Project: Automated Deployment and Monitoring of Tomcat Web Applications

<u>Project Description</u>: Led an initiative to automate the deployment and monitoring of Tomcatbased web applications for a high-traffic online platform.

The flow of the project involves developers pushing code to the Git repository, which triggers an automated deployment script.

This script deploys the updated application onto an AWS EC2 instance running Apache Tomcat.

Nagios monitors the Tomcat server's performance, sending alerts if any issues arise, enabling quick identification and resolution of any potential problems.

Linux Shell Scripting: Used to create scripts for automating various tasks in the deployment and monitoring process.

Apache Tomcat: Employed as the web server and servlet container to deploy various Javabased web applications.

AWS EC2: Used for hosting the web applications on virtual servers, allowing for scalability and flexibility.

Nagios: Implemented for monitoring the infrastructure and ensuring that the web applications are running smoothly.

Bash: Utilized for scripting and automation tasks, making it easier to manage the deployment and monitoring processes.

Git: Used for version control, enabling the team to collaborate efficiently and track changes made to the project's codebase.

Automation and Efficiency Improvements: Created shell scripts to automate the installation and configuration of Tomcat, web applications, and load balancers. Implemented automatic scaling of Tomcat instances based on application demand.

Security and Compliance: Enhanced application security by implementing the Azure AD in which we implemented the SAML and OAUTH based authentication.