



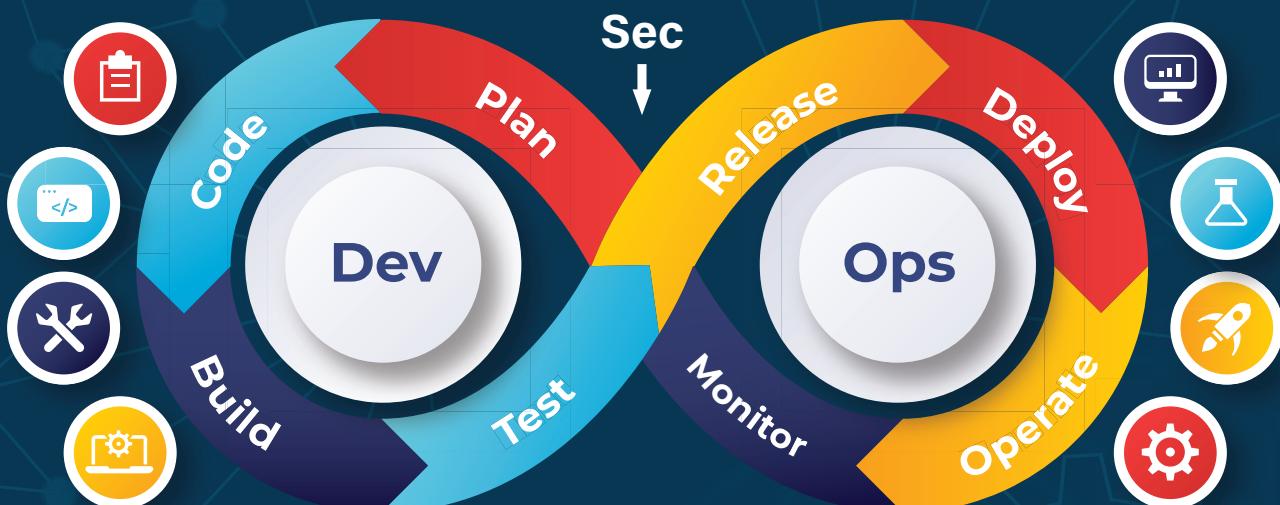
CLAHAN
TECHNOLOGIES

DevSecOps

Multi-Cloud

(AWS, AZURE, GCP)

Together, take the First Step to
Improve Your Career.



WHERE SPEED MEETS SECURITY & INNOVATION MEETS INTEGRITY

Your Path to a Successful Career in
DevSecOps!



MENTORED BY INDUSTRY EXPERTS

About the Instructor



Mabbu Murali Mohan
Founder and CEO, Clahan Technologies

With over a decade of experience in the IT industry, Murali Mohan is a recognized expert in Docker, Kubernetes, DevOps, DevSecOps, Site Reliability Engineering (SRE), and Observability Tools. As the Founder and CEO of Clahan Technologies, Murali Mohan has successfully led numerous DevOps and CI/CD pipeline projects, delivering innovative solutions and driving excellence in IT operations.

