



IITB TRUST LAB

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# HSBC HACKATHON CTF



## REPORT 2025





## EXECUTIVE SUMMARY

HSBC Technology India, in collaboration with IIT Bombay Trust Lab, successfully conducted another edition of **Hackathon Capture The Flag (CTF)**, aimed at identifying emerging talent in key technology domains. The event was held on 27th July 2025 across two locations – the HSBC Technology India office in Pune and simultaneously at T-Hub in Hyderabad.

Designed and tailored specifically for seventh-semester undergraduate students with an interest in one of the areas of **AI/ML, Cryptography, Data Science, APIs, or Microservices**, the Hackathon CTF attracted over **1,400 individual registrations**. From this highly competitive pool, **80 candidates** were shortlisted to participate in the final event.

The hackathon offered students a platform to apply their knowledge in real-world security scenarios and showcase their problem-solving skills.

Exceptional performers from the event were considered for **internship opportunities at HSBC Technology India**, making the CTF not just a learning experience, but a direct bridge to professional pathways. The overwhelming participation and positive feedback from students and mentors alike marked the event as a major success.



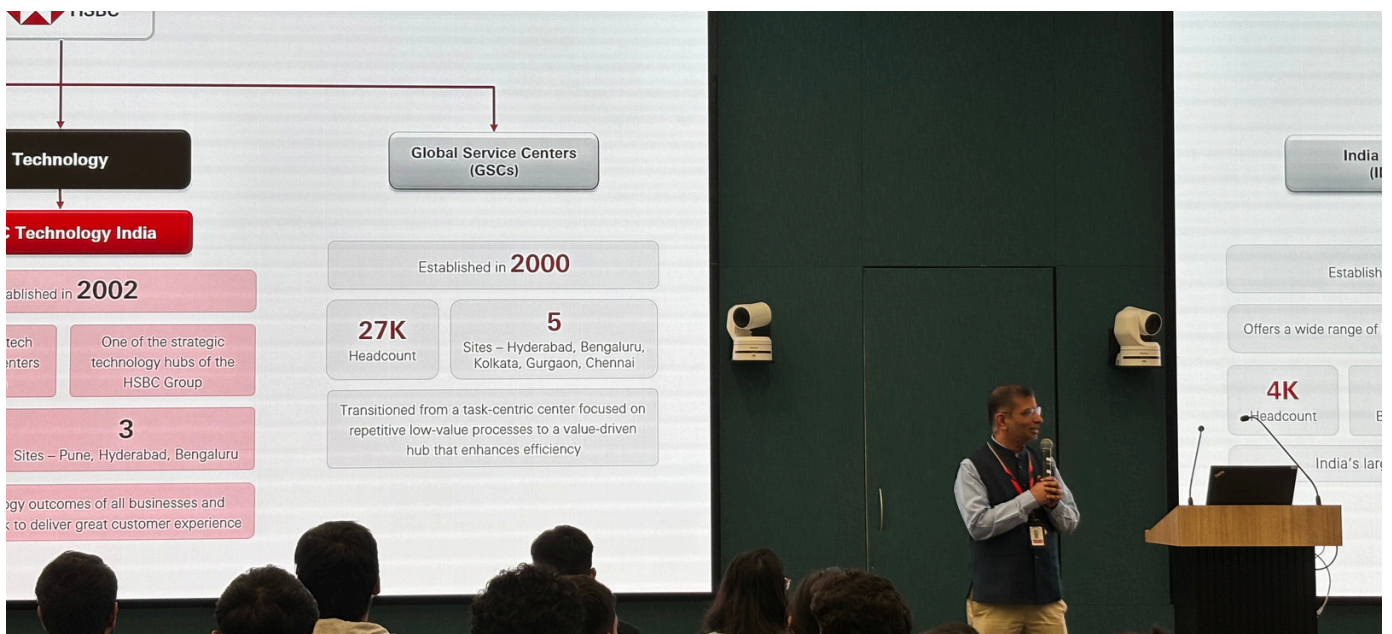
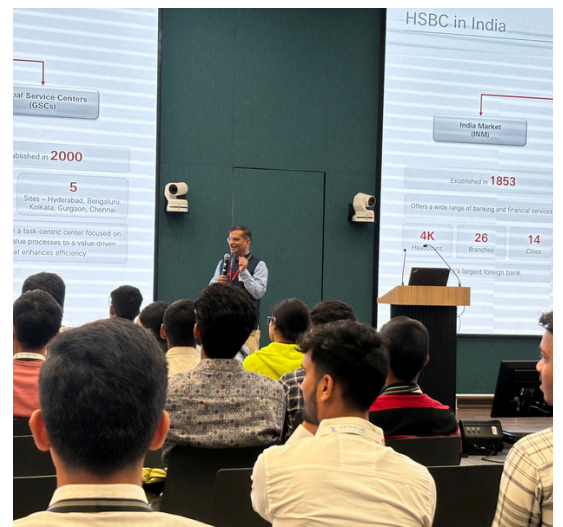


