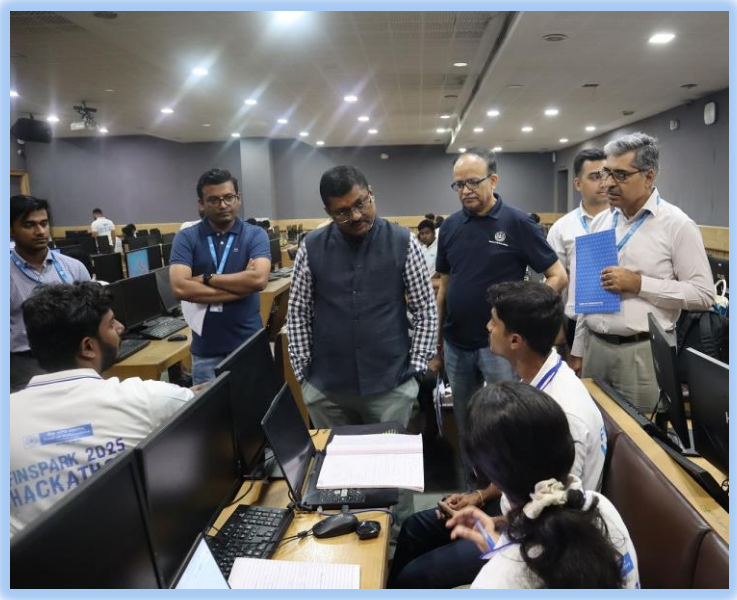
बैंक ऑफ महाराष्ट्र
Bank of Maharashtra
भारत सरकार का उद्यम

FINSPARK 2025 HACKATHON



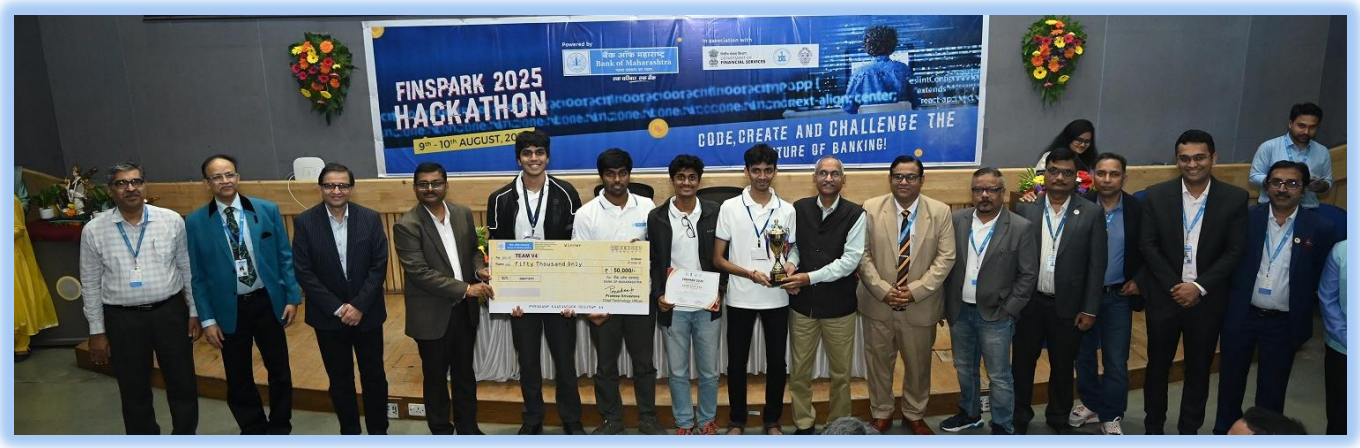
Overview of the Problem Statement and Relevance to Banking/Fintech

As part of the Government of India's vision to promote innovation in financial services, the Department of Financial Services (DFS) and the Indian Banks' Association (IBA) directed Public Sector Banks to organize hackathons in collaboration with premier institutions. Bank of Maharashtra partnered with COEP Technological University, Pune, to conduct FINSPARK 2025, a two-day hackathon held on 9 & 10 August 2025. The event showcased the synergy between academia, banking, and technology partners including TCS, etc. setting a template for future collaborations.

