MANGALORE INSTITUTE OF TECNOLOGY & ENGINEERING

(A Unit of Rajalaxmi Education Trust®, Mangalore)
Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE, New Delhi
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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

"Inauguration Ceremony of the CYBOTIC Activities 2025-26"

17/10/2025

Sponsored by

CYBOTIC, MITE, Moodabidri

The Department of Computer Science and Engineering (IoT, Cybersecurity with Blockchain Technology) at Mangalore Institute of Technology and Engineering (MITE) organized the Inaugural Ceremony of the CYBOTIC Association Activities for the Academic Year 2025–26 on October 17, 2025, at Auditorium 3, Main Block. The event commenced at 11:30 AM and witnessed the enthusiastic participation of dignitaries, faculty members, and students, marking the beginning of a new year of innovation and collaboration. The ceremony was held under the esteemed patronage of Dr. Prashanth C. M., Principal of MITE, and the dynamic leadership of Dr. Shivananda V. Seeri, Head of the Department of CSE (IoT & Cybersecurity with Blockchain Technology). The occasion was graced by the presence of the distinguished Chief Guest, Mr. Deepak Damodar, Technical Program Manager at XY Retail Pvt. Ltd., Mangalore, whose inspiring keynote address emphasized the importance of innovation, adaptability, and continuous learning in today's technological landscape.

The program was compered by Ms. Sneha Nayak and Ms. Lamiah Shabbir Saheb, who guided the proceedings with confidence and enthusiasm. The event began with an invocation by Tejaswini and team, setting a serene and auspicious tone for the day. This was followed by the traditional Lighting of the Lamp ceremony by the dignitaries, symbolizing the dispelling of ignorance and the illumination of knowledge. The Welcome Address was delivered by Ms. Sakshya Rai, who extended warm greetings to all guests and participants. This was followed by the Annual Report Presentation by Ms. Megha Poojary, who provided a comprehensive overview of the association's achievements and initiatives during the academic year 2024–25.

The newly elected Office Bearers of the CYBOTIC Association for 2025–26 were then introduced and conferred with badges by the Chief Guest, marking the beginning of their tenure. The Oath of Office was administered by Dr. Shivananda V. Seeri, reminding the office bearers of their responsibilities toward the association's growth and success. The newly appointed President, Mr. Abdul Khadar Jilani K. K., addressed the gathering and shared his vision for the upcoming academic year, emphasizing teamwork, innovation, and student engagement. The Head of the Department, Dr. Shivananda V. Seeri, in his address, highlighted the role of student associations in fostering leadership, collaboration, and technical expertise. He encouraged students to actively participate in departmental initiatives and stay attuned to emerging technological trends.

Ms. Fiona Lavisha Lobo then introduced the Chief Guest, Mr. Deepak Damodar, whose keynote address inspired students to embrace innovation, creativity, and a problem-solving mindset. His words resonated deeply with the audience, motivating them to pursue excellence in their academic and professional endeavours.

A key highlight of the event was the Release of the Department's News Bulletin, "ICONIC", which captures the achievements, innovations, and milestones of both students and faculty. The bulletin was compiled by Mr. Poornachandra S. Gowda and Mr. Suvith S. Amin, under the guidance of Mr. Sandeep Seetarm Naik, Chief Coordinator of the News Bulletin. The official release was carried out by the Principal, Chief Guest, Head of the Department, and the Association President. The ceremony also included a Felicitation Segment, during which students were recognized and awarded for their exemplary academic performance and outstanding participation in departmental and extracurricular activities. The recognition served as a motivation for all students to strive for continuous improvement and excellence.

In the Presidential Address, Dr. Prashanth C. M. commended the efforts of the department and the CYBOTIC Association in creating a platform for students to explore, innovate, and lead. He encouraged students to remain curious, collaborative, and responsible as they contribute to technological advancement. The event concluded with a Vote of Thanks delivered by Ms. Amulya, who expressed gratitude to all dignitaries, faculty members, and students for their support and participation. The ceremony came to a close on a positive note, symbolizing the beginning of another successful academic year filled with learning, leadership, and innovation.

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Honorable Dignitaries

Inauguration of the CYBOTIC Activities 2025-26

Office bearers pledging oath

***ICONIC* magazine release**

Principal delivering presential address.

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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

WORKSHOP ON

"CYBERSECURITY- ATTACK AND DEFENSE"

03/11/2025 and 04/11/2025

In association with

Computer Society of India

Sponsored by

CYBOTIC

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Title: "Cybersecurity- Attack and Defense"

Date: 03 November 2025 and 04 November 2025

Time: 9:30 AM to 04:30 PM

Venue: IOT LAB, 2nd floor, Post Graduation Block.

About the Workshop:

The **Cyber Security Attack and Defense Workshop** organized by the **Department of CSE (IoT & Cyber Security with Blockchain Technology)** was an intensive hands-on training program focused on developing practical knowledge and skills in the field of cybersecurity. The aim of this workshop was to enhance participants' understanding of modern cyber threats, ethical hacking practices, and defensive strategies to safeguard digital systems and data.

Throughout the sessions, participants were introduced to key cybersecurity concepts such as vulnerability assessment, penetration testing, web application security, digital forensics, and cyber audits. The workshop combined theoretical discussions with real-world, scenario-based exercises to provide a holistic learning experience. Participants engaged in Capture the Flag (CTF) challenges designed to simulate real cyberattacks and defenses, using industry-standard tools such as Burp Suite, Nmap, and OWASP Juice Shop.

This workshop emphasized both the technical and ethical aspects of cybersecurity, helping students bridge the gap between theory and practice. By performing vulnerability discovery, penetration testing, and exploitation challenges, participants gained valuable insights into identifying, analyzing, and mitigating common security vulnerabilities in a controlled, ethical environment.

Workshop Outcome:

The workshop provided participants with a deep, practical understanding of how cyberattacks occur and how to defend against them. By working through real-time scenarios and hands-on exercises, students developed confidence in using professional cybersecurity tools and techniques. The experience enabled them to approach security problems analytically and ethically while gaining exposure to potential career paths in cybersecurity.

By the end of the workshop, participants were able to:

1. **Understand Cybersecurity Fundamentals**
   Grasp key concepts of cyber threats, attack vectors, defense mechanisms, and ethical hacking principles.
2. **Perform Vulnerability Assessment and Penetration Testing**
   Conduct basic vulnerability discovery and penetration testing on lab targets, and document findings effectively.
3. **Use Industry-Standard Tools**
   Apply web-hacking and network scanning tools such as Burp Suite, Nmap, and other scanners to identify and assess common OWASP vulnerabilities.
4. **Analyze and Mitigate Security Risks**
   Evaluate discovered vulnerabilities and propose appropriate security controls and mitigations.
5. **Engage in Capture The Flag (CTF) Challenges**
   Participate in structured CTF exercises to solve real-world exploitation challenges in web, binary, crypto, and forensics domains.
6. **Apply Ethical Hacking Practices**
   Understand the ethical, legal, and professional responsibilities of cybersecurity professionals.
7. **Develop Practical Cyber Defense Skills**
   Build a foundation for advanced cybersecurity practices, preparing for future certifications and careers in the cybersecurity domain.

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About resource person for the Two days' workshop on "Cybersecurity- Attack and Defense"

Mr. Samarth Bhaskar Bhat
Director, Reinfosec

Mr. Samarth Bhaskar Bhat is a distinguished cybersecurity professional and the Technical Director at Reverse Engineering Infosec. He completed his Telecommunication Engineering from SSIT and has been recognized as one of the youngest ethical hackers in India by Prevoyance Toretisic Technologies, Maharashtra. He also holds the notable distinction of being the youngest court-appointed "Commissioner" serving as an expert witness in the Cyber Forensics domain.

With over six years of experience in Information Security, Mr. Bhat has contributed extensively to application security, vulnerability assessment, penetration testing, encryption technologies, and digital forensics. He has audited more than 50 business web applications across sectors such as banking, finance, insurance, trading, and e-commerce, and conducted payment gateway security audits. His expertise also includes threat profiling, system hardening, and secure software development.

Mr. Bhat holds several prestigious certifications, including GIAC Certified Web Application Defender, Certified Ethical Hacker (CEH v6), Qualys Guard Certified Specialist, and SANS Lethal Forensicator Coin Holder. He is also a SANS CTF Winner in Network and Web Application Penetration Testing, with proficiency in tools such as Burp Suite, IBM AppScan, and Wireshark. With his strong technical foundation and passion for cybersecurity, he continues to inspire and guide aspiring professionals toward building secure, ethical, and innovative digital ecosystems.

