Malnad College of Engineering

(An autonomous institute under VTU)

Department of CSE (AIML)

Report on computer organisation session

Title: Computer Organisation- Integrated Operation of Hardware and Software Components

Date: 19th February, 2024

Speaker: Mr. Tejonidhi M R

About the speaker: Mr. Tejonidhi M R serves as an Assistant Professor in the Computer Science and Engineering branch at Malnad College of Engineering, Hassan, bringing over a decade of teaching experience to his role. With expertise spanning diverse domains, Mr. Tejonidhi specializes in Computer Networks, Internet of Things (IoT) and Parallel Computing, Image Processing, Big Data Analytics, and Cloud Computing. His extensive background is underscored by a robust publication record, notably in projects pertaining to IoT devices. Throughout his tenure, Mr. Tejonidhi has demonstrated a commitment to academic excellence and a passion for advancing knowledge in his areas of specialization.

Objective: The objective of the session was to provide comprehensive insights and knowledge regarding computer organization, with a primary focus on understanding the role, functionality, and interplay of computer components. Through exploration of both hardware and software components, the session aimed to equip students with a deeper understanding of how computers function at a fundamental level. Furthermore, the session aimed to shed light on the critical relationship between hardware and software components, underlining their integrated operation in ensuring efficient and seamless computing processes. Overall, the session sought to empower students with foundational knowledge essential for comprehending the intricacies of computer organization and fostering a holistic understanding of computing systems.

Outcomes: The outcome of the session has significantly enhanced participants' understanding of computer organization. By delving into the integrated operation of hardware and software components, students have gained valuable insights into the intricate mechanisms that supports the computing processes. This deeper comprehension not only helped them with practical knowledge but also fosters critical thinking skills necessary for navigating complex challenges in the field of computer science. Endowed with this foundational understanding, students are better prepared to make informed decisions and tackle real-world problems effectively

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About the session:

The session on computer organization was enriched with hands-on experiences and practical demonstrations aimed at deepening participants' understanding of the subject matter. In addition to theoretical explanations, attendees had the opportunity for physical interaction with key computer components such as the CPU processor, hard drive, and power unit. This tactile experience provided a tangible connection to the concepts discussed and offered valuable insights into the physical hardware that comprises computing systems. Moreover, the session introduced participants to innovative software designed to facilitate seamless interaction between Windows and Linux operating systems, underscoring the importance of software compatibility and integration in modern computing environments. Towards the conclusion of the session, the speaker demonstrated the theoretical concepts discussed using a PC build simulator. This immersive experience allowed participants to visualize the process of building a PC from scratch, reinforcing their understanding of hardware components, assembly techniques, and system configurations. By combining theoretical knowledge with practical demonstrations, the session fostered a comprehensive learning experience that empowered participants with the skills and insights necessary to navigate the complexities of computer organization effectively.

Conclusion:

In conclusion, the session on computer organization provided a comprehensive understanding of computing systems. Through theoretical discussions, hands-on experiences with key components, and practical demonstrations, participants gained insights into the relationship between hardware and software. The introduction of software facilitating interaction between operating systems, coupled with a PC build simulation, reinforced understanding. Overall, the session equipped attendees with the knowledge and skills essential for navigating the complexities of computer organization in the field of computer science.

Gallery: