



GeeksforGeeks

# JAVA

## Backend Development Live



Detailed  
Course Syllabus

## WEEK 01:

- Java OOPS Concepts: Object, Class, Inheritance, Polymorphism, Abstraction, Encapsulation
- Exception Handling in Java
- Java Collection

## WEEK 02:

- Streams and File Handling in Java
- Threads in Java: Multithreading related concepts, problems and their solutions
- Maven

## WEEK 03:

- Introduction to Web Services
- Introduction Spring Framework
- Introduction to Spring Boot
- RESTful Web Services with Spring and Spring Boot

## WEEK 04:

- RESTful APIs
- Introduction to MySql
- JDBC (Java Database Connectivity)
- Data Access Using JDBC Template

## WEEK 05:

- Introduction to JPA, Hibernate & Spring Data
- Minor Project 1: Developing a Web App (Micro-service) using Spring Boot + Hibernate + MySQL + RESTful A

## WEEK 06:

- Redis
- Redis with Spring Boot
- Spring Security

## WEEK 07:

- OAuth 2.0
- Minor Project 2: Developing a Web App (Micro-service) using Spring Boot + Hibernate + MySQL+ RESTful APIs + OAuth 2 + Security

## WEEK 08:

- Kafka
- Kafka with Spring Boot

## WEEK 09:

- Major Project: Developing a complete Web App (that includes some Spring Boot-based Microservices) for an e-wallet (like Paytm) App, using Spring Boot + Hibernate + MySQL + RESTful APIs + Redis + Kafka +OAuth 2+ Security.  
It will have all the common functionalities that any e-wallet (like Paytm) can have.