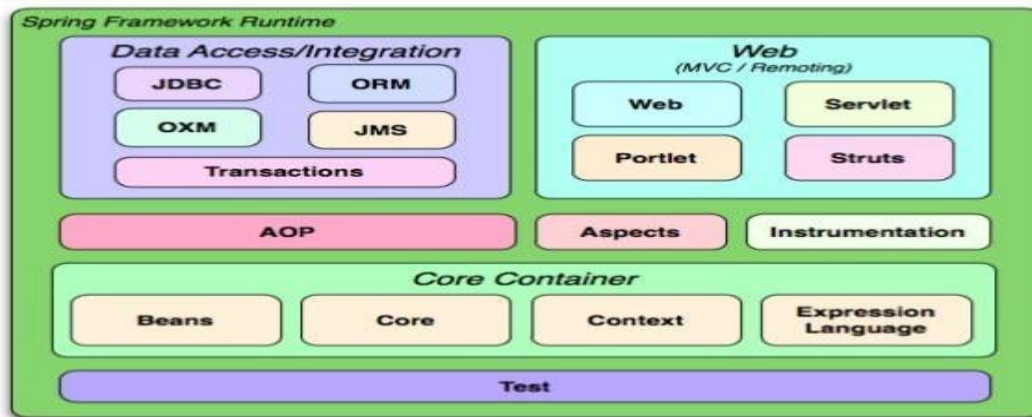




LEARN TODAY AND LEAD TOMORROW

# spring

## Spring modules



Spring Framework - Core Dmitry Noskov



## Overview

Let eMexo Technologies **Best Spring Boot Training in Electronic City Bangalore** take you from the fundamentals of the Spring framework and make you an expert in developing real-time Spring Boot applications. Here are the major topics we cover under this Spring course Syllabus **Overview of Spring Technology, Introduction to spring boot, Building SPRING BOOT Application, Rest Annotation with In-Memory Database & CRUD Operations, Rest Annotation with Relation DB, JPA Repository Concepts, Actuator Concepts, Spring Boot Custom Logging, Spring Boot Profile Components, Auto Configuration, Thymleaf Concepts, Integration with Spring Web, Spring Boot Security, Core Concepts, Micro Services, Micro Services Design Considerations, Spring Cloud, Spring Cloud Config, Fault Tolerance Concepts, API Gateway, Messaging Queue Concepts (CloudBus), Oatuh2 Concepts, Swagger API, and Cloud Hosting.** Every topic will be covered in mostly practical ways with examples for our Spring Boot Course in Electronic City Bangalore.

All the topics will be covered with Practical and hands-on training. Our trainers have industry experience with live project experience in cutting-edge technologies they teach. We hire only the Best Spring Boot industry specialists as trainers for our **Spring Boot Certification Training in Electronic City Bangalore**.

If you are looking for Spring Boot Certification Course in Electronic City Bangalore, eMexo Technologies is the **Best Spring Boot Training Institute in Electronic City Bangalore**. Come over to our training institute for a free demo class. Let our trainer give you a demo on Spring Boot and only then do you make the decision to enroll in the Spring Boot Training Course in Electronic City Bangalore.

## Training Features

### Real-life Case Studies

Do a real-life case study to understand the usage in real-world scenarios.

### Assignments

Each class will be followed by a practical assignment which can be completed before the next class.

### Preparation for interview

Our trainers are professionals working in multinational corporations. They are experts in their field and know exactly what the interviewer will look for in the candidate. Experienced trainers not only share interview questions but also conduct mock interviews to help prepare for the actual interview.

## Key Features

eMexo Technologies offers the **Best Spring Boot Training Course in Electronic City Bangalore** with the TOP industry expert trainers.

Here are the key features.

- ★ Free Demo Class Available
- ★ Practical Approach
- ★ Expert & Certified Trainers
- ★ 100% Job Oriented Training
- ★ Real World use cases and Scenarios
- ★ Completed 500+ Batches
- ★ Certification Guidance

## Unit 1: Introduction to spring boot

- Types of software architectures
- SOA and Monolith Architecture
- Why Microservices
- Detailed MicroService Architecture
- App Layer
- Business Layer
- Enterprise Layer
- Infra Layer
- Need of Spring Boot
- Difference between Spring & Spring Boot
- Advantages with Micro Services
- Hands-On

## Unit 2: Building SPRING BOOT Application

- Normal Spring Manual Approach
- Maven Overview
- Spring Initializer
- STS
- Eclipse with STS Plugin
- Understanding the Spring Boot auto configuration
- Hands-On

### **Unit 3: Rest Annotation with In Memory Database & CRUD Operations**

- H2
- Derby
- HSQL
- Redis Cache
- PostMan or Swagger Overview
- Hands-On

### **Unit 4: Rest Annotation with Relation DB**

- MySql
- PostGresSQL
- Hands-On

### **Unit 5: JPA Repository Concepts**

- Crud Repository
- JPA Query Concepts
- NamedQueries
- QueryAnnotation
- AsyncResults
- Pagination and Sorting
- Hands-On