Day-1: 3rd November, 2025 (9:00 AM)

The workshop commenced on November 03, 2025 (Monday) in the IOT lab. The session began with a formal welcome by MS. Lamiah Shabbir Saheb, followed by a prayer. Dr. Shivanandha V Seeri, the HOD of the CSE-IoT department, delivered a keynote speech emphasizing the growing significance of Cybersecurity. A brief introduction to Mr. Samarth Bhaskar Bhat, the workshop's key resource person, was provided by Ms. Fiona Lavisha Lobo.

The first session **Introduction to Cybersecurity and Ethical Hacking (09:45 AM-11:00 AM)** began with an engaging discussion on whether hacking is real or a myth. Mr. Samarth explained that hacking is a real and practical activity that involves identifying and exploiting weaknesses in systems and networks. He highlighted that ethical hacking is essential for improving cybersecurity and protecting organizations from malicious threats. Participants learned about different types of vulnerabilities such as software bugs, configuration issues, design flaws, and social engineering. The importance of CVE IDs (Common Vulnerabilities and Exposures) was discussed as a standard way to identify and manage known security flaws. Mr. Samarth also introduced the types of hacker's white hat, black hat, and grey hat and explained their motives and roles. He concluded by emphasizing the need to understand wired and wireless communication systems, ISPs, and Wi-Fi networks as part of cybersecurity awareness. Students were encouraged to build their own tools, practice ethical hacking responsibly, and keep learning to strengthen their technical and ethical foundation in cybersecurity.

The Second Session **What are the skills required for the cybersecurity profession (11:15 AM – 12:45 PM)** began with practical command prompt exercises for basic network operations. Participants practiced ipconfig/ifconfig, ping, traceroute, netstat, arp, and simple port checks to discover hosts and diagnose connectivity. The trainer explained how these commands help in network mapping in a legal lab environment. The session then introduced the bug bounty concept, platforms and scope rules, and best practices for responsible disclosure and reporting. Common commercial and open source industry packages for scanning and reporting were demonstrated. A hands-on segment used Mobile Tracker Free in a controlled lab to show mobile tracking for legitimate use cases and analysis of device data. The session concluded with an overview of malware families including batch based scripts, viruses, worms, trojans, bot software and ransomware. For each malware type the instructor covered typical infection vectors, indicators of compromise, basic containment and recovery measures, and the ethical and legal boundaries of testing.

In the Third Session **Hands on session on solving basic CTF challenges (1:45 PM-3:15 PM)** Mr. Bhat focused on anonymity and secure testing environments. Participants learned about proxy websites such as www.proxy.com and why proxies are used for privacy and testing, followed by differences between VPNs and the Tor browser for anonymity and threat

modeling. The trainer explained risks and legal considerations associated with anonymity tools. The second half covered virtualization concepts and step-by-step guidance on installing virtual machines. The instructor demonstrated downloading and running Kali Linux in a VM, explained why Kali is preferred for penetration testing, and summarized Linux categories and common command line basics. Emphasis was placed on using isolated virtual labs for safe testing and reproducing attacks without affecting production systems.

The fourth session **What is Web Hacking (3:30 PM – 4:30 PM)** introduced participants to cryptography and application layer security, emphasizing how encryption safeguards information at the seventh layer of the OSI model. The trainer explained the principles of encryption and decryption, their roles in ensuring confidentiality and integrity, and the difference between symmetric and asymmetric algorithms. The session highlighted real-world applications of cryptography such as data protection, secure communications, and authentication. A hands-on exercise using Kali Linux and OpenSSL allowed participants to perform live encryption and decryption of files. They practiced generating keys, creating certificate signing requests, and verifying encrypted outputs. Commands related to `openssl` were demonstrated to show how encryption works in real-time. The exercise helped participants understand how secure data transmission happens in everyday online interactions like HTTPS and VPN connections. The session concluded by emphasizing responsible encryption use, key management, and the importance of implementing security controls at the application layer.

"Highlights from day 1 Session 2 : Cybersecurity- Attack and Defense"

Day 2: 04th November 2025

On the second day, the first session **Web Vulnerability Scanner (9:00 AM – 11:00 AM)** focused on endpoint and network security mechanisms, explaining how they work together to create multiple layers of defense. Participants learned how antivirus software identifies, isolates, and removes malicious code. The instructor explained signature-based detection, which uses known malware patterns, and heuristic-based detection, which detects suspicious behaviour or unknown threats. Students were shown how to interpret antivirus alerts and understand the importance of database updates and behavioural analysis engines. The second part of the session focused on firewalls, covering their types which are packet-filtering, stateful inspection, proxy, and next-generation firewalls. Firewall policies were explained in detail, including the accept, reject, and drop actions, and how they affect network traffic. Students conducted a hands-on exercise using Kali Linux to analyze and test basic firewall behaviour. Simple commands were used to check open ports and verify responses. They learned how to log, monitor, and interpret firewall results and the importance of creating layered rules to minimize exposure. The session concluded with insights on how antivirus and firewall systems complement each other to provide robust security.

Following this, the Second Session **Hands on Session on Digital Forensic Activities (11:15 AM – 12:45PM)** introduced participants to defensive deception systems and the standard methodology followed during ethical hacking engagements. The concept of honeypots was explored in detail, describing their purpose in attracting attackers to controlled environments to study intrusion patterns and identify new threats. Participants learned the difference between low and high interaction honeypots and how data collected from them helps in improving organizational defenses. The next segment covered steganography, the technique of concealing information within files such as images or audio. The instructor explained both its legitimate uses in digital watermarking and its potential misuse for covert data transfer. The session then transitioned to the methodology of penetration testing and vulnerability assessment. The entire workflow was explained: defining objectives, gathering information, performing vulnerability scans, choosing the right tools, executing safe exploit verification, and finally, documenting results and conclusions. Participants were taught how to maintain proper reporting formats, highlighting the objective, scope, findings, risk levels, and recommendations. A ready-to-use

sample report structure was provided to help students document real-world assessments ethically and systematically.

The Third Session **Firewall and honeypot (1:45 PM – 3:15 PM)** was one of the most practical and engaging parts of the workshop. Participants performed hands-on exploitation and password cracking in a safe lab setup using Kali Linux. With tools like Nmap, they scanned lab machines ("Sunset" and "MHz") to identify open ports and services, while tools such as John the Ripper and Hashcat demonstrated how weak passwords can be exploited and the importance of strong authentication practices. The next activity focused on web application security using XAMPP, where participants explored SQL injection attacks, their detection, and mitigation through secure coding practices like parameterized queries and input validation. The latter half covered digital hygiene and sanity checks, including how to verify if mobile phones, laptops, emails, or social media accounts were compromised. Participants learned to recognize phishing attempts, spam messages, and malicious links, and were guided on handling lost devices, assessing second-hand gadgets, and verifying Wi-Fi provider legitimacy. The blend of technical exercises and practical awareness made this session both informative and highly relevant.

The final session **Q and A session (3:30 PM – 4:30 PM)** provided a comprehensive roadmap to careers in cybersecurity, highlighting the various domains and growth opportunities available. The instructor divided the field into four major sectors: Multinational Companies (MNCs), Critical and Important Organizations, Law Enforcement Agencies, and Research & Development (R&D). For each sector, the required technical and soft skills were discussed, along with suggested learning paths and certifications such as CEH, CompTIA Security+, OSCP, CHFI, and CISSP. Participants were briefed on industry expectations, average salary ranges, and the nature of work in each domain. Guidance was provided on how to build a professional portfolio by documenting lab work, participating in Capture the Flag (CTF) competitions, contributing to open-source tools, and continuously updating technical skills. The session also emphasized the importance of ethics, compliance, and legal responsibility in the cybersecurity field. The instructor encouraged participants to maintain curiosity and integrity while pursuing careers in cyber defense and ethical hacking. The workshop concluded with an open Q&A, where students shared takeaways, discussed future goals, and received personalized advice on how to progress in the cybersecurity domain.

"Highlights from day 2 Session 1: Cybersecurity- Attack and Defense"

Workshop Conclusion

The two-day Workshop on Cybersecurity- Attack and Defense concluded on a highly positive note. Ms. Viyona Menezes delivered the vote of thanks, expressing sincere gratitude on behalf of the participants for the invaluable knowledge and practical insights shared by the resource person, Mr. Samarth Bhaskar Bhat. The Head of the Department, Dr. Shivanandha Seeri, along with the workshop coordinator, Mr. Sandeep Naik, presented letters of appreciation to the resource person, acknowledging his significant contribution to the workshop's success. The closing ceremony marked the conclusion of an enlightening and impactful event that deepened students' understanding of cybersecurity concepts and practices.

Glimpses of the Workshop.

