised. You can also use a password manager to keep track of your data.

### **2.8. Activate two-factor authentication or multi-factor authentication.**

Because it involves several authentication methods, two or more authentication adds an extra degree of protection. This decreases the danger of hackers impersonating you. As you practise reading at home, you may consider downloading a number of online resources to assist with the transition. Do your study and examine potential security dangers or known threats before downloading the first tools you encounter.

### **2.9. Proposed Method**

Our technology offerings are a sentiment leaning framework (LDA) as a convex development problem that collectively enhances content error name, and user content is considered  $P / N$  using positive and negative

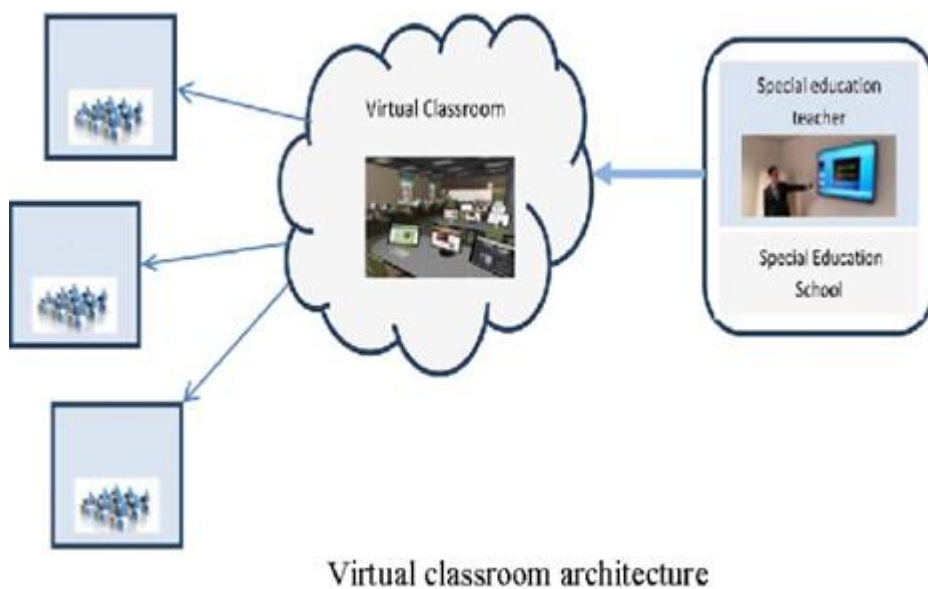
ratings. We use Lexical abstract analysis [9] and member vessel abstract functions in identifying content posted as W or B, and based on this we predict that bad guys join educational moments.

Our approach only requires a steady stream of content, calculated scores have a simple definition of "rating," that is, a score is the average amount of positive / negative that is expressed when sending participants. An incomprehensible keyword matching method used for the dice coefficient method. Used to calculate similarities between content and two dictionaries. Threshold is used to determine whether the content is good or negative depending on the degree of similarity. Posted content is therefore categorized as P / N. helps the system detect and block the ipaddress of unauthorized participants.

Benefits of the Proposed Program:

- No follower is required to predict.
- Predicting whether content is good or bad.n
- Identify an unauthorized participant from the data
- Tracking the IP address of unauthorized participants
- Discover the details of the unauthorized person

### III. ARCHITECTURE DIAGRAM



#### 3.1 Contributions

##### Our Contribution:

There are kids who always raise their hands to participate and others who are hesitant to participate in every class. It can be tough to attract children into talks who are too sluggish to offer their own words, whether they are inexperienced, think for a long time before donating, or are having a terrible day. Many teachers have told us that reading is important. Digital forums can add to communication hurdles by making it difficult to know when to talk, or how to acquire small but vital parts of speech like body language and facial expressions.

