







A Report on Seminar "A DevOps Journey for Beginners" Organised by Department of Computer Science & Engineering in association with ISTE Student Chapter on 25.10.2024



Report Submitted by: Mr. K. Sathish, Assistant Professor, Dept. of CSE.

Resource Person Details: Mr. Pavan Kumar Natam, Senior DevOps Engineer, Tredence, Bangalore.

Venue: Seminar Hall C; Time: 2:00 to 4:00 PM

Report Received on 04.11.2024 Mode of Conduct: Online

Event Overview:

The Department of Computer Science & Engineering, in association with ISTE Student Chapter, organized a seminar on "A DevOps Journey for Beginners" The event aimed to provide students with insights into the importance of DevOps in today's IT industry, provide recognition, and open up new career opportunities.

Opening Remarks and Welcome Note:

The event began with a welcome address by Mr. K. Sathish, Assistant Professor from the Department of CSE, who provided a brief overview of the event proceedings. He welcomed the resource person who graced the event and introduced him to the participants. The Head of the Department, Computer Science and Engineering Dr. M. Sreedevi addressed the gathering by explaining the importance of DevOps to fetch more job opportunities.



The Resource Person of the event Mr. Pavan Kumar Natam, Senior DevOps Engineer, Bangalore delivered the keynote address. Mr. Pavan Kumar completed his B. Tech in Sreenivasa Institute of Technology & Management Studies, Chittoor. Andhra Pradesh. Presently he is working as DevOps Engineer in Tredence Analytics Solutions Pvt. Ltd, Bangalore. He has expertise in GIT, Docker, Azure DevOps, Terraform, Vault and other DevOps tools. He shared his experience in the DevOps domains. Mr. Pavan Kumar emphasized the value of certifications in building expertise and career development. He also encouraged students to leverage DevOps platforms for hands-on learning.

Topics Covered:

The following topics were discussed in the Seminar:

1. Understand the Basics of DevOps:

- What is DevOps? Learn about the DevOps culture, its goals (collaboration, automation, continuous delivery), and how it differs from traditional development and operations.
- Key Concepts: Familiarize yourself with terms like CI/CD (Continuous Integration/Continuous Deployment), Infrastructure as Code (IaC), monitoring, and collaboration tools.

2. Learn Version Control:

- Git: Start with Git, the most widely used version control system. Learn how to create repositories, commit changes, branch, merge, and resolve conflicts.
- Platforms: Get comfortable with platforms like GitHub or GitLab to host and manage your repositories.

3. Understand Continuous Integration/Continuous Deployment (CI/CD):

- CI/CD Tools: Explore tools like Jenkins, Travis CI, or GitHub Actions. Set up a simple CI/CD pipeline for a sample application.
- Automate Testing: Learn how to write and run automated tests to ensure your code is reliable.

4. Get Comfortable with Scripting:

- Languages: Familiarize yourself with scripting languages such as Bash or Python. Automation scripts are essential for DevOps practices.
- Basic Scripts: Write scripts to automate repetitive tasks, such as deployment or environment setup.

5. Learn about Containers:

• Docker: Understand containerization and how Docker works. Create and manage Docker containers.

Outcomes:

- Enhanced Understanding of DevOps Principles: Participants gain a clear grasp of DevOps culture, practices, and its significance in modern software development.
- Familiarity with Tools and Technologies: Attendees learn about popular DevOps tools (like Jenkins, Docker, Kubernetes, etc.) and how they integrate into CI/CD pipelines.
- Networking Opportunities: Participants connect with industry experts, peers, and potential collaborators, fostering relationships for future projects.
- Best Practices and Case Studies: Sharing of real-world examples and success stories helps attendees understand practical applications of DevOps strategies.
- Skill Development: Hands-on workshops may lead to improved technical skills in areas such as automation, monitoring, and cloud services.

Vote of Thanks:

Ms. Sree Bhavana ISTE Student Member delivered the vote of thanks. She thanked the resource person for delivering the 'Seminar' and the Head of the Department Dr. M. Sreedevi, and the management for giving the opportunity to initiate the event.