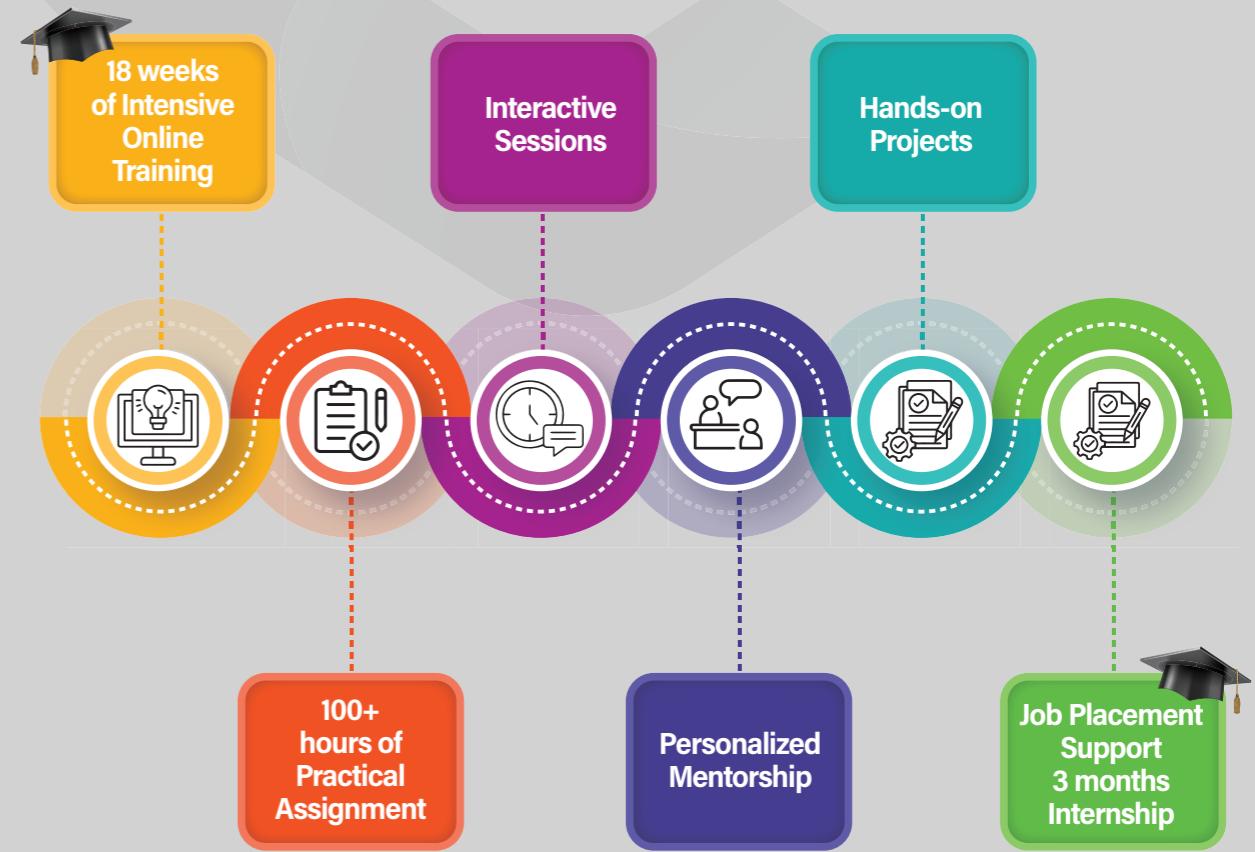
An accomplished trainer, Murali Mohan has delivered corporate training programs to some of the world's leading organizations, including Oracle, Wipro, Publicis Sapient, Capgemini, FSS, CitiBank, KickDrum Technologies, CRIS (Centre for Railway Information Systems), Gainsight, Comcast, and Shell Company. These programs have covered advanced topics such as DevOps, DevSecOps, SRE, Red Hat OpenShift, and Cloud Computing, earning exceptional feedback for their quality and depth.

In addition to hands-on expertise, Murali Mohan is committed to sharing knowledge and empowering IT professionals. Currently designing a course on DevSecOps, ensuring a strong foundation for aspiring DevOps engineers.

OUR MILESTONES



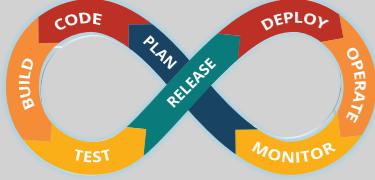
OUR COMMITMENTS



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MODULE
01

DevSecOps Introduction



- Understanding Development.
- Development SDLC: Water Fall VS Agile.
- What is DevSecOps.
- DevSecOps SDLC.
- DevSecOps tools for DevSecOps SDLC.
- DevOps Roles & Responsibilities.