Furthermore, because of students' access to technology and privacy issues, many teachers have had to rely on sending students work via private channels such as email, which can result in back and forth between classmates (and between students and teachers) along the route. It turns out that getting youngsters to participate in visual classes takes some effort. "We keep referring to this generation as digital natives, as if they were merely talking about how computers work." "They aren't," Tim O'Brien remarked on Facebook. "They require individual assistance, scaffolding, and comfort that technology cannot supply." It is merely a tool and not a teacher." We posted fantastic comments on social media and followed up with more than 20 instructors to see how they handled the challenge last spring to find out how you can boost student dialogues and participate in online learning. This fall, teachers have devised a number of ingenious, both harmonic and harmonious techniques to include the values and words of all students — even the most silent or those with a skewed schedule — into their classrooms.

### **1. Spider web chat:**

Students from Shai Klima High School led their own Google Meet sessions during a distance study this spring. Students solved questions independently before the live class, then shared their responses at the start of the session as the starting point for a larger class discussion. Klima listened and drew lines on the tracking paper while the students discussed the film. a spider web formed by the flow of dialogue Klima showed the students a graphic of the video at the end of the interview and asked them to think on what was going on and what they had learned about who was speaking, listening, and building on others' ideas. "It means that kids borrow from their peers to help them come up with fresh ideas, which helps them create relationships," adds Klima, who allows difficult students to attend meetings.

### **2. Using dialogue to test comprehension:**

Paul France said his third-grade students used the Google Chat tool after a lecture last spring to ask and answer questions or type emoji, such as pointing up or pounding down, to signify if they grasped a concept. She instructed her students to utilise the dialogue tool to form patterns around their responses, such as deciding as a group to use only one emoji at a time. France claimed the technique helped her assess her pupils' comprehension and encouraged them to connect more deeply with the material.

On the other hand, kindergarten teacher Ruth Calkins used Zoom chat to conduct live lessons with her kids. They enjoyed typing "T" or "F" to find true or false questions while completing mathematical problems in the dialogue box, he claimed, and some even attempted to create phrases in response to his queries. His younger students gained a lot of keyboard experience by typing comments.

### **3. To encourage deeper discussion, flip your classroom:**

A combination of erratic and consistent instructions, according to Forrest Hinton, a high school math teacher, works effectively to generate student dialogue during remote learning. Students were divided into living rooms to tackle difficulties connected to small groups at the start of her live session, where they briefly summarised the topics they had studied together. Exploring her classroom allowed Hinton to spend less time in direct instruction — and listening to students at the beginning of the class and in small groups helped her see, and speak, when her students were struggling. "This has allowed me to clarify ideas in a more targeted way and better help students," Hinton said.

## 3.2 RELATED WORKS

The American Power Grid Association has expressed optimism for future developments in Internet of Things objects based on the concept of the Internet of Things [3]. The International Telecommunication Union expanded the concept of the Internet of Things in 2005, warning of the coming Internet of Things age. The Internet of Things era allows massive amounts of data to be shared between devices via network transfers. The Internet of Things can be applied to every part of our lives, including employment and education. For example, in the case of visual courses, the Internet of Things proposes novel visual classroom solutions using middleware, network service technologies, and event-based sensors [4]. To communicate with smart gadgets, Abu-Sharkh et al. rely on a broadband network [5].

In a flexible classroom learning environment, Tiwari et al. deploy sensor network applications and intelligent control systems to conserve additional power of virtual classroom learning machines [6]. Technology for visual home schooling was introduced late. Some top cities have been exploring digital classroom programmes and introducing virtual classroom education technologies with the notion of digital visual classrooms since the 1990s, with the cooperation of national government entities. However, personal computer technology was far behind at the time. As a demonstration project, a system that uses digital visual classes has only made automatic control easier, and there was still a long way to go before digital visual classes could be used. However, the telephone network was the sole apparent interface of the home network at the time, according to the technology platform, and related digital technologies were thoroughly studied based on the telephone network [7]. Raes et al. investigate visual classroom technology by learning how to control the house gate [8]. The development of a virtual learning classroom integrated with online gateways and servers, according to Radovan and Kristl; the notion of Internet of Things has been formally mentioned in China [9]. Although we started late, Yilmaz claims that the visible class's contemporary technology in family education is developing at a breakneck speed [10].

