Build Intelligent Applications with Spring AI

Duration: 05 (40 hours)

Labs: Koenig DC would be provided and labs performed via an API

Courseware: Unofficial PDF/PPT

Prerequisites: Knowledge of OOPs and Generative AI

Tools: JDK, IntelliJ, OpenAI API key

Module 01: Spring AI Overview

- Models
- Prompts
- Prompt Templates
- Embeddings
- Tokens
- Structured Output
- Bringing your Data and API to the Model
- RAG
- Function Calling
- Evaluating AI responses

Module 02: Building Applications with Spring AI

- Building AI Applications in Java with Spring
- Working with Prompts in Spring AI - Effectively Communicating with LLMs
- Using Spring AI's Output Parsers to structure the response from LLMs
- Bring your own data using the Prompt

Module 03: Working with RAG

- RAG and Spring AI
- Building a Spring Boot Reference Documentation Assistant with Spring AI & GPT-4
- Chat with your PDF Documents using Java and Spring Boot

Module 04: Building Chat Applications

- GPT-4o in Spring AI with Chat and Vision Capabilities

- Building a ChatGPT Clone in Java with HTMX, Spring Boot, and Spring AI
- Getting Started with Ollama, Llama 3.1 and Spring AI

Module 05: Spring AI applications

- SpringAI and embeddings
- Generating Images with SpringAI
- Summarization using SpringAI
- LangChain Introduction

Target Audience: This course is intended for the developers who want to upgrade their skills in the field of Generative AI to create practical applications. Participants should have prior background in Java, AI and should be skilled with the project lifecycle management.

Benefits: The course would be extremely practical and will be an opportunity for the organization to move towards development related projects in the field of Generative AI.