

# VMware Pivotal Labs: Master Class for Developers (Java)

## Course Overview

This 4-day course teaches developers and architects how to build and architect software and covers the following topics: Tanzu Application Service, greenfield development, and end state reference architectures.

# Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Understand what Tanzu Application Service is, and how it runs apps
- Learn about key app-centric Tanzu Application Service constructs: app, manifest, buildpack, service instance, binding, domain, route, environment variables
- Experience common impediments to running an app on Tanzu Application Service, 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)

## Target Audience

Developers and Lead Developers

## 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.

## Course Delivery Options

- Classroom
- Live Online
- Onsite



#### Course Modules

#### 1 Course Introduction

- Introductions and course logistics
- Course objectives

## 2 Best Practices / Architecture

- 12-Factor applications
- Evolutionary Architecture

## 3 Tanzu Application Service

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

## 4 Continuous Delivery / Integration

• Build Pipelines

#### 5 Spring Development

- Monitoring
- Schema management
- Database Access
- REST APIs

## 6 Microservices

- Resilience
- Deployment
- Service Discovery
- Service Configuration
- · Service Security

# Contact

If you have questions or need help registering for this course, click <u>here</u>.



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