### 3.2.1. Internet of Things

The Internet of Things program is very complex. It includes various applications such as electronics, communications, computers, and agronomy. By using IoT technology for data collection and reception, reliable transmission, intelligent processing, automatic control, etc., various production and transmission links can be established. Expect complete tracking [11, 12]. However, if the network location is different, communication systems may not be fully compatible. Traditional wireless networks include mobile and wireless LAN networks. These network communications systems are intended for point-to-point or multi-point-to-point transmissions and have high communication objectives and countermeasures [13].

### 3.2.2. IoT Architecture

The current IoT system models are not general and lack a comprehensive system structure. When designing an IoT system, take into account network performance factors including measurement, usability, and security. It is required to outline the findings of the Internet of Things research as well as the theory behind wireless network architectural models. The fundamental premise for designing and ensuring the formation of the Internet of Things remains to imitate the realities of the Internet of Things, which should be integrated with existing examples of online Objects of Things Summary and Improvements, in order to understand the direction of Internet of Things development. Finally, for various types of storage devices, acceptable parameters,

application technologies, and appropriate standard definitions must be considered [14, 15], as well as a specific plan for user needs and the implementation of their functions. The Internet of Things programme is separated into viewpoint layer, network layer, and application layer, according to a number of research discoveries both at home and abroad.

### **3.2.3. Visual Layer**

Background to see the Internet-of-Things' most basic structure. During data transit to multiple networks, these are employed for node analysis, processing, automated management, and data gathering [16, 17]. The majority of changes in local knowledge are continuous and replicated. The information on the network is vastly different, yet different forms of sensory equipment are required to analyse the various types of data retrieved [18], in order to access and retrieve data and give solid production and guiding support.

### **3.2.4. Transport Layout**

The Internet of Things layer serves as a link between the visual and application levels. The essential data gathered at the visual level is wirelessly communicated to the terminal device. IEEE802.3-based Ethernet transmission technology, IEEE802.11-based Wi-Fi transfer technology, IEEE802.15.1xFoundation-based Bluetooth transfer technology, ZigBee-based transmission technology IEEE802.15.4, as well as 6Lan multi transmission technology and 6Low transmission technology mobile transfer technology, such as GSM, GPRS, and 3G, based on IEEE802.16, Mi MAX transfer technology, and so on are all commonly used. Ethernet based on 802.3 and Wi-Fi based on 802.11 are both IP-based network connections, and Ethernet based on 802.3 is the most frequently used communication technology and multilayer structure in IP protocol architecture. It can be used in conjunction with other communication agreements and for Building Materials [19, 20].

### **3.2.5. Application Layer**

Analyze data sent over the network layer and submit the findings of the algorithm analysis across several systems [21], making it easier for end users to operate and use things like production, management, and storage. The application layer is the most external layer of the three-phase Internet of Things, and its primary function is data processing, which is accomplished through the usage of cloud computing platforms. The most significant cores of the Internet of Things are the application layer and low resolution cores. They have distinctive traits [22]. To establish real-time data management, management, and processing scientific judgement, an application layer must perform statistics, processing, and application of in-depth information on the notion of data gathering.

### **3.2.6. Internet of Things-based virtual classroom process**

Different items in the physical world are removed as processes in the Internet of Things, while relationships between different objects are removed as connections between processes. The Internet of Things [23] allows for precise monitoring of real-world relationship networks. An Internet of Things is often built in one of two ways: top-down or bottom-up [24, 25]. The top-down technique is an ontology-based construction method that takes high-quality encyclopaedias and other websites as data sources, removes impediments and ontology rules from them, and adds to the knowledge base, all while keeping construction simple. Identify businesses, traits, and relationships using data gathered through pattern recognition, policy formulation, and other methods. Add it to the flowchart after that.