## ROLE OF TRUST LAB

**IIT Bombay Trust Lab** played a central role in the **planning, coordination, and successful execution** of the HSBC Hackathon CTF at Pune. Acting as the academic and operational anchor for the event, Trust Lab was responsible for a range of organisational and technical activities that ensured a seamless experience for participants, partners, and on-ground teams.

From the outset, Trust Lab handled **event budgeting**, aligning financial planning with the requirements of both the HSBC Technology India (HTI) team and the logistical demands. The team also led the **promotion and outreach** efforts, through emails sent to academic institutions and targeted social media posts, publicising the hackathon across engineering colleges and student communities to attract high-quality applications from eligible students.

Another one of the core responsibilities of Trust Lab was the **design of the CTF challenges**. These challenges were carefully curated to align with real-world problem scenarios in cybersecurity and systems engineering, while also being engaging and accessible to students with varying technical backgrounds.







Trust Lab also took charge of the overall **agenda design** and **day-of-event execution**. This included managing session flow, coordinating with volunteers and on-site teams, and ensuring that sessions stayed on schedule.

Specific logistical tasks included **printing and distributing certificates** of participation for all shortlisted attendees, arranging physical branding such as standees and banners at the Pune and Hyderabad venues, and supporting other event materials such as badges, signage, and orientation guides.

To ensure smooth and timely coordination between Trust Lab and HSBC Technology India, weekly sync-up calls were held throughout the planning phase. These regular touchpoints facilitated decision-making, resolved dependencies quickly, and kept all stakeholders aligned on timelines and deliverables.

Trust Lab's role encompassed end-to-end event management, from conceptualisation to on-site execution, significantly contributing to the overall success and professional polish of the Hackathon CTF.





## AGENDA

The hackathon day followed a thoughtfully structured agenda that balanced orientation, hands-on challenge solving, and collaborative learning. The event began in the morning with participant registrations, where shortlisted students were welcomed at the location.

Following registration, a brief orientation session was held to introduce the participants to HSBC Technology India and IIT Bombay Trust Lab, as well as to outline the flow of the day. This helped familiarise the attendees with the context, expectations, and learning objectives of the hackathon.

