

JSPM's
Jayawantrao Sawant College of Engineering, Pune
DEPARTMENT OF COMPUTER ENGINEERING
Cyber Security Club

About Club:

The Cyber Security Club provides a platform for students to explore and innovate in network security, ethical hacking, digital forensics, and cyber threat intelligence. It fosters collaboration across disciplines to address real-world security challenges through workshops, CTF competitions, penetration testing, and awareness programs.

With guidance from faculty, industry experts, and alumni, students enhance their skills for placements, research, and cyber security careers. The club encourages participation in hackathons, research projects, and open-source contributions, promoting innovation, awareness, and hands-on learning in cybers ecurity.

Coordinators

Sr. No	Name	Role
1	Prof. Swati Salunkhe	Faculty Coordinator
2.	Atharv Nikude	Student Coordinator

Club Members:

Taniya Jagtap [B.E]
Sanika Solapure [B.E]
Akash Sulgekar [B.E]
Vishal Zalake [T.E]
Bhakti Bhole [T.E]
Kalyani Patel [T.E]
Radhey Bildikar [T.E]
Fizza Sheikh [S.E]
Nakul Sali [S.E]
Darshan Walher [S.E]
Ajinkya Thorat [S.E]
Dev Zende [S.E]
Pratik Harde [S.E]

Team Photo



Objectives:


1. Develop hands-on skills in ethical hacking, network security, and digital forensics.
2. Promote research, innovation, and participation in cybersecurity competitions.
3. Conduct workshops and awareness programs on cyber threats.
4. Connect students with industry experts, alumni, and faculty mentors.
5. Enhance career opportunities through certifications and internships.
6. Encourage interdisciplinary collaboration on real-world security challenges.
7. Build a strong community for knowledge sharing and open-source contributions.

Activities:

- Workshop on cyber ethics and legal practices
- Expert Talk on recent technologies
- Monthly club Seminars
- CTF competitions


Projects developed by Club

1. Secure Cypher text encryption and decryption algorithm
2. NMap: the Network scanner
3. Secure certificate generation and validation system



JSPM'S JAYAWANTRAO SAWANT COLLEGE OF ENGINEERING

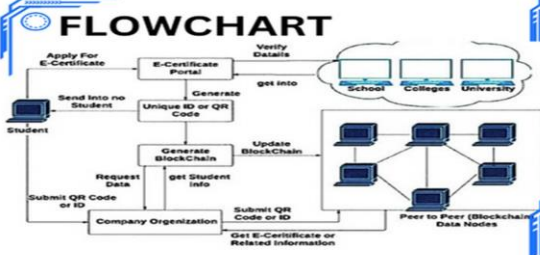
ONLINE CERTIFICATE GENERATION & VALIDATION SYSTEM



ABSTRACT

The problem statement involves creating an online system that uses blockchain technology to securely generate and validate certificates. This system ensures the authenticity and integrity of certificates, provides a user-friendly interface, and leverages decentralized blockchain networks for enhanced security and accessibility.

FLOWCHART




CONCLUSION

- Blockchain ensures data security through its decentralized, tamper-resistant ledger.
- Certificate forgery risks are reduced in a blockchain-based system.
- The process of applying for and granting certificates is transparent.
- Companies can easily verify certificate information.
- The system guarantees data accuracy and security.

MOTIVE

- Global accessibility
- Enhanced security
- Comprehensive verification
- Easy detection of fake certificates
- Streamlined processes for multiple stakeholders



BLOCKCHAIN

APPLICATION

- Academic credentials verification
- Supply chain transparency
- Secure identity verification
- Financial document authentication
- Healthcare record privacy and accuracy

PRABANDH : "STRENGTHENING THE AID CHAIN "

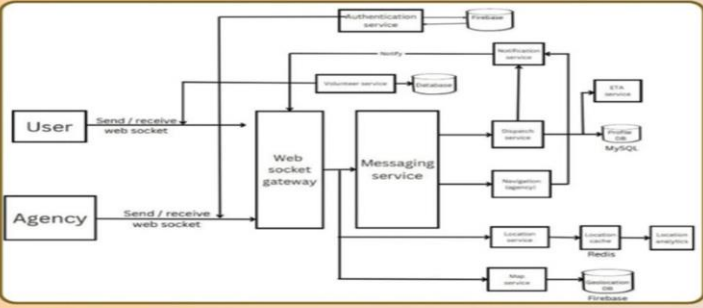
Abstract

Natural calamities, disasters and accidents are some of the greatest challenges we confront. Traditional disaster response relies heavily on human input and coordination, which often results in delayed response times. Introducing "Prabandh", our solution streamlines disaster response by developing a centralized application for rescue agencies. They can register location and expertise in a secure database. A user-friendly map interface with advanced filters aids discovery. Real-time messaging and resource sharing enhance collaboration. Security, scalability, and user training are priorities to ensure efficient disaster coordination. "Prabandh" ensures better coordination and collaboration among agencies, timely and effective response and sharing vital information.

