Training TR-102 Day 17 Report

9th July, 2024

The seventeenth day of the TR-102 training program concentrated on key concepts of DevOps, particularly the creation of CI/CD pipelines using Git, understanding various Git commands, and an introduction to Docker.

CI/CD Pipelines using Git

• Concept of DevOps:

- The session started with an in-depth explanation of the DevOps culture and its importance in modern software development.
- Discussed the benefits of CI/CD pipelines in DevOps, such as faster delivery and improved reliability.

• Creating CI/CD Pipelines:

- o Detailed the steps to create CI/CD pipelines using Git.
- Illustrated practical examples and workflows to show the implementation of these pipelines.
- Covered integration and deployment strategies, emphasizing continuous integration and continuous deployment.

Submitted by: Shafneet Kaur URN: 2203560 Page No.: 1

Git Commands

• Git Stash:

- o Covered the purpose and usage of the 'git stash' command.
- Demonstrated commands to save and apply stashes, such as 'git stash save', 'git stash apply', and 'git stash pop'.
- o Provided scenarios for using stash, like saving uncommitted changes temporarily.

Docker

• Introduction and Basic Definition:

- o Introduced Docker and the concept of containerization.
- Explained how Docker allows running applications in containers on a Linux platform, even if the host system does not have Linux installed.

• Running Applications:

- Discussed the advantages of using Docker for running applications in a consistent environment.
- Provided examples and use cases to illustrate how Docker can simplify application deployment and management.

Submitted by: Shafneet Kaur URN: 2203560 Page No.: 2

Conclusion

Day 17 of the training was comprehensive, covering essential tools and practices in the DevOps lifecycle. The focus on CI/CD pipelines, advanced Git commands, and Docker provided participants with practical skills and knowledge crucial for modern software development and deployment processes.

Submitted by: Shafneet Kaur URN: 2203560 Page No.: 3