MODULE
02

Networking



OSI and TCP/IP Models

- OSI Model: Layers and Functions
- TCP/IP Model: Layers and Protocols
- Comparison of OSI vs TCP/IP
- Encapsulation and Decapsulation

IP Addressing

- IPv4 Addressing: Structure, Classes, Subnetting
- IPv6 Addressing: Structure and Features
- Public vs Private IP Addresses
- CIDR (Classless Inter-Domain Routing)
- Subnet Mask and Default Gateway

Network Protocols

- TCP and UDP: Features and Differences
- HTTP/HTTPS
- FTP/SFTP
- DHCP (Dynamic Host Configuration Protocol)
- DNS (Domain Name System)
- ARP (Address Resolution Protocol)
- ICMP (Internet Control Message Protocol)

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MODULE
03

Introduction to Cloud Computing



- What is Cloud Computing.
- Cloud Computing Deployment Models.
- Cloud Computing Service Models
- Benefits of Cloud Computing
- Popular Cloud Providers
- What is Virtualization

MODULE
04

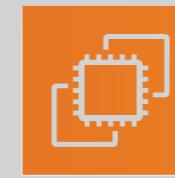
VPC Topics



- Overview of Networking.
- Explanation of IP address and CIDR.
- Understanding AWS networking, Regions, Data Centers.
- Detailed understanding of Internet Gateway, Route, Route table, Subnetting, NACL, NAT Gateway, ENI, VPC Peering, Security Groups.
- Creation of custom VPC, Gateway, Route, Route table, Subnetting, NACL, NAT Gateway, ENI, VPC Peering.
- Configuring all as per real-time scenarios

MODULE
05

Overview of EC2



- Understanding Virtual machines and benefits of Cloud.
- Launching instances in AWS.
- Discussion about different types of instances and configurations of instances.
- Costing of EC2 instances and different purchase orders.
- Creation of EBS and EFS and how to attach and mount volumes to instances.

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AWS Database Syllabus

Below is a Typical Syllabus Structure for Learning AWS Databases:

1. AWS Database Fundamentals

- Introduction to AWS Database services.
- Understanding Relational and Non-Relational Databases.
- Use cases for different database types (SQL vs. NoSQL).

2. Amazon RDS

- Launching an RDS instance.
- Configuring backups, snapshots, and automated failovers.
- Performance tuning and scaling.
- **Security:** IAM roles, encryption, and network configurations.

3. Amazon DynamoDB

- **Key concepts:** Partition key, sort key and indexes.
- Creating and managing tables.
- Querying and scanning data.
- DynamoDB Streams and Event-Driven Architecture.

4. Monitoring and Troubleshooting

- Using CloudWatch for performance metrics.
- Identifying and resolving bottlenecks.
- Automating recovery and backup.



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07

Overview of S3 and Usage



MODULE
08

Understanding IAM



MODULE
09

Introduction to Terraform

- Different storage classes and costing.
- Bucket creation, upload, delete, reading of Objects and etc.
- Static Website Hosting.
- Logging, Versioning, Object lifecycle, Cross-Region Replication and other properties.
- Discussion about Glacier.
- Working with S3 CLI.

- Understanding and working with Password policies.
- User creation/deletion, groups creation/deletion and different types of permissions.
- Understanding policies and working with policies.
- Implementing Multi Factor Authentication.
- Understanding ARN.
- Creation and working with Roles.
- IAM CLI

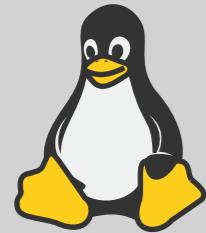
- Terraform Basics
- Terraform Resources and Providers
- Working with Variables and Outputs
- State Management
- Terraform Modules
- Advanced Terraform Features
- Terraform with Cloud Providers
- Terraform in CI/CD
- Terraform Cloud and Enterprise

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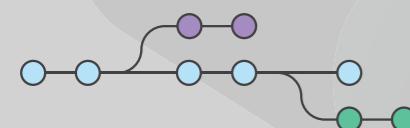
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Linux Commands



MODULE
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VCS and SCM



MODULE
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Maven Build Tools



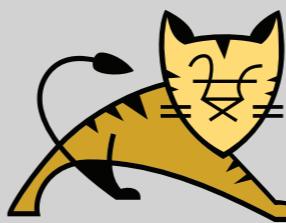
- Introduction to Maven and differences between Ant and Maven.
- Configuring Maven on Windows and Linux.
- Introduction to Maven Life cycle and Working with Maven for Java projects.
- Different types of Maven repositories and Profiling with Maven.

