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Enrollment No: 2302031030051
Date: 16/12/24 to 04/01/25
College: ASOIT

Internship Summary

During my 15-day internship at "AIA Engineering LTD.", I had the incredible opportunity to deepen my understanding of cloud computing and AWS services through hands-on activities and comprehensive learning modules. Each day presented new challenges and insights, allowing me to explore a variety of cloud technologies. I also gained a thorough understanding of networking concepts, including IP protocols, addressing schemes, sub netting, super netting, ports and protocols, network troubleshooting using tools like Wireshark, and safeguarding networks against attacks.

Summary of my Daily Learning's:

- **Day 1:** Introduction to AWS services, cloud computing architecture, EC2 instance types, pricing analysis, and cost comparison by region.
- **Day 2:** Hands-on with EC2 instances—launching, configuring network and storage, creating AMIs, and performing instance cost analysis.
- **Day 3:** Explored network and security aspects of EC2, including security groups, key pairs, Elastic IPs, and instance type changes.
- **Day 4:** Worked on VPCs, subnets, peering connections, routing tables, and S3 bucket management, including uploads and deletions.
- **Day 5:** Learned about IAM roles, user groups, policies, and CloudWatch for monitoring metrics and alarms.
- **Day 6:** Explored AWS RDS databases, creating and managing database instances with secure access.
- **Day 7:** Studied SOC reports for compliance and evaluated AWS Quotas and accidental stop protection for instances.
- **Day 8**: Configured AWS Network Firewall for VPC security and calculated firewall pricing for different configurations.
- **Day 9:** Set up a Site-to-Site VPN connection between on-premises and AWS VPC and completed a course on network operations.
- **Day 10:** Enhanced networking skills with CompTIA Network+ courses, covering IP protocols, ports, and addressing schemes.
- **Day 11:** Studied detailed port functionalities and protocols, understanding their applications in network communication.
- **Day 12:** Learned about common network attacks (DoS, DDoS, DNS spoofing) and troubleshooting using tools like Wireshark and CLI commands.
- **Day 13:** Integrated AutoScaling and Load Balancing for AWS efficiency and worked on AWS-related exercises.
- **Day 14:** Focused on S3 bucket functionalities, lifecycle policies, and data migration techniques like AWS DataSync and Snowball Edge.
- **Day 15:** Reviewed EC2 instance optimization strategies, completing tests to improve theoretical understanding and analysis skills.