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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

WORKSHOP ON

"IOT WITH ANALYTICS PROTOTYPING DESIGN"

02/03/2026 to 04/03/2026

In association with
Computer Society of India

Sponsored by
CYBOTIC

Title: "IOT with Data Analytics Prototyping design"

Date: 02 March 2026 to 04 March 2026

Time: 9:30 AM to 04:30 PM

Venue: IOT LAB, 2nd floor, Post-Graduation Block.

About the Workshop:

The **IOT with Data Analytics Prototyping Design Workshop** organized by the Department of CSE (IoT & Cyber Security with Blockchain Technology) was an intensive three-day hands-on training event. The aim of this workshop is to equip participants with practical knowledge and hands-on experience in building Internet of Things (IoT) systems by integrating hardware platforms with both wired and wireless sensor technologies, and applying data visualization and analytics tools to monitor, analyze, and interpret real-world data effectively.

Participants were introduced to the core concepts of the Internet of Things (IoT), including the architecture of IoT systems, key hardware components such as microcontrollers and development boards, and various types of sensors (both wired and wireless). They also explored different communication protocols (e.g., UART, I2C, SPI, Wi-Fi), and platform like Plotly Dash to visualise data and basic techniques for analysing sensor data to extract useful insights.

Workshop Outcome:

The workshop brought together various aspects of IoT, from sensor integration to data analysis, allowing us to see how each piece contributes to the overall system. By working through the entire process from acquiring real-time data to storing, visualizing, and analysing it, students gained a comprehensive understanding of how interconnected technologies come together to create powerful IoT solutions. This combination of practical experience and theory

helped solidify our knowledge and enhanced our ability to design and implement IoT applications effectively.

By the end of the workshop, participants were able to:

1. **Understand IoT Architecture**: Grasp the fundamental components and flow of an IoT system, from data sensing to actionable insights.
2. **Perform Data Acquisition**: Interface wired and wireless sensors with microcontrollers to collect real-time environmental or system data.
3. **Implement Communication Protocols**: Use appropriate wired (I2C, SPI, UART) and wireless (Wi-Fi) protocols to transmit sensor data.
4. **Store Acquired Data**: Configure systems to store sensor data locally or on cloud platforms for further processing and access.
5. **Visualize Sensor Data**: Use tools such as Plotly Dash to display real-time and historical data.
6. **Analyze and Interpret Data**: Apply basic analytics to identify patterns, trends, or anomalies in the data, supporting better decision-making.
7. **Develop a Complete IoT Prototype**: Design and demonstrate a mini-project that integrates data acquisition, storage, visualization, and analysis.

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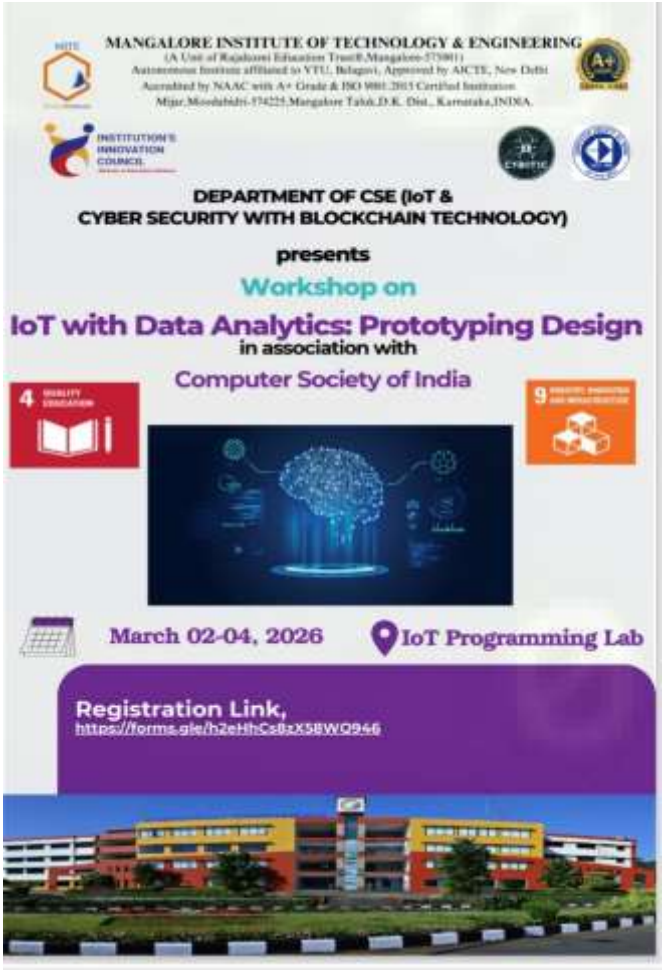
About resource person for the Three day's workshop on "IOT with analytics Prototyping design"

VIJAY G. H.

Vijay G. H. is an experienced technology leader with over 8 years in C, C++, Python development, and IoT solutions. He specializes in embedded systems, microcontrollers, sensors, and Industry 4.0 applications. Currently, Vijay serves as the Head of Technology at DLithe Consultancy Services Pvt Ltd, His role involves ensuring seamless integration between software and hardware, mentoring a team of developers, and overseeing the successful delivery of IoT solutions for Industry 4.0 applications. Vijay G. H. is skilled in various programming languages including C, Python, Embedded C, and JavaScript. He has strong expertise in IoT technologies like RTOS, MQTT, AWS IoT, and IBM Bluemix, and is proficient with microcontrollers such as ESP8266, ESP32, STM32, and Arduino. Vijay has hands-on experience with wireless protocols like Zigbee, Bluetooth, Wi-Fi, and LoRaWAN, as well as networking protocols (TCP/IP, UDP). His hardware proficiency extends to PCB prototyping, SMT assembly, and working with communication protocols like UART, I2C, and PWM. He is skilled in using EasyEDA for designing PCBs and Postman, Shodan, and Pytest for testing IoT solutions.Additionally, he is proficient in system administration, database management, and development tools like GitLab and Jira. Previously he has worked as a Research Engineer at ESDS Software Solutions Pvt Ltd, As an IoT Consultant at Tings Alive Solutions Pvt Ltd , As an IoT Developer at BlickX Technologies Pvt Ltd, as a Software Engineer at Impelsys India Pvt Ltd. Also Vijay G. H. co-authored the publication titled "Non-Invasive Smart Glucose Monitoring System," which was featured in the International Journal of Innovative Research in Computer and Communication Engineering .

Day-1: Session-1 Introduction to IOT with analytics Process Design (9:00 AM – 10:50 AM)

The workshop commenced on March 02, 2025 (Monday) in the IOT lab. The session began with a formal welcome by Ms. Joshni Fernandes. Dr. Shivanandha V Seeri, the HOD of the CSE-IoT department, delivered a keynote speech emphasizing the growing significance of IOT-Internet of Things. A brief introduction to Mr. Vijay G.H, the workshop's key resource person, was provided by Mr.Sidhanth Jeevan Achar.



1st day Inauguration Session.

The first session (9:30AM–10:50AM), **Introduction to Internet of Things** (IoT), was conducted by Mr. Vijay GS, who provided a clear overview of IoT and its evolution into the Internet of Everything (IoE), explaining its importance in Industry 4.0 and 5.0 across sectors such as healthcare, transportation, education, and hospitals. He addressed key questions like what IoT is, why it is needed, and its benefits, emphasizing automation, efficiency, real-time monitoring, and data-driven decision-making. He discussed the main components of IoT systems including sensors, microcontrollers, smartphones as gateways, data storage, databases, and analytics, along with enabling technologies such as low-cost chips, affordable bandwidth, and big data. He also explained sources of data generation like mobile networks, sensors, and internet activity, and described how IoT works through programmable systems where data is collected, stored, and analyzed, concluding with practical applications such as hydroponic systems, smart lighting, smart sprinklers, and smart garbage bins.

The second session (11:10 AM – 1:00 PM), IoT **Case Studies and Project Requirements** (Hardware & Software), was conducted by Mr. Vijay and focused on connecting theoretical concepts with real-world implementation. He explained the essential hardware and software components required to build IoT systems, including microcontrollers, sensors, connectivity modules, and programming platforms. Participants were guided on how to select appropriate components based on project requirements, application goals, and environment constraints, while also addressing key questions such as choosing the right microcontroller, suitable sensors, programming language, and secure cloud services. He emphasized the importance of data security in hardware-based systems. During the practical demonstration, Arduino software was used to showcase IoT applications, where a microcontroller was connected through a communication port to observe outputs. A simple LED blink program was implemented using the

controller, and the output was monitored through the serial monitor displaying "LED is ON" when the LED glowed and "LED is OFF" when it turned off successfully demonstrating real-time hardware-software integration.

