NEW HORIZON COLLEGE OF ENGINEERING

DEPARTMENT OF INFORMATION SCIENCE and ENGINEERING

Expert Talk

On

"Building Scalable Solutions on AWS"

Participants: **IV Semester Students**   **Date: 24-March-2025**

Brief Description of The Event:

On 24th March 2025, the Department of Information Science and Engineering hosted an expert talk on "Building Scalable Solutions on AWS," presented by Mr. Anil P, Cloud Solution Architect at SAP Labs. The session began with an introduction to cloud computing and industry expectations for cloud programming. Key topics included the role of a Cloud Architect, Storage, and Database Management.

Key Points Covered:

Elastic Compute – Use **EC2 Auto Scaling** and **AWS Lambda** to dynamically adjust resources based on demand.

Database Scaling – Utilize **Amazon RDS read replicas**, **DynamoDB auto-scaling**, and **Aurora** for efficient data handling.

Load Balancing and Networking – Implement **Elastic Load Balancer (ELB)**, **CloudFront CDN**, and **Route 53** for traffic distribution and latency reduction.

Microservices and Decoupling – Leverage **ECS, EKS, and API Gateway** for microservices and **SNS/SQS** for event-driven architectures.

Caching and Performance Optimization – Use **ElastiCache (Redis/Memcached)** and **CloudFront** for faster content delivery.

Monitoring and Automation – Employ **CloudWatch, AWS Auto Scaling, and CloudFormation** for real-time monitoring and infrastructure automation.

Security and Cost Optimization – Implement **IAM roles, encryption, AWS WAF**, and use **Spot/Reserved Instances** to reduce costs.

AWS provides a robust ecosystem for scalable, cost-effective, and resilient cloud applications.

Outcome:
By the end of the Expert talk, participants gained knowledge on

- Cloud Solution Architect
- Amazon Web Services
- Storage Data Base Services

Activities Conducted: NIL

No. Of Participants: 60

Winners (if any, for activities conducted): NA

Guest Details (Name, Designation, Organization, Location):

Anil P, Cloud Solution Architect, SAP Labs, Bangalore

The Brochure

GLIMPSES OF THE EVENT

Faculty Coordinator   **HOD-ISE**

SriHarshini   **Dr Vandana CP**