**3.3 Algorithm:**

INPUT : U&lt;- User

OUTPUT: R&lt;- Result

BEGIN

Step 1: U register and login -&gt;VCR

Step 2: U post content -&gt;VCR

Step 3: forward content -&gt;SA

 $SA = (\text{Count of positive words} / (\text{Count of negative words} + 1))$ 

Step 4: WC forward weights -&gt;SA

 $TP = (TP/TP+FN)$  $FN=(FN/FN+TP)$ 

Step 5: SA classify

Step 6: WC extracting P/N :: SA

Step 7: SA find similarity matrix from U

Step 8: VCR predicts U as Authorised / Unauthorised

Step 9:VCR Blocks IP

Step 10: Notify the Followers

END

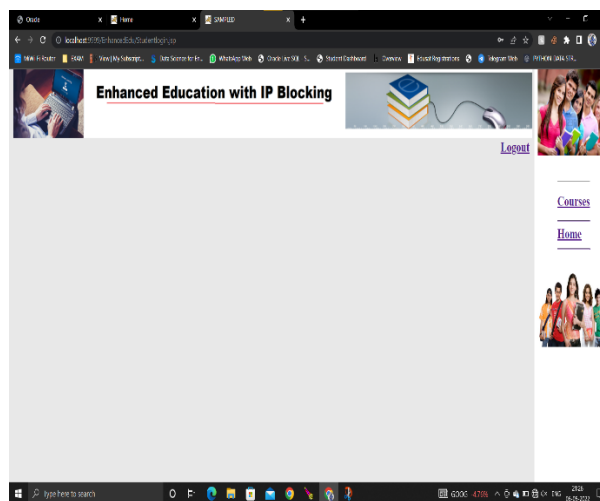
**IV. RESULTS**

Fig 1:HOME page



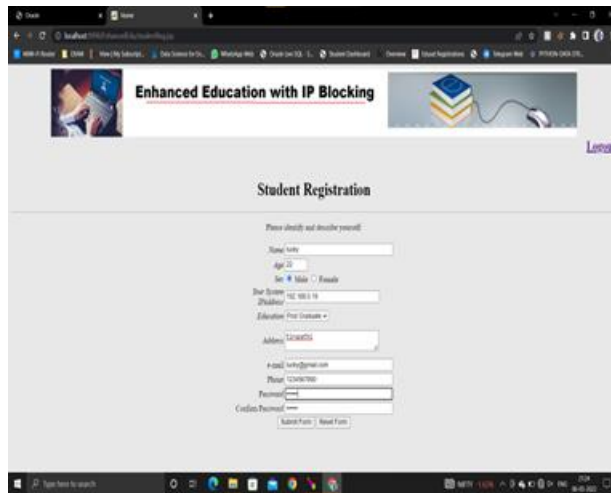


Fig 2: Student Registration

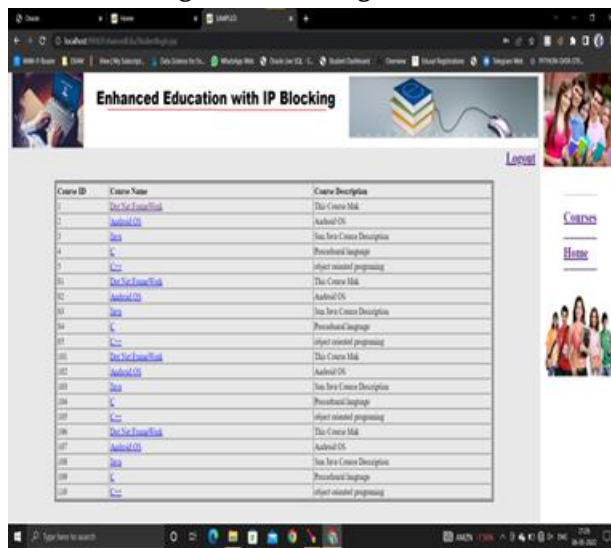


Fig3 :List of courses

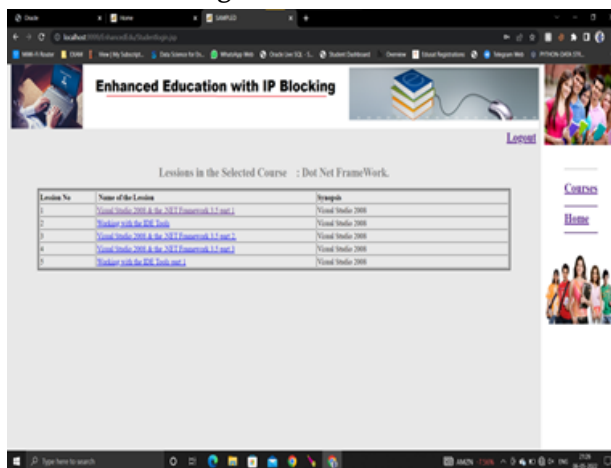


Fig4:List of available lectures

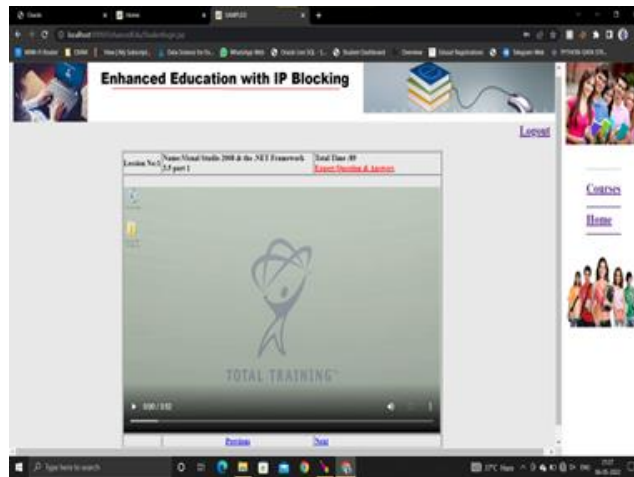


Fig 5:Course Vedio Player

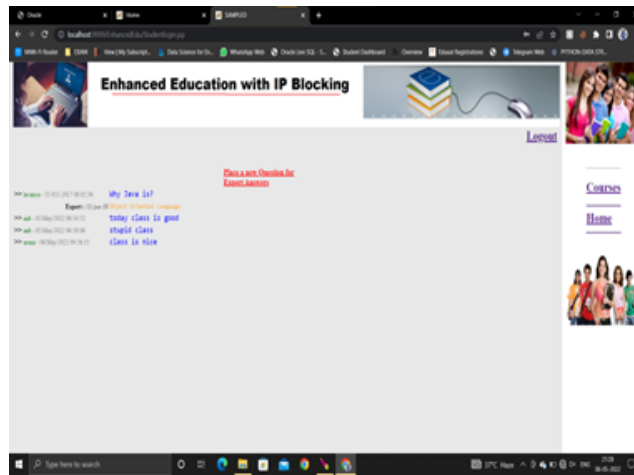


Fig 6:Expert Questions

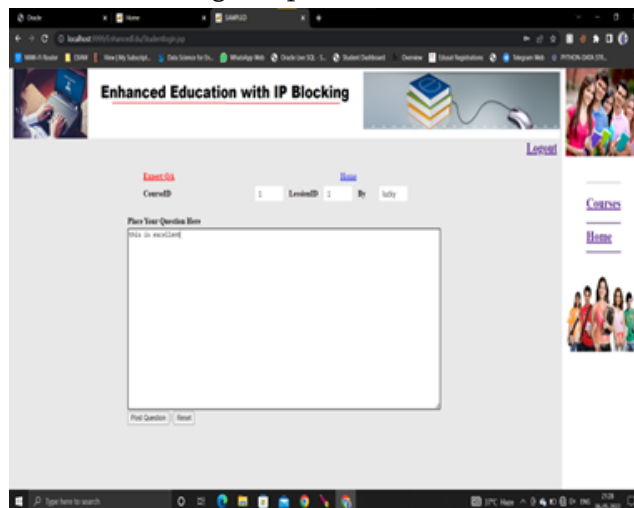


Fig 7:ChatBox



Fig8:Admin view of chatbox

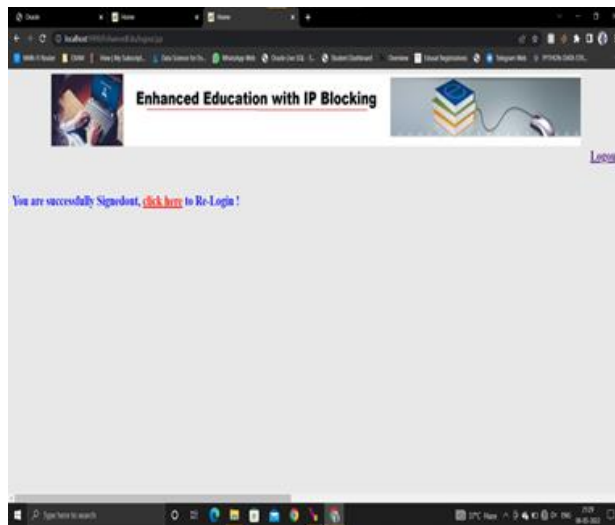


Fig9:Student redirect to logout



Fig 10 :Login page Page after IP blocking