"Highlights from day 1 Session 1 : Introduction to IOT"

The afternoon session (1:45 PM – 4:30 PM) focused entirely on practical implementation and hands-on learning. The session began with an explanation of how sensors work and how they can be integrated with microcontrollers. The first implementation was a basic capacitive touch program, where a controller, microcontroller, and connecting wires were used. When the wire was touched, the serial monitor displayed "1," and when the touch was removed, it displayed "0." After successfully testing this, the capacitive touch program was combined with the morning LED blink program. In this integrated implementation, the LED glowed when the wire was touched and turned off when the touch was removed, demonstrating real-time input and output control. Later, the concept of ultrasonic sensors was introduced, explaining how they use sound waves to measure the distance between objects. A practical object detection program was implemented

to measure distance, and the output was observed. Finally, the same setup was extended by integrating a buzzer, where the buzzer turned on when an object came closer to the sensor. With these successful implementations and observations, the first day's workshop session came to an end.

Day 2: 3rd March 2026

IoT Sensor Integration and Implementation (9:00 AM – 11:20 AM)

The second day session, held on March 3, 2026, from 9:00 AM to 11:20 AM, was conducted by Mr. Vijay along with Mr. Krishna and focused on practical sensor integration in IoT systems. The session began with an explanation of IR (Infrared) sensors, electronic devices capable of detecting objects using infrared signals. It was explained that the IR sensor consists of an IR LED (transmitter), a receiver, and pins such as VCC, GND, and signal. A hands-on object detection program was implemented, where the serial monitor displayed "Object Detected" when an object was sensed and "Object Not Detected" when no object was present, and the output was successfully observed. Following this, the DHT11 sensor was introduced, which measures temperature and humidity. Its components, including the NTC thermistor, humidity sensing element, and inbuilt microcontroller that converts analog values into digital signals, were explained. The interfacing and working of the DHT11 with the microcontroller were also discussed as part of the practical IoT implementation.

IoT Communication Protocols and Practical Demonstration (1:45 PM – 4:30 PM)

The second session of Day 2, held from 1:45 PM to 4:30 PM, was conducted by Mr. Krishna and focused on communication protocols in IoT systems. He explained that communication is the process of exchanging data between two devices, while a protocol is a set of rules that devices must follow to transmit data

correctly. The session covered two major categories of communication protocols: wired and wireless. Under wired protocols, he explained UART (Universal Asynchronous Receiver-Transmitter), SPI (Serial Peripheral Interface), I2C (Inter-Integrated Circuit), and CAN (Control Area Network), discussing their structure and real-world applications. Under wireless protocols, Wi-Fi, Bluetooth, and LoRa were introduced along with their practical use cases in IoT environments. A detailed demonstration of the I2C protocol was conducted, explaining the master-slave concept where the master controls communication and the slave responds. A program was implemented to display characters one by one using I2C communication, and the output was successfully observed. With this hands-on experimentation and understanding of protocol-based data exchange,the session concluded successfully.

"Highlights from day 2 Session 1: IoT Sensor Integration and Implementation"

Day 3: 4th March 2026

On Day 3, the first session was conducted from 9:00 AM to 10:50 AM in PGL 102 Classroom, Postgraduate Building. At the beginning of the session, our Head of the Department took an overview of the previous two days, gathered feedback

from participants, and provided valuable suggestions for improving our understanding and implementation of concepts. Following this, Mr. Vijay continued the session on **Wireless Communication and Wi-Fi technology**, explaining how Wi-Fi works using radio frequencies, the use of 2.4 GHz and 5 GHz bands, and the IEEE 802.11 standards along with different modes such as Station Mode and Access Point Mode. He demonstrated a program to scan available mobile hotspots in the classroom and executed it on his laptop, giving us practical exposure. He also introduced the basics of client server communication and demonstrated how sensor data can be read and displayed on a web server. The session concluded with an explanation of Design Thinking through a simple classroom activity, making the session both informative and interactive.

The second session was conducted from 11:10 AM to 1:00 PM, during which Krishna Sir led the session. He began by discussing various domains available in the field of Computer Science and Engineering and explained the wide range of career opportunities present in the IT industry after completing CSE. He provided valuable insights into different career paths, helping participants understand industry expectations and growth prospects. In the later part of the session, we practically implemented the programs that Mr. Vijay had demonstrated in the morning session. This included Wi-Fi scanning within the classroom, understanding basic router, client, and server communication, and executing programs to read sensor data and display it on a web server. The hands-on implementation helped reinforce our understanding of wireless communication and IoT concepts, making the session highly practical and informative.

The final session of the workshop was conducted from 1:45 PM to 4:30 PM focusing on **Analytics, Artificial Intelligence, and the power of SMACI** an acronym for Social Media, Mobility, Analytics, Cloud, and Internet of Things.

The session began with an introduction to how these five components integrate to build modern smart systems. Participants were guided through the creation of a Google Service Account and enabling Google Drive and Google Sheets to facilitate cloud-based data storage. Using an ultrasonic sensor, real-time distance data was captured and transmitted to Google Sheets via the cloud, demonstrating live data acquisition and how cloud platforms process and store IoT-generated data. The program execution and data logging process were clearly demonstrated, providing hands-on understanding of cloud integration. The session also introduced the Edge Impulse platform, where the concept of AI-based model training was explained. A practical example of marine product shipping was discussed to illustrate how AI models can be trained to identify object positions, lifting patterns, and movement conditions. This gave participants a clear understanding of data acquisition and AI training workflows. The workshop concluded with a vote of thanks by Mr.Shruthan, appreciating the efforts of the coordinators and resource persons, followed by a group photo session with students, lecturers, and the workshop conductors, marking the successful end of theworkshop.

“Highlights from day 3 Session 2: Practical Implementation of programs”

Workshop Conclusion

The three-day workshop on IoT with Analytics and Process Design concluded on a positive and enriching note. Throughout the workshop, participants gained practical and theoretical knowledge on IoT fundamentals, wireless communication, Wi-Fi implementation, client–server architecture, cloud integration, real-time sensor data logging to Google Sheets, and basic AI model training using platforms like Edge Impulse. The sessions effectively combined demonstrations with hands-on implementation, strengthening our understanding of modern technologies such as SMACI and smart monitoring systems. The valedictory ceremony included a vote of thanks and the presentation of appreciation certificates to the resource persons, followed by a group photo, marking the successful completion of the workshop.

Glimpses of the Workshop.

Coordinator **Head of Department** **Principal**

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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

Technical event

"MAN VS BUG SEASON-3"

1/12/2025 & 2/12/2025

Sponsored by

CYBOT1C

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Title: Technical event- "Man vs Bug Season-3"

Date: 1st & 2nd December 2025

Timings: 2:00 PM

Venue: IoT Lab

Event Overview: The Department of CSE (IoT & Cyber Security with Blockchain Technology) under Cybotic Association, organized Man vs Bug – Season 3, an exciting Debugging Competition aimed at enhancing students' logical thinking, error-identification capability, and programming skills. The event provided a platform for competitive learning through a structured approach involving MCQs and hands-on debugging.

Debugging competition: Debugging is the process of identifying and resolving errors (bugs) that cause incorrect program behaviour. This event was designed to evaluate students' analytical, logical, and debugging skills using programming tasks.

Event Outcomes:

1. **Enhanced logical thinking and debugging skills** among participants through MCQs and hands-on error-fixing tasks.
2. **Active participation of 34 teams**, with the top 16 progressing to the final round after a competitive screening.
3. **Successful execution of two structured rounds**—MCQ round on Wayground and debugging round on HackerRank—with smooth coordination by the organizing team.

4. **Identification and recognition of top performers**:

1st Place: Team ReproFailed (TVS Ashwin & Sakshath P Rao)

2nd Place: Team *ByteForce* (Nishika & Siyona)

5. **Improved student engagement and confidence**, encouraged by faculty guidance and coordinated event management, promoting a strong coding culture in the department.