Problem Statements: In line with the directions of DFS & IBA and the ever-changing need of the Banking industry, the following problem statements were identified for the Hackathon:

Sub Area	Problem Statement	Problem /Background	Challenge	Impact / Outcome
Cyber security	Automated Log Analysis for	Banks generates massive volumes of logs from various sources like firewalls, servers,	Develop an automated log analysis system that uses machine	Early detection of cyber threats with minimal false positives

	Threat Detection.	applications, end user devices etc. Traditional log monitoring systems, which rely on rule-based analysis, often fail to detect sophisticated attacks or anomalous patterns not previously seen. As a result, critical incidents might go unnoticed, leading to severe security breaches.	learning and data analytics to detect security anomalies, generate real-time alerts, and support proactive threat management. The system should be capable of analysing vast amounts of log data efficiently while minimizing false positives.	Improved visibility into suspicious activities across the organization. Automated alerts and early response mechanisms to reduce reaction time.
Fintech	Bridging the Language Gap in Indian Banking	India a diverse country with numerous regional languages, the lack of language support in digital banking platforms restricts financial inclusion. A large portion of the population is more comfortable using native languages rather than English for banking interactions. Addressing this gap can significantly enhance digital literacy and banking accessibility	Design a multilingual, end user friendly banking platform that offers seamless communication for users speaking different Indian languages. The solution should ensure smooth interaction through both voice and text interfaces, catering to users with limited digital literacy.	Increased accessibility for non-English speakers. Enhanced customer satisfaction through personalized language support. Strengthened financial inclusion, especially in rural and semi-urban areas.



Winning Solution: Automated Log Analysis and Threat Detection System (ALATDS)

The first prize was awarded to Team V4 for their solution ALATDS. Their prototype, ALATDS, was designed as a lightweight, machine-learning augmented log analysis pipeline capable of mimicking real-world Security Operations Center (SOC) practices.

Key Features:

- Real-time log ingestion and categorization for modular analysis.
- Log-type-specific ML models (covering employee logs, server logs, NetFlow, and Windows event logs).
- Anomaly detection engine with autoencoder neural networks and statistical algorithms.
- Threat scoring system with classification into Low, Medium, High, and Critical levels.
- Correlation engine that links multiple anomalies into a chain of events for root cause analysis.
- Centralized dashboard and UI offering intuitive monitoring, raw log access, and alert investigation workflows.
- Scalable architecture leveraging system for efficient retrieval.

This innovation not only enhances early threat detection but also minimizes the need for static rule-based detection, improving the efficiency of SOC in banks and financial institutions.

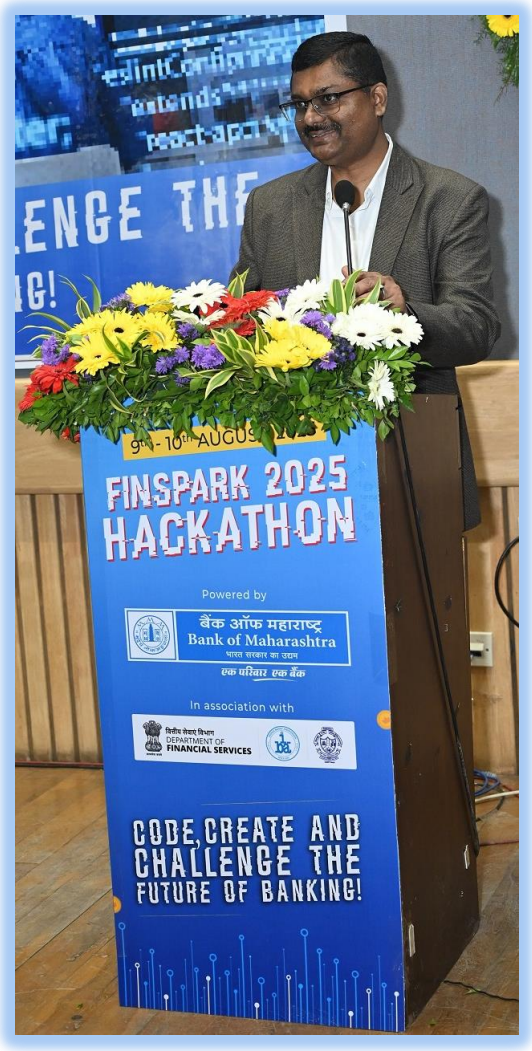
The Teams' Journey Through the Hackathon

