

netsui



**100% JOB
ABSORPTION
TRAINING
PROGRAM**

LINUX AND MICROSERVICES PROGRAM



**CERTIFIED OFFLINE
COURSE**



**INTERNATIONAL
PROJECT**



EXPERT TRAINERS

www.netsuilabs.in

ABOUT US



Netsui Labs - Pioneers in Advanced Embedded Systems and Analytics Training

Established as a premier institute with over 12 years of rich experience, Netsui Labs stands at the forefront of providing unparalleled training in Advanced Embedded Systems and Analytics in Chennai. Our legacy is built on a commitment to excellence, practical knowledge, and fostering career growth for individuals aspiring to make their mark in the dynamic IT industry.

100% ABSORPTION INTO ZESTLOGICS

Netsui Labs takes pride in announcing a groundbreaking "100% Absorption" into its parent company, Zestlogic Systems. Thus ensuring 100% employment for the candidates. Aligned with our vision of empowering individuals with practical knowledge, Zestlogic facilitates a transition into the IT field, offering opportunities for career growth and success. This approach ensures that Netsui Labs candidates have a direct career path with Zestlogic Systems.

FEATURES



**TRAINING &
MENTORSHIPS
BY INDUSTRY EXPERTS**



**COURSE COMPLETION
CERTIFICATE**



**INTERNATIONAL
PROJECTS**



WELL-EQUIPPED LABS



**INTERACTIVE
LEARNING**



**COMPREHENSIVE
CURRICULUM**



**100% JOB
GUARENTEED**



**EXPERIENCE WITH REAL-TIME
INDUSTRY PROJECTS**



**4 MONTH OFFLINE
SESSIONS**

A woman in a black dress is pointing at a presentation board. The board contains a table titled 'Fundraiser Results by Salesperson', a bar chart, and a pie chart. The table lists participants: Andy, Chloe, Daniel, Grace, and Sophia. The bar chart shows values for 'm Chart' and 'ace Sophia'. The pie chart shows percentages: 16%, 21%, and 23%.

ABOUT THE PROGRAM

Our Advanced Linux and Microservices Training Program is meticulously crafted for IT professionals and developers aspiring to enhance their skills in Linux systems and microservices architecture.

This comprehensive course covers essential Linux fundamentals, basic commands, shell scripting, networking, and system administration. Participants will gain proficiency in various Linux distributions, file system navigation, user management, and security measures.

The program seamlessly transitions into advanced microservices concepts, offering a deep dive into containerization, container orchestration and effective communication among microservices through RESTful APIs.

The curriculum is delivered with a hands-on approach, ensuring participants actively engage with the material.

KEY TOOLS



docker



MODULES

INTRODUCTIONS TO LINUX

- History and evolution of Linux
- Linux distributions (Ubuntu, CentOS, Debian, etc.)

BASIC LINUX COMMANDS

- File System Navigation and Manipulation
- User and Group Management
- Package management (apt, yum)

SHELL SCRIPTING

- Bash Scripting Basics
- Variables, Loops & Conditional Statements

LINUX NETWORKING

- IP Addressing and Subnetting, Network Configuration
- Troubleshooting & Firewalls

LINUX SYSTEM ADMINISTRATION

- Process Management
- System Monitoring
- Performance Tuning and Backup
- Recovery strategies

INTRODUCTION TO MICROSERVICES

- Definition and Characteristics of Microservices
- Benefits and Challenges of Microservices Architecture

CONTAINERIZATION

- Creating and Managing Docker Containers
- Docker Compose for Multi-container Applications

CONTAINER ORCHESTRATION

- Introduction to Kubernetes
- Deploying Applications on Kubernetes Clusters
- Service Discovery and Load Balancing in Kubernetes

MICROSERVICES COMMUNICATION

- RESTful APIs and HTTP/HTTPS protocols
- API Gateways
- Reverse Proxies
- Message Brokers (e.g., RabbitMQ, Apache Kafka)

SERVICE DISCOVERY AND LOAD BALANCING

- Consul
- etcd
- load balancing strategies for microservices

MONITORING AND LOGGING

- Application performance monitoring, centralized logging with tools like ELK stack

SECURITY IN MICROSERVICES

- Authentication and authorization mechanisms
- API security (OAuth, JWT), secure communication between microservices

CONTINUOUS INTEGRATION AND DEPLOYMENT

- Version control systems (Git)
- CI/CD pipelines using tools like Jenkins
- GitLab CI, blue-green deployments and canary releases

MICROSERVICES TESTING

- Unit testing and Integration testing of Microservices
- Contract testing and Consumer-Driven Contract testing

BEST PRACTICES AND PATTERNS

- Microservices design patterns (e.g., API Gateway, Circuit Breaker, Saga)
- Error handling and fault tolerance strategies
- Scalability and performance optimization techniques