### **Unit 6: Actuator Concepts**

- Production Monitoring
- Health Check Concepts
- Security Measurements
- Hands-On

### **Unit 7: Spring Boot Custom Logging**

- Logging Level
- Patterns Changes
- Rolling Logs
- Hands-On

## **Unit 8: Spring Boot Profile Components**

- Introduction
- Multiple Properties
- YML File
- Command Line Runner Example
- Real time scenarios of components
- Hands-On

## **Unit 9: Auto Configuration**

- Introduction
- Conditional Flow
- Customize conditional annotations
- Spring Boot built-in conditional annotations
- Hands-On

## **Unit 10: Thymleaf Concepts**

- Introduction
- Example on Web Application
- Validatins on Web Applications
- Internalization i18n Concepts
- Hands-On

## **Unit 11: Integration with Spring Web**

- Using Spring Web MVC
- Using Spring Restful
- Need of embedded servers & customization
- Hands-On

## **Unit 12: Spring Boot Security**

- Spring JDBC
- Database to CSV
- Spring Batch
- Flyway Database Migration

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- Liquid Database Migration
- Flyway vs Liquid
- Hikari Connection Pool
- Hands-On

## **Unit 13: Core Concepts**

- Spring Boot AOP
- Spring Boot Cache
- Guava Cache integration
- Caffeine Cache
- EH Cache
- MultiResourceItemReader
- Spring MVC vs JAX-RS
- SpringBoot with Jersey
- Junit Integration
- Rest Integration Test Cases
- Hands-On

## **Unit 14: Micro Services**

- Micro Services Introduction
- Principle and Characteristics
- Use cases and Benefits
- Challenges
- Design standards
- Micro Services Communication
- Synchronous
- Asynchronous
- Pitfalls
- Hands-On

## **Unit 15: Micro Services Design Considerations**

- Micro Services per JVM?
- Micro Services share the data stores?
- Micro Services Transaction boundaries

- User Interfaces integration with Micro Services
- Challenges in Micro Services implementation
- Hands-On

## **Unit 16: Spring Cloud**

- Introduction
- Cloud Architecture
- Cloud application benefits
- Hands-On

## **Unit 17: Spring Cloud Config**

- Introduction
- Setup version control repository
- Integration with repository
- Hands-On

## **Unit 18: Fault Tolerance Concepts**

- Circuit Breaker Pattern
- Hystrix Concepts & Hystrix Dashboard
- Hands-On

## **Unit 19: API Gateway**

- Introduction to ZUUL
- Design standards
- Integration
- Hands-On

## **Unit 20: Messaging Queue Concepts (CloudBus)**

- Apache KAFKA
- RabbitMQ
- JMS
- Hands-On

## Unit 21: OAuth2 Concepts

- Client Types
- Protocol End Points
- Grant Types
- Implantation with Token Based
- JWT Tokens
- Hands-On

## Unit 22: Swagger API

- Introduction
- Integration
- Hands-On

## Unit 23: Cloud Hosting

- Pivotal Cloud Foundry Account Setup
- Hosting to Pivotal
- AWS Account Setup
- Hosting to AWS
- Enabling cloud features like load balancing, security
- Hands-On

## FAQs

### 1. How is the training organized? How much percentage is theoretical and how much is practical hands-on?

We at eMexo believe nothing beats hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical and hands-on-oriented. You learn a concept, you practice it then and there with the trainer. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer the next day.



**2. What is the course duration? How and when do you plan to complete the course?**

We generally cover our courses in 30 hours, however, we are aware that we can't put a hard- stop to learning with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 28 hours or 35 hours, doesn't matter.

**3. What is the material provided in the training?**

We have industry standard course material which is used by our trainers to train you. At the end of the training apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions, etc.

**4. Do you help in preparing for the interview?**

Our trainers are working professionals who work in MNCs. They are the expert in their domain and know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions will also conduct mock interviews to help you prepare for the real interview.

**5. Who are your trainers?**

Our trainers are industry experts who work in their respective technologies day in and day out. They work in MNCs and are technology experts within their organizations.

**6. What is the total batch size per course?**

We maintain a strict batch size of a maximum of 5 students. We also provide exclusive one-to-one training as well. Talk to our training partner to get more details.

**7. Do you provide certification for the course?**

Yes, at the end of training we provide a certification of completion.

**8. Will I be joining a new batch or being merged with another batch?**

You will be added to a new batch.

**9. Is fast-track training available?**

Yes, we also provide fast-track training for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain the same. However, the trainer will be spending more hours with you to complete the course.

**10. Do you assist in job placement?**

Our trainers are expert professionals in their organizations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look for in a resume.

**11. Timings for training - Regular training/weekend training**

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

**12. Will you be working on a live project during training?**

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and working with you for the implementation.

**13. What happens if I miss a class?**

If you miss a class the content of that class will be taught to you again. With us, you might miss a class but not the content.

**14. Can I attend a demo before the actual class?**

Yes, absolutely! Talk to our training counselor on phone at **+91-9513216462** or email us at **info@emexotechnologies.com** to arrange a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.