Day-01: Dec 02 2025

Round 1 – CODE CRACKERS (MCQ ROUND)

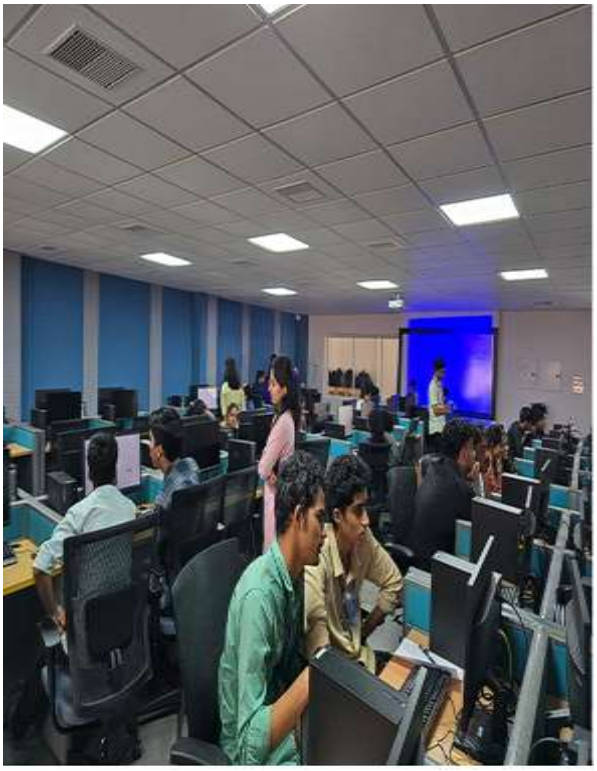
The first round of the event commenced **at 2:00 PM**, where all 34 participating teams assembled in the IoT Lab for **the MCQ-based screening test**. This round consisted of **40 carefully curated multiple-choice questions on C** programming, designed to assess participants' conceptual clarity in logic, syntax, operators, arrays, strings, and debugging fundamentals. The questions were hosted on the **Wayground platform**, ensuring a smooth and standardized evaluation environment. Each team was given a fixed time limit to complete the quiz, requiring them to think quickly, apply core programming fundamentals, and avoid common logical pitfalls. The balanced mix of easy, medium, and challenging questions tested their analytical approach and readiness for the hands-on debugging tasks in the next round.

The round concluded successfully, after which the coordinators proceeded with the evaluation. Based on their performance, the **top 16 teams** were shortlisted for the final debugging round. The highest-scoring teams showcased strong logical reasoning, excellent command over C programming basics, and sharp error-identification skills qualities essential for excelling in Round 2.

Highlights of the Round-1 session – Man vs Bug Season 3"

Round 2 – DEBUG CHAMPIONSHIP (HANDS-ON DEBUGGING ROUND)

Round 2 began at **2:00 PM** with the **16 qualified teams** from Round 1. After a quick briefing on the rules and evaluation process, the final debugging challenge commenced on the **HackerRank platform**. Participants were given **10 C programming debugging problems**, requiring them to identify errors, correct faulty logic, and produce accurate outputs within the allotted time. This round tested their precision, analytical skills, and real-time problem-solving ability. The atmosphere was intense and focused, with teams fully engaged in tracing bugs and refining code. By the end of the session, the submitted solutions showcased varying approaches and technical strengths. The evaluation helped determine the top-performing teams who demonstrated strong debugging accuracy and consistent logical reasoning.



"Highlights of the Round-2 session – Man vs Bug Season 3"

Evaluation & Results:

The final evaluation was carried out by **Mr. Sandeep Seetaram Naik**, Cybotic Coordinator, who assessed the submissions based on **accuracy, efficiency, and debugging precision**. After reviewing the solutions from both rounds, the top-performing teams were declared as winners.

Winners:

- **1st Place:** Team ReproFailed – TVS Ashwin & Sakshath P Rao

- **2nd Place:** Team ByteForce – Nishika & Siyona

All participants received certificates in recognition of their effort, competitive spirit, and enthusiasm throughout the event. The two-day "Man vs Bug – Season 3" debugging competition was a successful and engaging technical event conducted by the Cybotic Student Association. It provided students with a platform to strengthen their problem-solving abilities, sharpen debugging skills, and build confidence in real-time coding scenarios. The smooth coordination by the organizing team and the active participation of students contributed to the event's overall impact, making it a meaningful experience that encouraged technical excellence and continuous learning.

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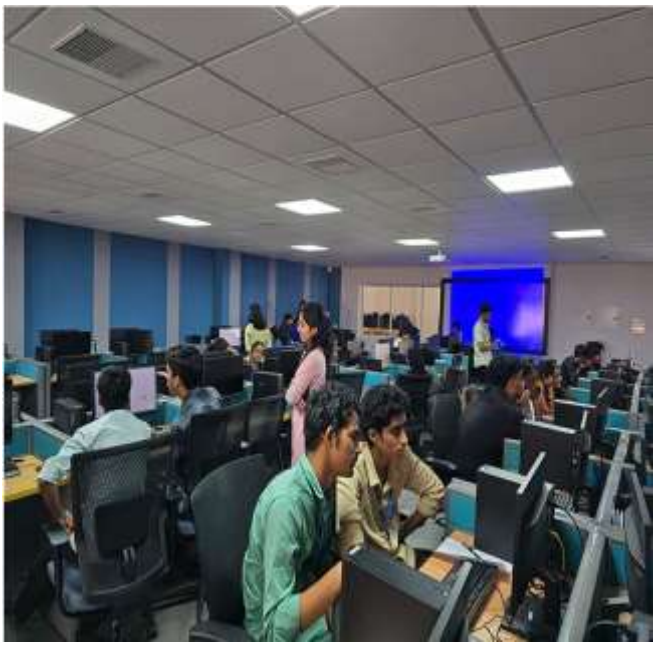

Glimpses of WEB DASH 2.0 event

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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

TECHNICAL EVENT

"WEB DASH 3.0"

27-02-2026 & 28-02-2026

Sponsored by

CYBOTIC

TECHNICAL EVENT REPORT: WEB DASH 3.O

Date: February 27&28, 2026

Time: 1:00 PM

Venue: IoT Lab, PG Block, 2nd Floor.

Organized by: Cybotic Student Association

About the Event:

The Cybotic Student Association of the Department of Computer Science and Engineering (IoT and Cyber Security with Blockchain Technology) successfully organized "Web Dash 3.0". This two-day intra-college technical competition, held on February 27th and 28th, was designed to foster problem-solving, coding efficiency, and collaborative learning among students. The event encouraged a multidisciplinary spirit by allowing students from different branches to form teams of up to two participants. By prohibiting internet access and requiring original manual coding, the competition challenged teams to demonstrate their core technical capabilities in a focused environment. Structured into two rigorous and intellectually stimulating rounds, Web Dash 3.0 served as a dynamic platform for frontend development. The event focused on practical coding experience, requiring participants to integrate structure, styling, and interactivity to create functional web interfaces.

Event Outcomes:

- Enhanced proficiency in manual coding using core frontend technologies, specifically **HTML** and **CSS**.
- Improved precision in UI/UX design by recreating complex web layouts exactly as specified in the "**HTML Mashup**" challenge
- Mastery of modern CSS layouts and responsive design principles through the "**Flexbox Arena**" scenario-based task.
- Strengthened technical adaptability by solving diverse web development scenarios under strict time constraints without internet access.
- Fostered multidisciplinary collaboration by allowing students from different engineering branches to work in teams of two.

Day 1: February 27th, 2026

Round 1 – HTML MASHUP(Elimination)

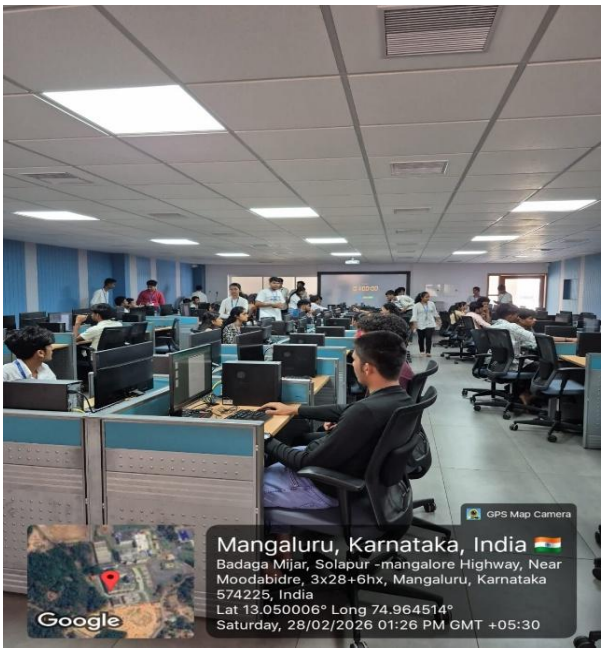
The first round of the event, "HTML Mashup," was an elimination challenge where all participating teams received the same sample web page to serve as a reference. The provided page was designed to include only basic HTML elements, testing the participants' fundamental understanding of web structure. Teams were required to recreate the page exactly using manual coding techniques without the assistance of external libraries or internet access. The evaluation was conducted based on specific required "flags" or criteria to ensure technical accuracy. Upon completion, only the top 30% of teams qualified to advance to the final round.