## V. CONCLUSION & FUTURE WORK

Different scripting methods are used to identify the target audience in the following list. The account owner's tweets to the component follower will help the account holder to use the resources more efficiently by posting the offer to the appropriate user. It is interesting to note that those who tweeted the same content may have been more pleased with the tweets of the account holders at the time. In a comparative analysis the Fuzzy keyword matching method has created a good flexibility in identifying a high number of targeted audiences. Our system can also be extended to other OSNs via retrieval methods such as retweets, such as Facebook and YouTube which works as "preferences".

## VI. REFERENCES

- [1]. Priyanka S. Kedar, Vrunda Bhusari, "Using PBKDF2 Pair & Hybrid technique for Authentication", International Journal of Emerging Research in Management & Technology (ISSN) 2278-9359, Volume-3, Issue-5, May 2014.
- [2]. M Shashi, M Anirudh, MD Sultan Ahamer, V Manoj Kumar, "Authentication Schemes for Session Password using colors and Images", International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.3, May 2011.
- [3]. Priti Jadhao, Lalit Dole, "Survey on Authentication Password Techniques", International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-3, Issue-2, May 2013.
- [4]. Z. Zheng, X. Liu, L. Yin, Z. Liu "A Hybrid fuzzy based text classification", Journal of Computers, vol.5, no.5 May 2010.