The hackathon attracted over 40+ team registrations, with 20 shortlisted teams and 16 teams competing on campus. The journey included:

- Inauguration Ceremony graced by senior dignitaries from Bank of Maharashtra, TCS, and COEP.
- 36 hours of non-stop coding where students collaborated intensively.
- Mentorship from Bank executives and industry leaders providing real-world insights.
- Multiple evaluation rounds assessing innovation, functionality, scalability, code quality, and impact.
- Final Valedictory Ceremony chaired by **Mr. Asheesh Pandey (ED, Bank of Maharashtra)** and **Prof. Sunil Bhirud (Vice Chancellor, COEP Technological University)**.

Bank of Maharashtra played a central role in:

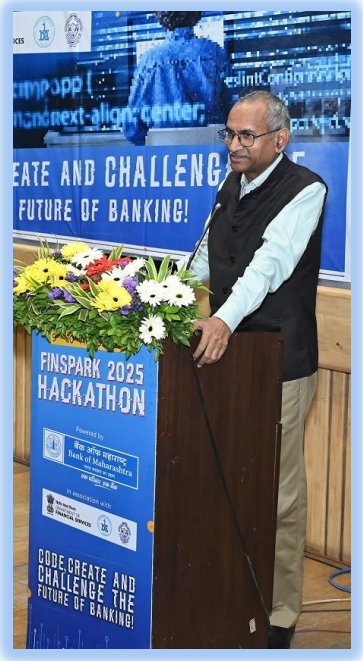
- Problem Statement Design – ensuring the challenges were rooted in real-world banking and cybersecurity issues.
- Knowledge Transfer Sessions – equipping students with domain knowledge prior to the hackathon.
- Mentorship – senior officers and technocrats, including the CTO, CDO, GM Digital Transformation and CISO, guided participants with industry insights & technical feedback.
- Evaluation – Bank executives served on the jury alongside industry experts from TCS and GoDaddy.
- Resource Support – ensuring seamless event management in collaboration with COEP.



This active involvement reinforced the Bank's commitment to fostering innovation and bridging academia with the financial sector.