Shell scripting

- Basic Programming using Shell scripting.
- Creating Functions and its advantages.
- Working with If, if else, for loop, while loop and Switch cases.

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Application Servers



MODULE
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Continuous Integration Tool (Jenkins)



Jenkins

Tomcat

- Overview of Application Servers.
- Difference between Application and Web Servers.
- Deploying Java projects to Application Servers.
- Application server Admin console usage.
- Installing Tomcat on Windows and Linux and working with it.

- Overview of Continuous Integration and the need for it.
- Setting and Starting Jenkins. Different ways to configure Jenkins.
- Creating Freestyle, Maven style, Pipeline, Multi pipeline style Jobs.
- Configuring Different tools like Java, Git, Maven, SonarQube, Tomcat etc to Jenkins.
- Adding and working with different kinds of Jenkins Plugins.
- Creating fully automated jobs to pull code from GIT, build using Maven, check Code quality using SonarQube, take backup in Nexus and deploy to Tomcat.
- Creating Jenkins Pipeline and Multi branch pipeline jobs (Using Groovy script).
- Working with real-time branching strategies.
- Configuring Jenkins Master-Slave and working with them effectively.
- What is Continuous Integration, Continuous Delivery and Continuous Deployment.
- Different ways to trigger builds and what is Labels and how to work with labels.
- Parallel execution of Jobs.
- Creating Jobs for Dev, QA, UAT and Prod environments.
- SMTP configuration and Sending alert messages from Jenkins.
- User access and Authentication strategies to Jenkins.

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Code Quality Analysis Tool



SonarQube/Sonar Scanner

- Introduction to SonarQube and its Architecture.
- Installation of SonarQube and Scanner on Windows and Linux.
- Configuring with free style and Maven style of Projects.
- Integrating with Jenkins for Freestyle and Maven style of Projects.
- Working with dashboard and creating Custom Quality Gate ways.



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External artifact Repositories



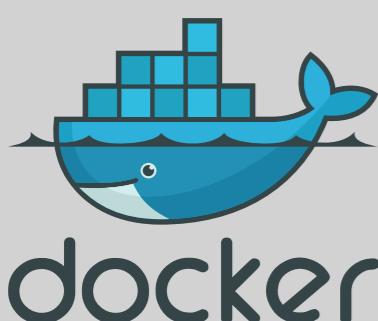
Nexus

- Introduction to Nexus.
- Configuring on Windows and Linux.
- SMTP configuration in Nexus and Creating users.
- Creating Snapshot, Release and Group repositories.
- Configuring Nexus with Maven.



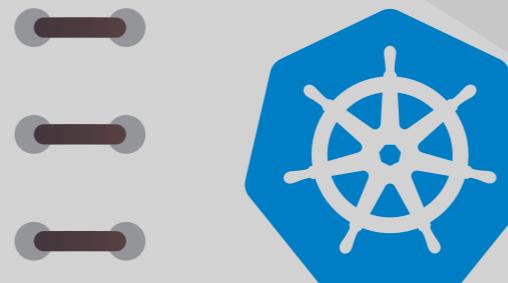
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Containerization Tools



Docker

- Virtualization VS Containerization.
- What is Docker, Docker Hub and Docker benefits.
- Understanding Docker components, Architecture and Life cycle.
- Installing Docker on Linux (AWS cloud).
- Deep dive about Docker image and Containers.
- Working with most of Docker commands.
- Running multiple containers and Docker compose.
- Docker key words, creating custom images, running, building and pushing to Docker Hub.