- [5]. D.Aruna Kumari, Design, Implementation of Network Based Authentication Mechanisms, Advances in Information Technology and Management, vol.1, no.2, pp.44-48, 2012.
- [6]. H. Zhao and X. Li, "S3PAS: A Scalable ShoulderSurfing Resistant Textual-Graphical Password Authentication Scheme," in 21st International Conference on Advanced Information Networking and Applications Workshops (AINAW 07), vol. 2. Canada, 2007, pp. 467-472.
- [7]. M Sreelatha, M Shashi, M Anirudh, MD Sultan Ahamer, V Manoj Kumar "Advanced and Authenticated Marking Schemes for IP Traceback (IJNSA), Vol.3, No.3, May2011
- [8]. D. Aruna Kumari, Design, Implementation of Network Based Authentication Mechanisms, Advances in Information Technology and Management, vol.1, no.2, pp.44-48, 2012.
- [9]. S.Balaji, Lakshmi.A, V.Revanth, M.Saragini, V.Venkateswara Reddy "Research on the Platform of Online Education Platform " Advances in Information Technology and Management Vol. 1, No. 2, 2012.
- [10]. Adams and M. A. Sasse, "Users are not the enemy: why users compromise computer security mechanisms and how to take remedial measures," Communications of the ACM, vol. 42 pp. 41-46, 1999.
- [11].L. Sabrado and J. C. Birget, "Authenticate passwords", The Rutgers Scholar, An Electronic Bulletin for Undergraduate Research, vol 4, 2002.
- [12].L. D. Paulson, "Taking a Graphical Approach to the Password," Computer, vol. 35, pp. 19, 2002.

