Fruto Academy Java Developer Course Syllabus

Course Overview:
Welcome to the Fruto Academy Java Developer Course! This comprehensive program will provide you with the skills and knowledge needed to become a proficient Java developer. Throughout this course, you'll learn the fundamentals of Java programming, object-oriented principles, and how to build various types of applications using Java.

Course Duration: 14 weeks

Week 1-2: Introduction to Java Programming
- Understanding programming concepts and paradigms
- Introduction to the Java programming language
- Setting up Java environment and IDE

Week 3-4: Java Basics
- Variables, data types, and basic operators
- Control structures: conditionals and loops
- Functions and methods
- Handling exceptions and errors

Week 5-6: Object-Oriented Programming (OOP) in Java
- OOP principles: encapsulation, inheritance, and polymorphism
- Creating and using classes and objects
- Designing and implementing class hierarchies

Week 7-8: Collections and Generics
- Working with Java collections framework
- Lists, sets, maps, and iterators
- Using generics for type safety and code reusability

Week 9-10: File Handling and I/O
- Reading from and writing to files
- Understanding input and output streams
- Serialization and deserialization of objects

Week 11: Java Database Connectivity (JDBC)
- Introduction to databases and SQL
- Connecting Java applications to databases using JDBC
- Executing queries, retrieving data, and handling transactions

Week 12-13: Java Web Development (Spring Boot)
- Introduction to web development concepts
- Setting up a web application using Spring Boot

- Building RESTful APIs with Spring MVC
- Handling data persistence with Spring Data JPA

Week 14: Final Project and Deployment
- Applying Java skills to a real-world project
- Deploying Java applications to web servers
- Final project: Build and deploy a complete web application using Spring Boot

Assessment and Certification:
- Weekly coding assignments: 40%
- Midterm project (Java application development): 20%
- Final project: 30%
- Participation and quizzes: 10%

Recommended Resources:
- "Java: The Complete Reference" by Herbert Schildt
- "Spring in Action" by Craig Walls
- Online tutorials and documentation for relevant Java frameworks and libraries

Note: This syllabus is subject to adjustment based on instructor discretion and the evolving landscape of Java development.

For inquiries, contact us at info@frutoacademy.com or visit www.frutoacademy.com.