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Workshop on
"Microsoft Azure – Fundamentals"

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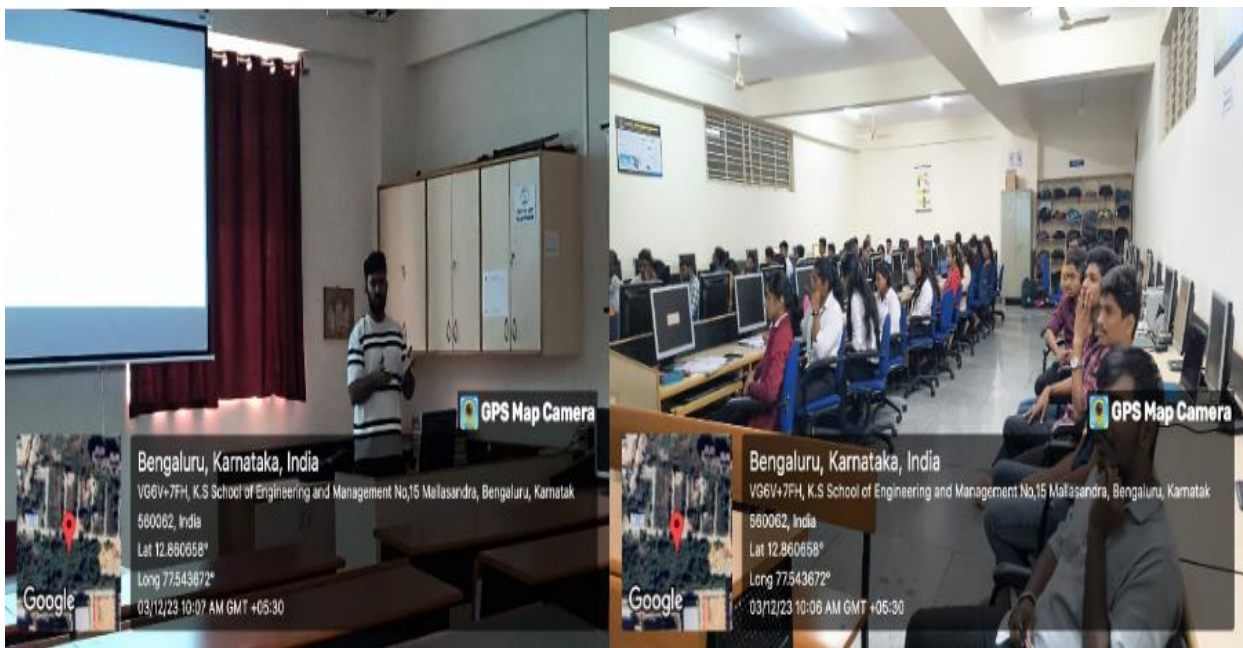
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The Department of Computer Science and Engineering, KSSEM in association with Microsoft has organized 4-days Workshop on 25th, 26th November, 2nd and 3rd December 2023.

The workshop was inaugurated by Dr. K. RamaNarsimha, Principal and Director of KSSEM, Dr. K Venkata Rao, Professor and Head of CSE, and Faculty of CSE Department, KSSEM. The Resource persons for the workshop were, Mr. Shreyas Ramakrishna, Senior Industry Trainer, IN-BIOT and Mr. Pulastya Pandey, Senior Industry Trainer, IN-BIOT.

Day 1: Introduction to Cloud and its types and services

On the inaugural day of the intensive 4-day Microsoft Azure workshop, participants delved into the fundamental concepts of cloud computing, laying a robust foundation for the subsequent learning journey. The session commenced with a comprehensive exploration of the overarching advantages of cloud computing, elucidating its transformative impact on modern businesses. The instructors provided insightful perspectives on the diverse types of cloud services, encompassing Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS), enabling participants to grasp the spectrum of cloud-based solutions available in the Microsoft Azure ecosystem.The instructors navigated through Azure's architecture, emphasizing its role in facilitating seamless integration, high availability, and optimal performance. The practical aspects of these concepts were reinforced through hands-on exercises, fostering a dynamic and engaging learning environment.