- [13].Jean-Camille Birget, Dawei Hong and Nasir Memon, "Passwords Based on Robust Discretization", IEEE Transactions on Information Forensics and Security, Vol. 1, No.3, September 2006.
- [14].L. Y. Por and X. T. Lim, "Multi-Grid background Pass-Go". WSEAS Transactions on Information Science and Applications, Issue 7, Volume 5, July 2008.
- [15].Li, L. Zhu, M. Shen, F. Gao, X. Tao, and S. Liu, "Blockchain- based data preservation system for medical data," J. Med. Syst., vol. 42, no. 8. p. 141, Aug. 2018.
- [16].H. Wang and Y. Song, "Teacher views on students misbehaviors during Online courses," J. Med. Syst., vol. 42, no. 8. p. 152, Aug. 2018.
- [17].Y. Miao, J. Ma. Q. Jiang. X. Li, and A. K. Sangaiah, "Verifiable keyword search over encrypted cloud data in smart city," Comput. Electr.Eng., vol. 65, pp. 90- 101, Jan. 2018.
- [18].Davanam, Ganesh, T. Pavan Kumar, and M. Sunil Kumar. "Novel Defense Framework for Cross-layer Attacks in Cognitive Radio Networks." In International Conference on Intelligent and Smart Computing in Data Analytics, pp. 23-33. Springer, Singapore, 2021.
- [19].Thummala Pavan Kumar, and Malchi Sunil Kumar. "Optimised Levenshtein centroid cross-layer defence for multi-hop cognitive radio networks." IET Communications 15.2 (2021): 245-256.
- [20].Kumar, T.P. and Kumar, M.S., 2020. A Dynamic and adaptive learning mechanism to reduce cross layer attacks in cognitive networks. Materials Today: Proceedings.
- [21].Davanam, Ganesh, T. Pavan Kumar, and M. Sunil Kumar. "Efficient energy management for reducing cross layer attacks in cognitive radio networks." Journal of Green Engineering 11 (2021): 1412-1426.
- [22].Ganesh Davanam, T Pavan Kumar, M Sunil Kumar, "Multiple Nash Reputation Cross Layer Classification Framework for Cognitive Networks", Journal Of Mechanics Of Continua And Mathematical Sciences, Vol.- 15, No.-8, August (2020) pp 355-367.
- [23].Yashasree, G., Pavan, M., Bindu, K. (2021). Applications of Artificial Intelligence Techniques for Cognitive Networks. In: Goyal, D., Chaturvedi, P., Nagar, A.K., Purohit, S. (eds) Proceedings of Second International Conference on Smart Energy and Communication. Algorithms for Intelligent Systems. Springer, Singapore. [https://doi.org/10.1007/978-981-15-6707-0\\_25](https://doi.org/10.1007/978-981-15-6707-0_25).
- [24].Ganesh, D., Sunil Kumar, M., Rama Prasad, V.V. (2017). Mutual Trust Relationship Against Sybil Attack in P2P E-commerce. In: Saini, H., Sayal, R., Rawat, S. (eds) Innovations in Computer Science and Engineering. Lecture Notes in Networks and Systems, vol 8. Springer, Singapore. [https://doi.org/10.1007/978-981-10-3818-1\\_18](https://doi.org/10.1007/978-981-10-3818-1_18)
- [25].Sangamithra, B., P. Neelima, and M. Sunil Kumar. "A memetic algorithm for multi objective vehicle routing problem with time windows." In 2017 IEEE International Conference on Electrical, Instrumentation and Communication Engineering (ICEICE), pp. 1-8. IEEE, 2017.