“Highlights of Afternoon session WEB DASH 3.0 event Day 1”

Day 2: February 28th, 2026

Round 2 – FLEXBOX ARENA

The final round, titled "**Flexbox Arena**," challenged the qualifying teams to demonstrate their advanced styling and layout capabilities. To begin the round, teams used a randomized "**spin the wheel**" mechanic to receive a specific design scenario or theme. Participants were then tasked with designing and developing a web page based on that scenario within a set time limit. This round emphasized creativity and technical mastery of **CSS Flexbox**, allowing teams one optional re-spin if they encountered a difficult scenario, though a negative marking penalty was applied for doing so. The final evaluation was conducted by a panel of judges, whose decision on the functionality and design of the submissions was final.



“Highlights of afternoon session ROUND 2: WEB DASH 3.0”

The evaluation was conducted by **Mr. Shylesh B C, Assistant Professor, Mr. Shivaraj B G, Assistant professor**, who judged the final submissions based on design, functionality, and creativity. The winners were: **"Gamblers" (1st place), "Infinity" (2nd place), and "Team Elite" (3rd place).** A vote of thanks was

delivered at **3:15 PM**, and the event successfully wrapped up by **3:30 PM.** It was a well-organized and engaging competition that highlighted the talent and enthusiasm of all participants.

Winners:

- **1st Place:** Team **Gamblers**
- **2nd Place:** Team **Infinity**
- **3rd Place:** Team **Elite**

All participants received **certificates of participation** in recognition of their efforts and enthusiasm.

Conclusion:

In conclusion, the two-day **WEB DASH 3.0** event proved to be a resounding success, showcasing the technical expertise and creative problem-solving skills of the participating students. By emphasizing manual coding and original work without internet access, the initiative ensured a high standard of technical integrity and allowed students to demonstrate their proficiency in **HTML** and **CSS**. The event served as a motivating platform for students to

embrace technical excellence in a collaborative environment, effectively bridging the gap between theoretical knowledge and practical application.

Glimpses of WEB DASH 3.0 event.

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Department of CSE (IOT AND CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)

TECHNICAL EVENT

CODE CREST-BID BUILD BREAK"

24/04/2026 to 25/04/2026

Sponsored by

CYBOT1C

TECHNICAL EVENT REPORT: CODE CREST

Date: April 24th – 25th, 2026

Time: 3:00 PM– 10:00 AM

Venue: IoT Lab, PG Block, 2nd Floor

Organized by: Cybotic Student Association

About the Event:

The Cybotic Student Association of the Department of Computer Science and Engineering (IoT and Cyber Security with Blockchain Technology) successfully organized **"Code Crest – Bid Build Break"**, a two-day intra-college technical competition aimed at enhancing coding proficiency, analytical thinking, and strategic decision-making among students. The event witnessed enthusiastic participation from multiple teams, each demonstrating strong problem-solving abilities and teamwork. The competition was carefully structured into three challenging rounds, each designed to test different aspects of programming skills, including speed, logic, collaboration, and strategy. The format of the event simulated real-world competitive coding and software problem-solving environments, encouraging participants to think critically, work efficiently under pressure, and apply their theoretical knowledge in practical scenarios. The innovative structure of the event ensured a balanced combination of individual performance and team coordination.

Event Outcomes:

- The event successfully enhanced **technical problem-solving, coding skills, and logical reasoning** among students.
- It provided a practical platform to apply **theoretical knowledge in real-time scenarios.**
- The event enhanced **strategic thinking, especially during bidding and competitive rounds.**
- Participants gained valuable exposure to **competitive programming and real-world problem-solving environments.**

Day 1: April 24th, 2026

Round 1 – Code Relay

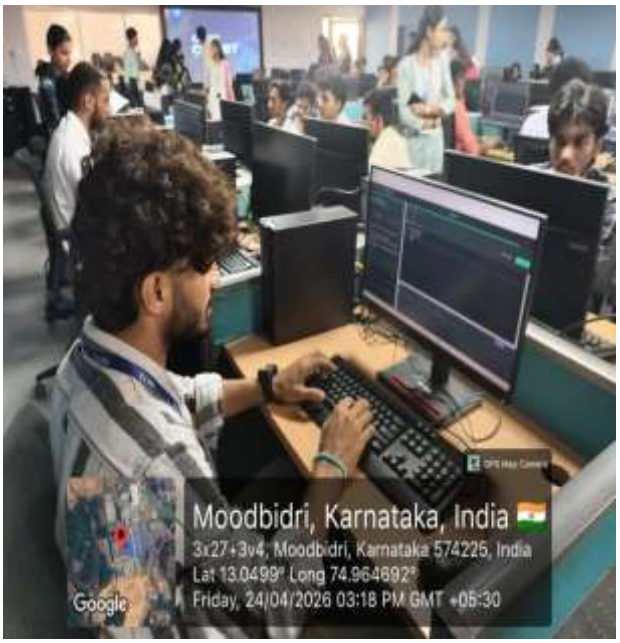
The event commenced at **3:00 PM**, with all teams reporting to the venue. A brief **welcome address** was delivered at **3:06 PM**, followed by the **rules briefing at 3:09 PM**. The round officially began at **3:15 PM**. A total of **20 teams from various departments** actively participated in this round. The round was conducted in a **Code Relay format**, designed to evaluate both individual performance and team coordination.

Each team member was required to solve one coding problem in a sequential manner, where every participant was given a **maximum of 15 minutes** to complete their assigned question. Simultaneously, the remaining team members worked on a **common question set**, which included aptitude, logical reasoning, and code-based questions. The total duration for the round was **1 hour**.

This structure ensured that all team members were actively engaged throughout the round, testing their ability to manage time, think logically, and collaborate effectively.

Based on the cumulative performance of teams in both the relay coding and the common question set, evaluation was carried out. As this was an **elimination**

round, teams were shortlisted according to their scores, and the **top 8 teams** qualified for the next round, which was scheduled for day 2. The round concluded at **4:20 PM**, marking the successful completion of the first phase of the event.



"Highlights of day 1: CODE CREST event"

Day 2: April 25th, 2026

Round 2 – Code Auction

The second round began with all **8 qualified teams** reporting to the venue at **9:50 AM**. The **rules briefing** was conducted at **10:00 AM**, followed by the commencement of the **auction at 10:15 AM**. At the beginning of the round, each team was provided with a wallet of **2,000 virtual points**, which were used for **bidding on coding questions**. In this round, participants competed in a Code Auction format, where coding questions were displayed to all teams. Each question was given a short duration for reading and analysis, after which teams placed their bids based on their confidence and understanding of the problem**.**

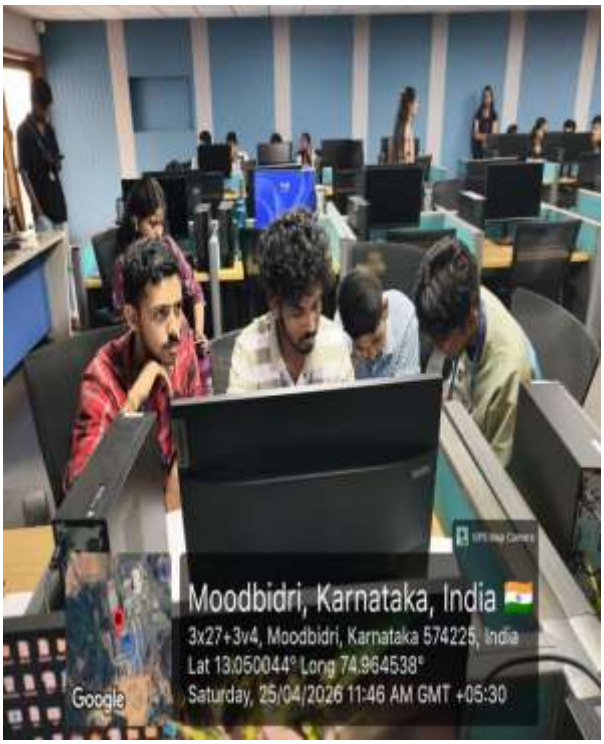
Teams were required to **compulsorily acquire two questions**, while an **optional third question** was available for additional advantage. This introduced a **strategic element**, as teams had to carefully decide how to utilize their points while avoiding

unnecessary risks. Once the auction phase concluded, the coding phase began at **11:40 AM**, where teams were given **50 minutes** to solve the questions they had secured. The round concluded at **12:30 PM**. This round focused on **strategic decision-making, time management, and problem-solving skills**, as participants had to balance between bidding wisely and solving accurately. All teams progressed to the next round, and their performance contributed to the **overall evaluation**.

