

Platform Acceleration Lab for Architect

PROGRAM DETAILS

TARGET AUDIENCE

- Architects
- Lead Developers

DELIVERY METHODS

- Online – Virtual Instructor Led
- Classroom

DURATION

Three weeks, Monday – Thursday

PREREQUISITES

- Experience building and deploying modern software; i.e. TDD, CI/CD, and Refactoring
- Familiarity with design patterns, domain driven design, component- based architecture, and evolutionary architecture
- Experience developing apps using: Java 6 and above, Java Enterprise Edition, Java/ Spring

MORE INFORMATION

More information Contact your Education Account Manager or contact us to learn more about the program and register.

<https://education.dellemc.com/content/pal.html>

Experience best practices building cloud native applications on Cloud Foundry in a hands-on setting.

The Platform Acceleration Lab (PAL) teaches developers and architects how to build and architect cloud-native software and covers the following topics; Tanzu Application Service, greenfield cloud-native development, end state reference architectures, re-platforming, modernization. The program is focused on enabling customers and partners through “doing it” rather than “talking about it”.

PLATFORM ACCELERATION LAB APPROACH

Upon completion of this course, participants will understand how to implement the following:

- Understand what Cloud Foundry is, and how it runs apps
- Learn about key app-centric Cloud Foundry constructs: app, manifest, buildpack, service instance, binding, domain, route, environment and variables
- Experience common impediments to running an app on Cloud Foundry, and overcome them
- Learn how to identify, codify, and make use of reusable patterns for building applications
- Understand distributed system development/ architectures
- Learn how to evolve monolithic apps (i.e. understand when and how to break out microservices from the monolith)

COURSE CONTENT

CLOUD FOUNDRY, SPRING BOOT, CONCOURSE

Best Practices / Architecture

- 12-Factor applications
- Evolutionary Architecture
- Test First Development (TDD)

Pivotal Cloud Foundry Concepts

- Applications
- Buildpacks
- Manifests
- Organizations and Spaces
- Users and Roles
- Domains and Routes
- Services
- Environment variables

Continuous Delivery / Integration

- Build Pipelines

Microservices

- Resilience
- Scaling
- Deployment
- Replaceability
- Organization Alignment
- Service Versioning
- Service Reuse

Spring Cloud Services

- Service Discovery
- Service Configuration
- Cascading Failures
- Service Security
- Service Monitoring
- **Weeks 2-3: Cloud-Native “Coding/ Application” Architect**
- Pair rotation guide
- Build a Spring Boot app
- Deploy a Spring Boot app to Cloud Foundry
- Deployment Pipelines for multiple environments
- Spring MVC with REST endpoints
- Cloud Foundry Services and Database migrations
- Spring JDBC template
- Spring Boot Actuator
- HTTP Basic authentication and SSL with Spring Security

Architecture

- The Application Continuum

Spring Cloud Developer

- Deploying distributed systems
- Service discovery and client-side load balancing
- Circuit breakers
- Securing a distributed system
- Config server

CONTACT US

Engage your local Education Services Account Manager for local pricing information and scheduling classes. Visit us online at <http://education.dellemc.com/content/contactus>