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- What are microservices, use of docker with microservices and creating a real-time custom image and working with it.
- Building Docker images and pushing those to Docker Hub public repository and private repository on AWS.
- Docker volumes, linking containers and exposing ports.
- Integrating Docker with Jenkins and automating.
- Docker Networking and basics of Docker Swarm.

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Kubernetes

- Introduction to container Orchestration.
- Overview of Kubernetes and setup on Linux (AWS cloud).
- Kubernetes Cluster configuration.
- Monolithic and Microservices Architecture.
- Understanding Kubernetes components and what is clustering.
- Introduction to YAML and Json formats.
- Creating and deep dive into Pods, Replication Controller, ReplicaSet, Service, Deployments, Secrets, Config Maps, DaemonSet.
- Storage Volumes, HostPath, emptyDir.
- Static and Dynamic Persistent Volumes.
- POD life cycle, Load balancing and Scaling of PODS and working with Labels and its importance.
- Rolling updates and Rolling back of Deployments.
- Kubernetes Volumes.
- Persistence Volumes, Claims, Dynamic provisioning.
- Discussion and usage of Helms.
- Pods monitoring using Prometheus and Grafana dashboards.
- Kubernetes Integration with Jenkins.
- Realtime scenarios.

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Application Monitoring Tool



Prometheus



Grafana

MODULE
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Configuration Management



ANSIBLE

MODULE
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GitOps and ArgoCD



- Introduction to GitOps
- Introduction to Argo CD
- Getting Started with Argo CD
- Argo CD Application Management
- Working with Git Repositories
- Advanced Argo CD Features
- Argo CD Security
- Monitoring and Troubleshooting

CONTENTS

DevSecOps Introduction

Static Application Security Testing (SAST) with SonarQube

MODULE
22.1

Introduction to SAST

- Overview of Application Security
- Importance of SAST in the Software Development Life Cycle (SDLC)
- Key Concepts in Static Analysis
- Differences Between SAST, DAST, and IAST

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22.2

SAST Principles and Practices

- Understanding Static Analysis Techniques
- Common Vulnerabilities (OWASP Top Ten)
- Code Quality vs. Code Security
- Writing Secure Code Guidelines

MODULE
22.3

Configuring SonarQube for SAST

- Creating and Configuring Projects
- Custom Quality Profiles
- Setting Up Security Rules
- Using Plugins for Enhanced Security Analysis

MODULE
22.4

Introduction to Jenkins Security

- Overview of Jenkins and its Architecture
- Importance of Security in CI/CD Environments
- Common Security Threats in Jenkins

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22.5

Jenkins Security Best Practices

- Securing Jenkins Configuration
- Best Practices for Credential Management
- Regular Updates and Patch Management



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MODULE
22.6

Introduction to Container Security

- Overview of Containerization
- Importance of Container Security
- Common Vulnerabilities in Container Images

MODULE
22.7

Introduction to Trivy

- What is Trivy?
- Key Features and Benefits
- Architecture and Components
- Installation and Setup

MODULE
22.8

Understanding Trivy Output

- Interpreting Scan Results
- Vulnerability Severity Levels
- Package Information
- Layer Information
- Generating and Customizing Reports

Secure Coding Practices

OWASP Top 10: Identifying and mitigating common vulnerabilities

Input validation, error handling, encryption, authentication, and authorization

Code obfuscation and security-focused code review Security for Infrastructure as Code (IaC)

Securing cloud infrastructure (e.g., AWS, Azure, GCP) Terraform and CloudFormation security best practices Automating security checks for IaC files.

Realtime Tools

WinScp, FileZilla, Slack, Mailing Tools, Communication Tools, Agile Scrum Methodology, All Real-time Scenarios

Note: All the practice will be done on AWS cloud and will provide material for all the above specified DevOps tools with model interview questions.

Will help in interview preparation and share interview questions.

TESTIMONIALS



VAISHNAVI
Product Head
Salesken.ai

Clahan Technologies is one of the growing software Company in Bengaluru. We are dealing with Cloud Computing, DevOps, SRE, Web Development, Mobile App Development Projects.