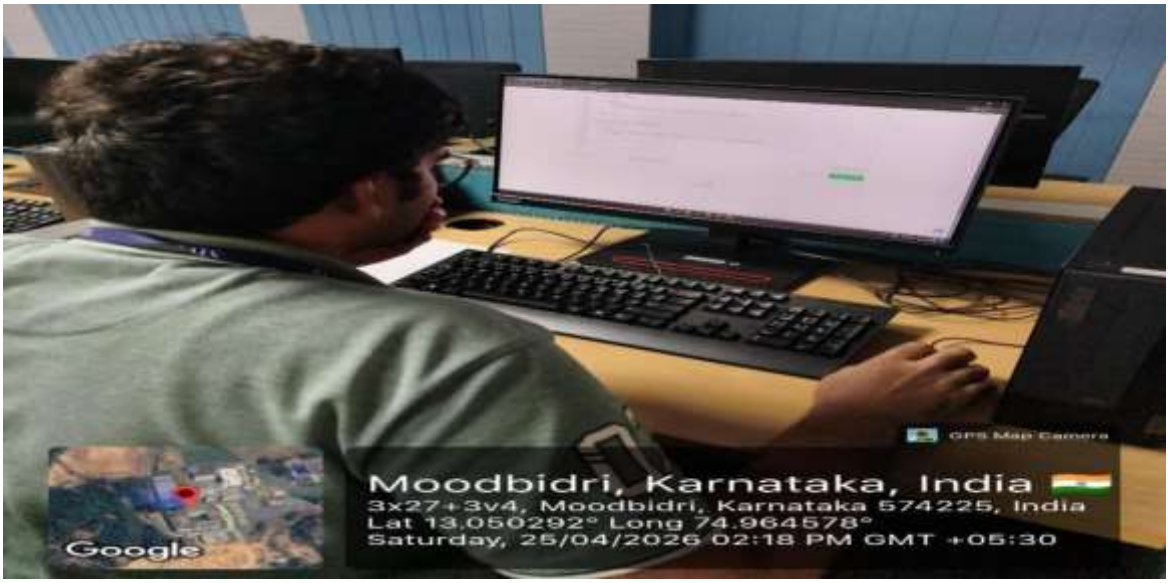
Round 3 – Head-to-Head Battle

The final round was conducted as a **Head-to-Head Battle**, with **all 8 teams participating**, as there was **no elimination in Round 2**. In this round, teams competed directly against each other in a **one-on-one coding format**. Each team selected one member to represent them in a coding duel against an opponent team member. Both participants were assigned the **same coding problem**, and they competed simultaneously to solve it. The participant who successfully solved the problem and passed all **test cases first** was awarded points. The round was conducted in two stages, where different members from each team participated in separate duels. In the first stage, individual members competed in a one-on-one coding battle, where both participants solved the same question. In the second stage, two members from each team were allowed to discuss and solve the problem together, encouraging teamwork along with problem-solving. This ensured that team members had the opportunity to participate, collaborate, and contribute to the overall performance.

This format created an intense and competitive environment, requiring participants to demonstrate speed, accuracy, and problem-solving ability under pressure. The evaluation was based on performance in each round, and the **final winners were determined based on the cumulative score from all three rounds**



“Highlights of day 2-ROUND 2: CODE CREST (Code Auction)”



“Highlights of day 2-ROUND 3: CODE CREST (Head-to-Head Battle)”

Winners:

- **1st Place:** Team **Mutex**
- **2nd Place:** Team **Void main**
- **3rd Place:** Team **Nexus**

The winners were awarded with prizes. All participants received **certificates of participation** for their efforts and enthusiasm. The two-day **"Code Crest – Bid Build Break"** event, conducted by the **Cybotic Student Association**, was a successful initiative that highlighted the **coding skills and analytical abilities** of the participants. The event was executed smoothly, with active involvement from all teams, reflecting its effectiveness and impact. It provided a valuable platform for students to strengthen their skills and encouraged **innovation and technical excellence** in a collaborative setting.

Glimpses of the CODE CREST event.

Department of CSE (IoT & Cyber Secuirity with Blockchain Technology)

AICTE Activity Report

Title of the Event: **Tourism Promotion Innovative Approaches.**

Date: **23/02/2025 to 23/03/2025**

Timings: **09:00 AM to 1:00 PM**

About the Event: As part of our local tourism visit, 63 students explored several beautiful and culturally significant places in our region. The aim of this visit was to better understand and appreciate the natural beauty, history, and heritage of our local area. Students had the opportunity to explore several beautiful, historically significant, and naturally rich places in and around our region. The main purpose of this excursion was to enhance our understanding of local geography, culture, heritage, and the importance of environmental preservation.

Students journey included visits to **Thodar Falls**, **Konaje Kallu**, **Malpe Beach**, **Saavira Kambada Basadi**, and **Kadalkere Nisarga Dhama**. Each destination offered a unique and enriching experience that left a lasting impression on us. Students visit to Thodar Falls, located near Moodbidri in the Dakshina Kannada district, was both adventurous and enriching. The falls are beautifully nestled within the dense greenery of the Western Ghats, known for their rich biodiversity and ecological importance. As Students made our way through the forested path, Students observed a wide variety of native plant species, showcasing the area's healthy and thriving ecosystem. The trail to the falls was steep and rocky, adding an element of challenge and excitement to our journey. This sense of adventure made reaching the falls even more rewarding. The falls are located in Thodar village, a place of cultural and spiritual importance, home to Shri Kshetra Thodar, known for its deep-rooted traditions of spirit worship. The serene atmosphere, combined with the natural beauty of cascading water and chirping birds, offered a peaceful retreat. The experience helped us appreciate the importance of conserving such natural spaces that blend ecological richness with local heritage. Though the path was challenging, it added adventure to the trip. The peaceful surroundings and natural beauty made it a memorable stop.

Students next destination was the striking and historically noted Konaje Kallu, a twin-peaked granite hill situated approximately **7** kilometers from Moodbidri. This impressive natural formation is also known by the nickname **"**Ass's Ears**"**, a name given by British sailors due to the

distinct shape of its twin peaks that resemble the ears of a donkey from a distance. Rising to a height of about 344 meters above sea level, Konaje Kallu is a favored destination among trekking enthusiasts, nature lovers, and geology students alike. The trek to the top was both challenging and exhilarating, involving narrow rocky paths and steep inclines. However, the trail also offered us the opportunity to observe the diverse vegetation, rock layers, and peaceful surroundings of the Western Ghats. Along the way, Students paused frequently to take in the sounds of birds, the rustling of trees, and the refreshing breeze elements that added to the overall immersive nature experience. Students also noticed how untouched and raw the landscape was, providing a stark contrast to the bustling towns Students are used to. Reaching the summit of Konaje Kallu was a rewarding moment for all of us. From the top, Students were greeted with breathtaking panoramic views of the surrounding valleys**,** forests**,** paddy fields, and distant hills. The sight was not only visually stunning but also gave us a new appreciation for the natural topography of our region. It was a perfect spot for photography, quiet reflection, and environmental observation. Some of us even took the time to sketch the landscape or take notes for future school projects related to geography or environmental science. Apart from its natural beauty, Konaje Kallu also carries geological significance, being a part of the ancient rock formations in the Western Ghats. Learning about its formation sparked our curiosity about regional geology and the forces of nature that shape the land over time. Moreover, the peaceful environment and relatively untouched surroundings made us reflect on the importance of preserving such landscapes, especially in times of rapid urban development and deforestation. Overall, our visit to Konaje Kallu was much more than a trekking trip it was an experience filled with learning**,** physical endurance**,** and spiritual calmness.

As part of our local tourism journey, one of the most memorable and scenic destinations we visited was Malpe Beach, situated near Udupi along the stunning coastline of Karnataka. Known for its pristine sands, scenic sunsets, and vibrant local life, the visit to Malpe Beach was not only enjoyable but also deeply educational and thought-provoking, offering us a wonderful blend of fun, learning, exploration, and environmental awareness. Upon our arrival, Students were immediately captivated by the breathtaking beauty of the beach. The endless stretch of golden sand, the gentle roar of waves, and the sight of swaying coconut palms against the backdrop of an open blue sky created a refreshing and tranquil atmosphere that instantly lifted our spirits. Many of us took a moment just to stand by the shore, letting the cool breeze and rhythmic waves connect us with the serenity of nature. As Students walked along the shoreline, we engaged in a variety of activities that allowed us to interact more closely with the coastal environment. Some of us collected seashells, observed crab trails, and watched fishermen preparing their boats, gaining insight into the traditional coastal livelihoods that are still practiced here. Students also had meaningful discussions with our teachers about coastal ecosystems, the importance of mangroves, and the delicate balance that must be maintained to protect marine life. This helped us understand the crucial role beaches like Malpe play in supporting both biodiversity and local economies. Students also learned about the impact of tourism on coastal environments. Littering, overdevelopment, and pollution are serious concerns, and Students discussed how responsible tourism practices such as avoiding plastic, respecting local wildlife, and supporting eco-friendly initiatives can help preserve the beach for future generations. This sparked conversations among us about what Students, as students and future citizens, can do to promote sustainable tourism and protect the natural treasures of our region. The beach also offered recreational opportunities such as camel rides, local snacks, and a glimpse of St. Mary’s Island ferries, which added to the liveliness of the area. While Students didn't have time to explore the island on this trip, learning about its geological rock formations and historical significance made many of us eager to return one day with family or friends. The visit to Malpe Beach was not just a fun outing it was a truly meaningful experience that taught us to admire and respect the natural world around us. It deepened our connection to the coastal charm of Karnataka and gave us valuable insights into the ecological and cultural significance of coastal regions. The memories Students created at Malpe will stay with us for years to come, reminding us of the importance of protecting such serene and beautiful landscapes.