## HACKATHON CTF 2025 AGENDA

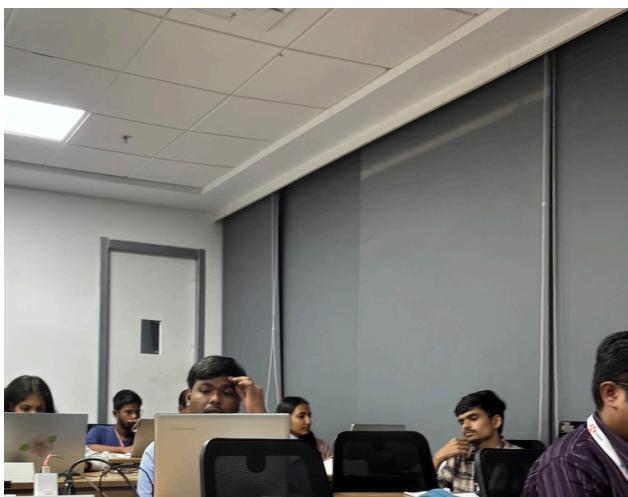
<b>Registrations</b> - P Floor	🕒	7:00 AM — 8:00 AM
<b>Opening Ceremony</b> Auditorium – P Floor	🕒	8:00 AM — 8:30 AM
<b>Breakfast</b> – 5 <sup>th</sup> Floor	🕒	8:30 AM — 9:00 AM
<b>MCQs</b> 1st Floor	🕒	9:00 AM — 9:30 AM
<b>Morning Hackathon Session</b> 1st Floor	🕒	9:30AM — 1:00PM
<b>TEA</b> – 1st Floor	🕒	11:30AM – 11:45 AM
<b>Checkpoint 1</b> — 🕒 12:30 PM		
<b>Lunch</b> – 5th Floor	🕒	1:00 PM — 2:00 PM
<b>Evening Hackathon Session</b> 1st Floor	🕒	2:00 PM — 6:30 PM
<b>High Tea</b> – 1st Floor	🕒	4:00 PM — 4:15 PM
<b>Checkpoint 2</b> — 🕒 4:30 PM		
<b>Checkpoint 3</b> — 🕒 6:00 PM		
<b>CTF challenges</b> 1st Floor	🕒	6:30 PM — 7:30 PM
<b>Break</b> – 1st Floor	🕒	7:30 PM — 8:00 PM
<b>Announcement of Winners</b> Auditorium – P Floor	🕒	8:00 PM — 8:30 PM
<b>Dinner</b> – 5th Floor	🕒	8:30 PM — 9:00 PM



To ease participants into the competition environment, the day started with a short online **MCQ-based quiz**. This warm-up exercise served as a preview of the types of thinking and topics they would encounter in the later technical rounds.

The main body of the event consisted of the **Hackathon Challenge**, conducted over two sessions – one in the morning and one in the afternoon, with a scheduled lunch break in between. During these sessions, participants worked on a curated set of challenges spanning multiple technical domains including **Artificial Intelligence & Machine Learning, Cryptography, Data Science, API design, and Microservices Engineering**. The problems were designed to simulate real-world scenarios, allowing participants to apply both theoretical knowledge and practical problem-solving skills.

The day concluded with a final **Capture the Flag (CTF)** round, lasting one hour, where participants engaged in a focused cybersecurity challenge. It was a finale that allowed individuals to demonstrate their deep technical knowledge.





## COLLABORATION AND NETWORKING

Beyond the technical competition, the event created a vibrant space for meaningful **engagement** among **participants, organisers, and industry professionals**. The hackathon was not only a test of skill but also a platform for students to connect with peers who shared similar interests in cybersecurity, data science, and software engineering.

Participants had opportunities throughout the day to **interact with representatives from HSBC Technology India and IIT Bombay Trust Lab**, engaging in informal discussions about career paths, emerging industry trends, and the practical applications of their academic training. These interactions helped students gain a deeper understanding of the roles, challenges, and innovation happening within the technology and security domains.





## CLOSING CEREMONY AND AWARDS

The event concluded with a closing ceremony that brought together participants, mentors, and organisers to celebrate the day's achievements. During the ceremony, the winners of the hackathon were formally announced, and outstanding performances were recognised.

The **key highlight** of the ceremony was the announcement that **41 students** had been selected for **internship opportunities with HSBC Technology India**. This remarkable number reflects both the high calibre of the participants and HSBC's commitment to identifying and nurturing young talent through experiential learning opportunities.

The closing ceremony also served as a moment of reflection – to appreciate the success of the event, the strength of the collaboration between HSBC and IIT Bombay Trust Lab, and the seamless efforts of sponsors, organisers, volunteers, and participants, all of whom contributed to the event's execution.

Looking ahead, HSBC will support the selected students in completing the necessary internship formalities. The hope is that many of these interns will go on to build long-term careers with HSBC, and we extend our best wishes to all of them as they begin this next chapter in their professional journeys.







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