It's been quite a good experience working with Clahan technologies the team consisting of Murali, Mobin, Michael and Simon. Their deliverable has been good and they have been quite accommodating about the back and forth involved with our engineering teams.

The team has also provided guidance and knowledge transfer to our internal teams.

Certainly looking forward to working with them on a long term.



PRASANYA
Publicis Sapient

This was surely the best trainer I've attended so far sir. You were really a great trainer and moreover a great friend to all of us. You motivate each one of us to achieve more and to improve ourselves everyday. Apart from being a trainer you were a mentor to each one of us and the best advisor. Thank you for everything sir.



MARUTI RAO
Senior DevOps Engineer
HCL

Currently I am working as DevOps role in one of leading company. Thanks for your support murali. I can happily say it is very pleasure meeting you and learning from you and still continue it. This is good opportunity to learn new things as DevOps Engineer.

TESTIMONIALS

Namaste saarr,

So firstly we all successfully completed our training. It is so sad that our training period is too short. But in this training period I learned a lot from you. And your life lessons that personally inspire me a lot. And saaarrrr miru first faculty who I can speak freely. Nenu aeppudu ae faculty tho free ga matladaledu but your are our best friend more than a faculty. And we created lot of memories in this journey which I can treasure all my life and we are going to miss you a lot.



Vahini
Publicis Sapient

Murali sir,
Sir our journey and our bonding started with this training. First we think that it just a training but you made it what a training. If we very glad to meet such a wonderful and amazing person in our lives. It is a very great experience with you. From starting day you helped in every aspect you cleared every doubt and you teaches us out of the things. This shows you are not came to complete the things which that have assigned to you but you came here to learnt us the things in practical way and to get knowledge and how those use in our future. You know that I am unable to access the docker. You said don't worry I'm there in that way you connected with me till 1-2pm those were not

your working hours though you solved my issue at night with very patience. Your hard work: your hardwork towards your passion will make you see in heights in future.

As a father:you showed us right path to walk and guided us
As a mother:you given so many inputs how the things will go on future and we have to be taken care
As a friend:you made jokes with us, you laugh with us, you eat with us, you share your feelings with us
Memorable moments with you:

We used to eat panipuri and we used to eat momos, and we go to that aunty and we eat lunch, we taken many photos with happy faces. We really love you sir from our hearts. we made many memories that are unforgettable. And we really miss your presence sir.

I wish you that I want to see that smile on your face every time



Leha
Publicis Sapient



Sreedhar
DevOps Engineer
UK

Dear Murali, I want to express my sincere gratitude for the time, effort, and dedication you invested in teaching the DevOps course. Your clear explanations of complex concepts, patient guidance, and real-world examples made the learning process both engaging and practical.

"You not only taught us the technical skills but also instilled the mindset needed for continuous learning and adaptability in this field."

The knowledge I gained from your course has significantly shaped my understanding of DevOps practices, and I feel more confident about applying these skills in real-world scenarios. Thank you for always being approachable and encouraging us to ask questions and explore ideas.

Thank you once again for your support and for being an exceptional teacher.



Nemika BN
Mphasis

Firstly, thank you so much Murali for the entire journey. I am confident in saying that this course has been incredibly helpful in starting my DevOps career. I wanted to take a moment to express my heartfelt appreciation and admiration for the exceptional training you provided. Your unique approach to skill transfer was truly impressive, making complex concepts accessible and engaging.

"Your dedication to the training and your genuine concern for all candidates were inspiring. Your passion for teaching was evident in every session, and your ability to adapt to our needs and provide personalized attention was remarkable."

Your communication way, style & approach to understanding each candidate were outstanding. You have a gift for breaking down involved topics into manageable pieces, making it easier for us to grasp and retain the information. I admire how you handle unresponsive students with patience and how you thoughtfully adapt to each individual's learning and I like the way you consider each and every one in our complete batch and treat all in the same priority. Please accept my sincerest gratitude for your outstanding training. You are an exceptional trainer, and I feel fortunate to have had the opportunity to learn from you.

