Viettel Digital Talent Program Cloud - 2021

Getting Started

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Crews (VTNet)

Mentors

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Leaders

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KOLs

Le Quang Hieu

Viettel

Nguyen Trong Đăng Trınh

VietOpenInfra

To Thanh Cong

MBBank

Phase 1 (~ 5 weeks)

1. Course overview
   Virtualization, Container, Docker
   Automation, configuration management tools

2. IaaS – OpenStack

3. PaaS – Kubernetes

4. Microservices & Cloud-native application
   Monitoring, Telemetry, Observability

5. Discussions

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Phase 1 – Chapter 1.1

- Virtualization

- Cloud

- Container

- Docker

Phase 1 – Chapter 1.2

- Automation

- Configuration management tools overview

- Ansible

- 1st assignment

Phase 1 – Chapter 2.1

Infrastructure as a Service

- IaaS overview

- OpenStack overview

- OpenStack Networking

- OpenStack Storage

- Viettel Private Clouds, Public Clouds – Quick comparison

- Autoscaling in OpenStack

- Tuning and gotchas

- 2nd assignment

Phase 1 – Chapter 2.2

SDN-NFV

- SDN overview

- SDN case study

- Vision and NFV

- NFV vs SDN

- NFV-MANO use case

Phase 1 – Chapter 3

Platform as a Service

- PaaS overview
- Kubernetes overview
- Architecture, deployment
- Kubernetes Networking, CNI
- Kubernetes Resources
- Stateless, stateful applications
- Autoscaling in Kubernetes
- Service Mesh
- 3rd assignment

Phase 1 – Chapter 4

Applications

- Microservices
- Cloud-native applications
- CI/CD
- Monitoring
- Telemetry
- Observability
- Prometheus stack
- Grafana
- EFK, ELK, PLG
- 4th assignment (final)

Phase 1 – Chapter 5

- Discussions

- Q & A

- Summary

Phase 2 (12 – 18 weeks)

- Real projects

- VTNet, VHT, VTS, Ban CNTT Tap đoan
  - Automation
  - OpenStack cloud
  - Kubernetes platform
  - Monitoring, telemetry, observability
  - Microservices, cloud-native application
  - CI/CD