One of the most impressive and culturally rich sites Students visited was the Saavira Kambada Basadi, also called the Thousand Pillars Temple, located in the heart of Moodbidri. This ancient Jain temple was built in 1430 AD during the rule of Devaraya Wodeyar and stands as a monumental representation of Jain architectural excellence. The temple is renowned for its 1000 intricately carved stone pillars, each one unique in design and craftsmanship. These pillars are adorned with carvings of various motifs, including animals, flowers, and religious symbols, showcasing the artistic mastery of the artisans of that era. Students walked through the temple in awe, taking in the peaceful atmosphere and the spiritual aura of the place. Students also appreciated the ongoing preservation efforts, as the temple premises were clean, well-organized, and maintained in a way that protects its cultural and historical value. Visiting Saavira Kambada Basadi gave us a deeper appreciation of the region's religious diversity, traditional architecture, and artistic legacy.

Finally, Students concluded our trip with a visit to Kadalkere Nisarga Dhama, a tranquil eco-park near Moodbidri. This beautiful nature retreat is surrounded by lush greenery and offers a wide range of recreational activities such as boating, nature walks, and picnic areas. It was a peaceful way to end our journey, allowing us to reflect on what Students had seen and learned. Kadalkere is an ideal spot for families, students, and nature lovers, and its well-maintained environment promotes eco-tourism and nature appreciation. Students spent time boating, walking through shaded trails, and simply relaxing in the serene environment. The park also reminded us of the role green spaces play in urban life, offering both environmental and mental health benefits.

In conclusion, our local tourism trip was not just a sightseeing experience but a deeply enriching educational journey that left a lasting impact on all of us. It gave us the valuable opportunity to explore and appreciate the natural beauty, cultural landmarks, and historical treasures present in our own local surroundings many of which Students had previously overlooked or taken for granted. Each destination Students visited offered unique learning experiences from the biodiversity of Thodar Falls and the geological marvel of Konaje Kallu, to the architectural brilliance of Saavira Kambada Basadi, the coastal charm of Malpe Beach, and the recreational serenity of Kadalkere Nature Park. Students returned from the trip with greater awareness, a deeper respect for our environment, and a new sense of pride in the rich heritage of our region. The memories Students created be it trekking up rocky hills, walking on sandy shores, or observing intricate temple carvings will be cherished for a lifetime. Students came to understand how deeply interconnected natural and cultural heritage is, and how preserving one helps sustain the other. The trip also encouraged teamwork, responsibility, and a sense of curiosity among all of us, as Students explored these sites together. More importantly, this experience has inspired us to take an active role in promoting and preserving local tourism, ensuring that these remarkable places continue to thrive and inspire future generations to explore, learn, and protect the heritage that surrounds them. Tourism promotion is an investment in our culture, economy, and environment. Highlighting our rich history, vibrant festivals, and scenic landscapes can attract global attention and boost local livelihoods. By combining modern marketing with sustainable practices, Students can ensure tourism grows responsibly. Let us work together to make our region a must visit destination for travelers everywhere.

Glimpses of the Activity

Coordinator **Head of the Department**

Department of CSE (IoT & Cyber Secuirity with Blockchain Technology)

AICTE Activity Report

Title of the Event: **Facilitating 100% Digitized money transactions.**

Date: **28/05/2025**

Timings: **09:00 AM to 1:00 PM**

About the Event: Under the AICTE activity point program, Students organized an awareness activity with the goal of facilitating 100% digital transactions. Digital payments refer to transactions conducted using electronic methods, where no physical exchange of cash takes place. Both the payer and the payee engage in the transaction through online platforms such as banking applications, UPI systems, or internet banking services. The Indian government has taken several steps to promote digital payments and financial literacy across the country, aiming to create a digitally empowered economy that is fearless, paperless, and cashless. These efforts are designed not only to improve convenience and efficiency but also to reduce corruption, increase transparency, and bring more people into the formal financial ecosystem.

During our activity 3 year toltal 63 students of were participated, students visited a nearby shop and introduced ourselves to the people there. Students explained the purpose of our visit, which was to spread awareness regarding digital payments, educate the public about various online transaction methods, and highlight the importance of secure digital practices. Students began by discussing the basic concept of digital banking and familiarized the participants with different types of digital payment methods widely used in India today. Among the most commonly used were banking cards such as debit and credit cards, Unified Payments Interface (UPI) systems, mobile wallets like Paytm and PhonePe, mobile banking, internet banking, and Micro ATMs. Each method has its own benefits and is designed to provide secure and convenient access to financial transactions. Students also emphasized that UPI, developed by the National Payments Corporation of India (NPCI), has become one of the fastest and most widely used digital payment systems in the country due to its simplicity, speed, and real-time transfer capabilities.

An important part of our session focused on educating people about the safety measures that must be followed while using digital payment methods. We discussed the importance of never sharing personal banking information such as OTPs, PINs, or passwords with anyone. People were

informed about common scams and phishing attempts that can occur through fake websites or suspicious messages. Students strongly advised everyone to use only verified and official applications from trusted developers. Additionally, users were encouraged to regularly update their banking apps, use strong passwords, and enable two-factor authentication wherever possible to enhance their account security. Students made sure to explain that just as it is important to lock one's house or wallet, securing digital payment methods is equally crucial.

Students also demonstrated how digital payments can be made easily through mobile phones using UPI apps and mobile wallets. The demonstration included step-by-step guidance on how to scan QR codes, send money to contacts, check transaction history, and ensure successful payments. By doing this, Students helped people realize that digital transactions are not only time-saving but also reduce the need to handle physical cash, which is particularly beneficial in reducing the risk of theft, loss, or unhygienic exchanges. Students further discussed how digital payments contribute to better financial tracking, improved record-keeping, and transparency for both consumers and small business owners. These advantages make digital payments a reliable and modern solution, especially for shopkeepers, vendors, students, and working professionals who engage in frequent transactions. Another important aspect Students covered was the role of digital transactions in improving access to government schemes and subsidies. Through Direct Benefit Transfers (DBT), many welfare

programs now credit money directly into the beneficiaries' bank accounts, which is only possible due to digital banking. Students explained that by adopting digital payments, citizens can take full advantage of these services without delays or middlemen.

Students also introduced the audience to digital literacy resources and customer support helplines available through banks and government portals in case they face issues or have doubts about using digital payment tools. The people Students interacted with showed great interest in learning and asked questions about security, usage, and benefits. Students clarified their doubts and encouraged them to start with simple transactions and gradually become comfortable with more advanced features. Overall, this activity was a meaningful step in spreading awareness about the benefits, tools, and precautions related to digital payments. By promoting digital financial habits, Students hope to empower more citizens to confidently embrace technology in their daily lives and actively contribute to India's journey toward a truly digital and inclusive economy.

Digital payments refer to cashless transactions conducted through electronic platforms like mobile apps, internet banking, and payment cards. To promote financial inclusion and reduce dependency on cash, the Government of India has been actively encouraging digital payment adoption under the "Digital India" initiative. As part of our awareness activity, Students visited a local shop to educate people about different digital payment methods such as debit/credit cards, UPI, mobile wallets, internet and mobile banking, and Micro ATMs. Students provided hands-on demonstrations, explained the benefits of each method, and discussed how to use them safely. A major focus was on cybersecurity highlighting the need to protect personal information, use verified apps, and remain alert to phishing threats. Students also introduced user-friendly platforms like UPI apps to make the shift to digital payments easier for daily use. Overall, the session aimed to empower people with knowledge and confidence to adopt secure and efficient digital payment practices.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Lat 13.05079° Long 74.966474°
28/05/2025 02:20 PM GMT +05:30
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STATIONERY ITEM
Puttige Padavu, Karnataka, India
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Dakshina
Kannada,Karnataka,India
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AICTE ACTIVITY POINT
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Badagumijaru, Karnataka, India
Lat 13.049653° Long 74.968405°
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Glimpses of the Activity

Coordinator **Head of the Department**