Kaushalya Technical Training and Consultancy Services
No. 1094, Indushankara,MCECHS Layout,
23 Cross, Dr. Shivarama Karanth Nagara, Bengaluru - 560077
www.kaushalya.tech

Fullstack Web Application Development using Java, Spring, Spring Boot and MySQL

Raghu Prasad K S

B.E, MS (Software Systems)

CEO

Kaushalya Technical Training and Consultancy Services
#1094,Indushankara,23 Cross, MCECHS Layout, Dr. Shivarama karanth Nagar, Bangalore 560 077

+91 – 9845547471 **www.kaushalya.tech** **raghuprasad@kaushalya.tech**

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Course Details:

Name	Fullstack web development using Java,Spring,Spring Boot and MySQL
Course Duration	80 hours
Fees	INR 15,000 (Fifteen thousand only)

Fullstack web development using Java has become the hot skill in the industry. It is essential for the graduates and professionals to learn and master these skills. One has to be well versed with front end,middleware and database programming to become a full stack web developer.

Objectives of Training

- Provide minds-on and hands-on training
- Understand Java and its applications
- Understand Web design and development using Java
- Learn rapid web application development using Spring framework
- Learn building RESTful Webservices using Spring Boot
- Learn database programming using MySQL and Spring
- Build simple web application modules

Outcome of Training

- Trainees should be able to independently develop sample web application
- End to end (Full stack) application development
- Trainees can develop web application or back end application for their projects/internships
- Training on Java Fullstack should enable trainees to solve objective and programming type questions. This would help them to prepare for placements/switch career.

Syllabus

Module	Topics
Module 1 – Core Java	✓ Introduction to Java ✓ Java Platforms ✓ Language fundamentals – JDK,JRE,JVM ✓ Data Types,Operators,loops,conditional statements ✓ OOPs concepts Introduction ✓ Array and String

	✓ Oops in Java ✓ Packages and Wrapper Classes ✓ File Management ✓ Exception Handling ✓ The Collection Framework – List,Set,Queue and Map ✓ Multi Thread programming ✓ Executors – Concurrent pattern ✓ Sample programs and assignments
Modules 2 – SQL,JDBC and Servets	✓ SQL ✓ Introduction to Database management system ✓ Introduction to SQL ✓ Basic SQL commands – DDL,DML,DCL ✓ JDBC ✓ Introduction to JDBC ✓ Types of drivers ✓ Database programming using Java and MySQL ✓ CRUD Operations ✓ Joins ✓ Query optimizations ✓ Servlets ✓ Introduction to Java Web Applications ✓ Web Containers – Web Server ✓ Servlet life cycle and architecture ✓ Processing Get and Post Requests ✓ Listeners ✓ Cookie Management ✓ Session Tracking ✓ Sample programs and assignments
Module 3 – JPA with Hibernate	✓ Introduction to ORM and its need ✓ The Persistence Life Cycle ✓ Java persistence API (JPA) ✓ JPQL ✓ Association and Mapping

Module 4 – Spring and Spring Boot	✓ Introduction to Spring Platform and environment and Spring Boot Features ✓ Introduction to Spring Framework, IoC ○ What is Spring Framework,Benefits of Spring ○ The Spring architecture ○ IOC – Inversion of control, wiring beans ○ Bean containers, lifecycle of beans in containers ○ Customizing beans with BeanPostProcessors & BeanFactoryPostProcessors ○ XML and Annotation-based, mixed configurations ○ Java configuration ✓ Spring MVC framework ○ Introduction: DispatcherServlet, Handler mappings, Resolving views ○ Annotation-based controller configuration ✓ Front end programming using HTML,CSS,JavaScript and AJAX ✓ Spring JPA Integration ○ Spring support for JPA ○ Implementing Spring JPA integration ○ Spring Data ○ Spring Boot(Annotation based and Java configuration) ○ Spring REST ○ Spring DATA ReST ✓ Sample programs, assignment and evaluation
Module 5 –Project	✓ Develop a project using Java, Spring Boot and MySQL ✓ Assessment