Program Agenda

Java, J2EE, Web
CICD

Day

Day	Hours	Topic
1	4 hours	Basics of Java
		JVM
		Java coding steps
		Program structure
		variables and data types
		constants
		type conversion
		control structures – if, for, while, switch
		class definition
		fields, methods
		constructors
		overloading
	2 hours	String & StringBuilder class
		Java API reference
		Object lifecycle
		Arrays in Java
		enhanced for loop for arrays
		primitive arrays VS object arrays
	2 hours	Lab
2	2 hours	Inheritance
		Super class and Sub class concept
		what is not inherited
		super keyword
		Overriding
		Polymorphism
	2 hours	Abstract Classes
		Interfaces
		default methods of interfaces
	2 hours	Object class and methods
		Wrapper classes
		Autoboxing and unboxing
	2 hours	Lab
3	2 hours	Generic classes
		Collections

		4 hours	List, Set and the other Collection classes
			Map interface
			Usage of Comparable and Comparator
		2 hours	Lab
4		2 hours (SQL, JDBC)	SQL overview
			JDBC
			Java Persistence API with hibernate
			JPA mapping types
		4 hours (Web services)	Introduction to Webservices
			Basic difference between Soap and Restful
			How to build Restful services
			Differences between PUT, PATCH and POST operations
			Deploy Restful services
			How to consume Restful Services/Building clients
		2 hours	Lab

GIT and GITHub Jenkins CI/CD Duration 1 day		
5	Git and GitHub 2 hours	Git Basics
		Working with Branches
		Forking and contributing
		Collaboration
	CI/CD with Git and Jenkins 4 Hours	Introduction
		Jenkins Installation and usage
		Jenkins script
		Jenkins Configuration
		CI/CD pipeline using GIT and Jenkins
		Integrating Jenkins in CI/CD pipeline
	2 hours	Lab