Thank you once again for your tireless efforts, patience, and Dedication.

TESTIMONIALS

TESTIMONIALS

Hello Sir,

Thank you so much sir for being a part of my life, not only as a trainer but also as a mentor and supporter. On the first day of our training, when I first saw you, I felt like meru chala strict and serious ani but I never expected that meru enta support and motivation istar ani.. Thank You Sir, for being our trainer and making the training phase more memorable.. I'm really going to miss your classes and meru iche suggestions and feedbacks..

I wish you will continue to be as a mentor.. Asalu expect cheyaledhu sir oka 2 months lo entala bond create avtadhi ani..but time has also passed so quickly..

Every class memorable ga undhi potadhi sir and I wish next batch kuda mere ravalı so that we can meet u again sir..

I'm Sorry Sir, I'm not that good at expressing my feelings but still I'm trying my level best to express my words...

Once again, thank you so much sir, the way you taught use not just only giving the content but also adding more examples which made more easier to understand the topic and also for all the efforts that you've put into helping us in all aspects and it means a lot to me sir..

Thank You Murali Sir for everything.



Santhoshi
Publicis Sapient



AFFU
Publicis Sapient

I just wanted to say a big thank you for all your help during my training. Your knowledge, patience, and encouragement meant a lot to me. Learning about Java, Node.js, microservices, Docker, Kubernetes, AWS, DevOps, Ansible, Linux, ITIL, ITSM, Data Dog, and ServiceNow was really interesting, especially with your guidance. The projects we worked on together helped me understand everything better and got me excited about these technologies.

You're really good at explaining complicated stuff in a way that's easy to understand. Each session felt like a cool adventure, and I learned so much about the systems and tools we used.

Hi sir!! I am your Auto Akshaya. Thanks for being a best teacher, best coordinator, best mentor, best trainer. You provide us a real path for success. My career started with your training sir. You are really hardworking, down to earth, very sweet, very friendly. You mingle with everyone easily, knows the capability of each person in technical wise and personal wise. You train us in the way we will listen and pay attention. I never listened to any class like which I have listened to your classes and learnt a lot of things from you sir. You are really a dynamic hero for the SUSTAIN BATCH - 3 HYD. You have understood my behaviour, my character and you teach me how to be strong as a girl, how to live in this society and how to handle situations. You are a very good motivator for me sir. You create a collaborative environment for me sir. I feel very comfortable to talk with you and I am in my comfort zone sir. I really want to sincerely thank you for how friendly and approachable you are. Thank you for your continuous support sir.

You explain topics with clarity and patience. You are my role model forever sir. You have build confidence in me in every aspect sir. If I say like this about you.. it will continue sir. You are really amazing sir. Thank you so much sir for being with me in my hard times as a motivator and mentor. I wish I will have your blessings sir. Thank you!



Akshaya
Publicis Sapient

TESTIMONIALS

I just wanted to say a big thank you for all your help during my training. Your knowledge, patience, and encouragement meant a lot to me. Learning about Java, Node.js, microservices, Docker, Kubernetes, AWS, DevOps, Ansible, Linux, ITIL, ITSM, Data Dog, and ServiceNow was really interesting, especially with your guidance. The projects we worked on together helped me understand everything better and got me excited about these technologies.

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Our Recently Placed Students



Rithika Reddy
Devops Engineer
TCS - 9LPA



Bhaskar
Devops Engineer
Tech Mahindra
9LPA



Raghudhar V
Associate DevOps
Engineer
Cognis Solutions
4 LPA



Sreekanth
Software
Engineering Associate
Accenture - 3.2 LPA



Hema
Devops Engineer
TCS-10LPA



Ravi Teja
Devops Engineer
\$80 Per Hour
USA



Sharan
Junior TL
Infosys -18LPA



Pavan Chand
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Nielsen -11 LPA



Maruti Rao
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16 LPA



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Capitalone
\$115k



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COURSE TODAY!**

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