Outcomes, Learnings, and Future Plans

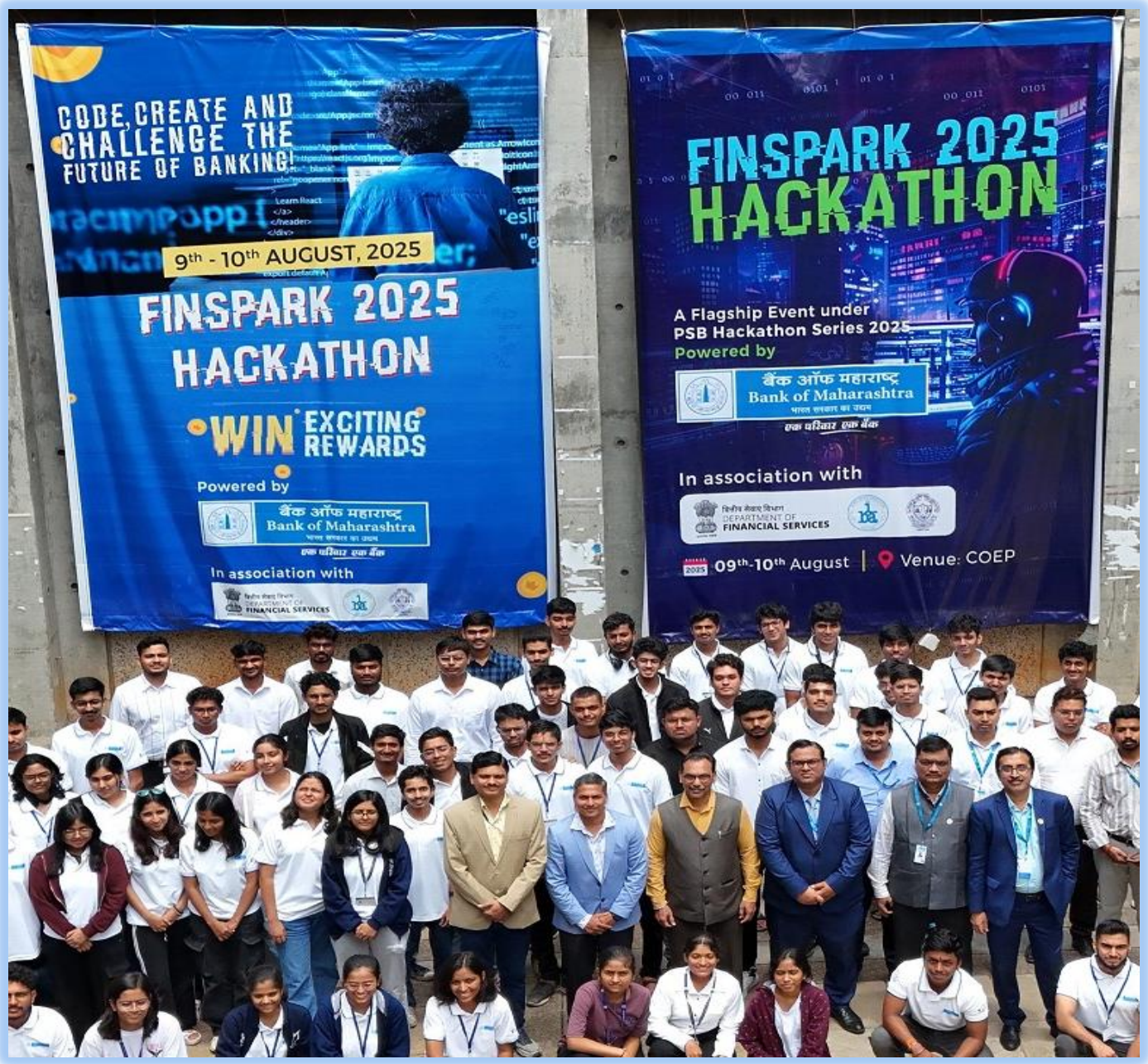
- Prototype Development: Winning teams created deployable prototypes within 36 hours, demonstrating the immense potential of student innovation.



- Scalability of Solutions: Feasibility studies will be undertaken to explore adoption of ALATDS within banking cybersecurity frameworks.
- Visibility & Proposed Internship Opportunity: The event enhanced the Bank's image as a forward-looking institution championing innovation and proposed internship opportunity for the deserving students.
- Future Presentations: DFS has proposed that winning teams should present at the Global FinTech Fest 2025, offering global exposure to student innovations.

Conclusion

The FINSPARK 2025 Hackathon was a resounding success, providing a vibrant platform for young innovators to design solutions for critical challenges in FinTech and Cybersecurity. The winning solution, ALATDS, demonstrated the feasibility of AI-driven cybersecurity tools in strengthening resilience of the banking sector. DFS & IBA continued support, mentorship, and incubation, such innovations have the potential to be scaled for deployment across the public sector banking ecosystem.


CODE, CREATE AND CHALLENGE THE FUTURE OF BANKING!
9th - 10th AUGUST, 2025
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A Flagship Event under PSB Hackathon Series 2025
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09th-10th August
Venue: COEP