Objectives:

Our objective is to overcome following :

- Inefficient coordination among agencies and stakeholders
- Delays in providing aid to those affected
- Limited access and communication



Existing system:

- The outreach of 33 freely available disaster-related mobile apps in India is "very limited" with most of them being educational.
- Today, the country has a wide range of institutions related to disaster monitoring and forecasting, which have enhanced disaster management activities. However, one of the biggest drawbacks in managing the disasters in India as identified by the Ministry of Home Affairs is the lack of data availability.
- The key shortcomings that are limiting the large-scale use of disaster-related apps are bad application interlack of inclusivity and communication infrastructure and absence of routine communication channels.

Methodologies:

- Hybrid algorithm for shortest distance travel.
- Geofencing for sending alerts and notification to nearby agencies.
- General Packet Radio Service(GPRS) critical connectivity in areas with weak network.

Proposed system:

PRABANDH , a centralized application that allows rescue agencies to coordinate their efforts and provide aid more effectively for responding to natural or man-made disasters. It is a platform where all rescue agencies can register their information which is displayed through map. Involves features for communication and collaboration like sending or receiving alerts or requests for assistance to each other directly through the application, or collaborate on shared resources such as medical equipment or transportation.

Conclusion

- Disaster management app enhances preparedness, response, and recovery efforts.
- User-friendly interface for easy navigation and accessibility.
- Provides real-time information updates during crises.
- Integrated communication features for swift coordination.

Major Achievements and Awards

Sr no	Name of Competition	Prizes/ Awards
1	Great Appsec Hackathon 2024	Selected for the Final round
2	Avishkar hackathon	Two teams selected from club

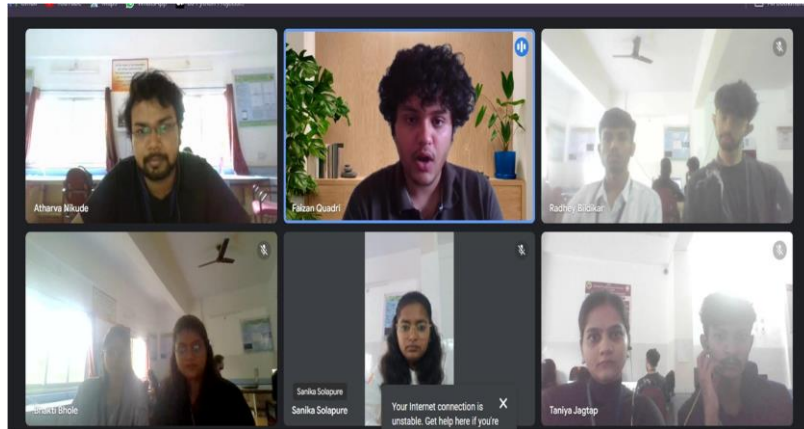
Activities under Club:



An Expert Talk on the Cyber Security Club

2. Seminar on Career Guidance and Development in Cyber Security

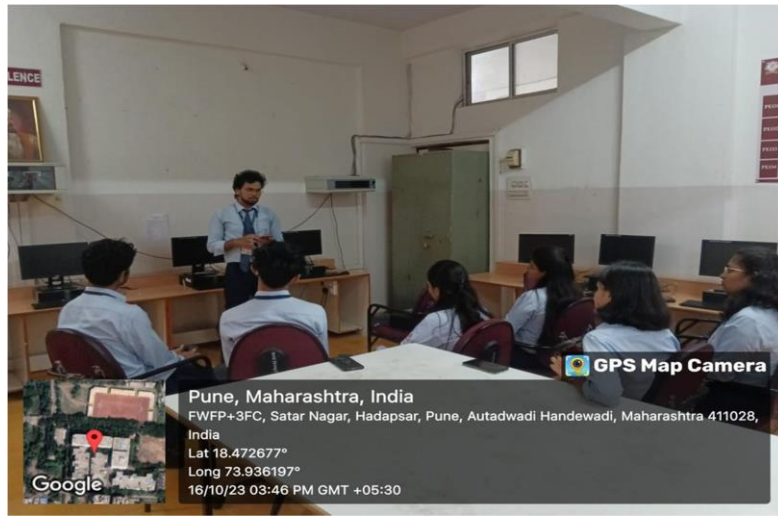
Speaker: Faizan Quadri, Alumnus and Former Senior Member of the Cyber Security Club, JSCOE.



3. Security Boat - Meet Up



4. Monthly Club Seminars



5. Making Network With Professionals



Club Members making Network with Professionals

4. Expert talk on ““Cyber Shield - Securing Tomorrow today”



2. Club Collaboration with Befojji OpSec NGO



URVESH THAKKAR President BEFOJJI OPSEC