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The session successfully set the stage for the subsequent days of the workshop, equipping participants with a solid understanding of cloud fundamentals and Azure's core architecture. Overall, the first day provided an insightful and comprehensive initiation into the world of Microsoft Azure, instilling a sense of anticipation for the forthcoming days of immersive learning and practical application.

Day 2: Mastering Azure Pillars: A Deep Dive into Compute, Networking, Storage, Identity, Security, and Cost Management

The second day of the Microsoft Azure workshop proved to be an enriching continuation of our exploration into the Azure ecosystem, focusing on key pillars of cloud computing. The day commenced with an in-depth study of Azure Compute services, elucidating the deployment and management of virtual machines, containers, and serverless computing resources.The workshop seamlessly transitioned into the realm of Azure Networking Services, where participants acquired knowledge about creating and managing virtual networks, implementing load balancing, and securing network communication. The intricacies of Azure's networking capabilities were demystified, providing a solid foundation for constructing robust and secure cloud architectures. The latter half of the day was dedicated to understanding Azure Identity, Access, and Security features. Participants delved into the implementation of Azure Active Directory, configuring identity solutions, and enforcing security measures to safeguard cloud resources. This comprehensive overview equipped participants with the tools necessary to ensure the integrity and confidentiality of data within Azure.The day concluded with a strategic exploration of Azure Cost Management, emphasizing the importance of optimizing resources and monitoring usage to manage costs effectively. Understanding the financial aspects of cloud services became integral for participants, ensuring they could strike a balance between resource allocation and budget constraints. The combination of theoretical insights and practical applications set a strong precedent for the subsequent days, propelling participants further into the intricacies of Microsoft Azure.

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Day 3: Governance, Deployment, and Management Tools for Cloud Excellence

The third day of our Microsoft Azure workshop unfolded with a comprehensive exploration of governance and compliance features, as well as tools integral to maintaining regulatory adherence within the Azure cloud environment. The importance of aligning Azure resources with regulatory frameworks and internal policies was underscored, emphasizing the significance of a secure and compliant cloud infrastructure. Following this, the focus shifted to features and tools for managing and deploying Azure resources effectively. The participants were introduced to Azure Resource Manager (ARM) templates, enabling them to automate the deployment of resources and consistently enforce configurations. Practical exercises provided hands-on experience in creating, customizing, and deploying templates, empowering participants to implement infrastructure as code principles and enhance resource deployment efficiency. The latter part of the day was dedicated to exploring various management tools available within the Azure ecosystem. Participants gained proficiency in tools like Azure Monitor for tracking performance metrics & Azure Log Analytics for deep insights into operational data. In summary, day three of the workshop focused on empowering participants with the knowledge and skills to establish effective governance and compliance measures within Azure, automate resource deployment through advanced tools, and leverage management tools for monitoring, analysis, and optimization. The day provided a strategic blend of theoretical

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understanding and practical application, equipping participants to navigate the complexities of Azure governance and resource management with confidence.

Day 4: Revisiting Key Concepts and &Sample Tests to check our understanding

The fourth and final day of our Microsoft Azure workshop marked a culmination of our intensive learning journey, focusing on reinforcing key concepts and evaluating our preparedness for the AZ-900 certification. The day commenced with thorough revision sessions, allowing participants to revisit fundamental Azure concepts, methodologies, and best practices covered in the preceding days. Instructors provided clarifications, addressed queries, and ensured that participants had a solid grasp of the essential elements required for success in the AZ-900 certification exam. To assess and fortify our understanding, the day featured sample tests designed to simulate the conditions of the actual certification exam. These tests gauged participants' knowledge across a spectrum of Azure topics, providing valuable insights into areas of strength and areas that might require additional focus. The day fostered a collaborative learning environment, allowing participants to engage in discussions, share insights, and seek clarification on any lingering doubts. Instructors actively facilitated the review process, ensuring that each participant felt adequately prepared and equipped

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for success in the AZ-900 certification. In essence, day four encapsulated a holistic approach to exam preparation, combining targeted revision, interactive sessions, and realistic sample tests to assess and enhance participants' readiness for the AZ-900 certification.

Workshop Coordinator

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