JAVA

Course structure:

NORMAL JAVA STACK	#	Topic	Sub-Topic	Days	Hrs
	1	Java Programming	Introduction Java, keywords, loops Classes and Objects, Methods and Constructors, Static methods and Static variables	5	10
	2	Java Programming	Class Relationships, Inheritance Polymorphism [overloading and overriding]	6	10
	3	Java Programming	Abstract classes, Interfaces, Packages, final keyword, Arrays Strings	2	4
	4	Collections API & Exception Handling	Collections (List, Set, Map) ----------------------------- Exception Handling Creating Threads, Sleep, Join, Thread States, Synchronized . ------------------------------	3	6
	5	MultiThreading & Java 8	Java 8 Programming -Functional Interface and Default and static methods in interfaces, Lambdas, Method References Stream API and Collections.	4	8
	6	JDBC and MySQL	Need of RDBMS in an Applications, Using JDBC to connect to MySQL and showing CRUD operations and transaction Management.	5	10
	7	Mini Project - Crud	CRUD operations, Strategies to Autogenerate Primary key	2	4
	8	Web Layer	HTML, CSS and JS Servlets: HTTP Servlet, JSP: scriptlets,	3	6
	9	Mini Project - Crud	UI project + DB	4	8

SPRING STACK	10	Spring Core	Containers, IOC, Dependency injection andits type, Autowiring and its Types, xml configuration, java configurations and annotations, Reading value from Properties File	5	10
	11	Spring MVC,Spring Form	Spring-MVC: Controller, ModelAndView, parent context and child context. FormUI Components (static and dynamic), Validations (standard and custom) using	7	14

			annotations		
	13	Introductionto Microservices andSpringBo ot	▪TypesofApplications ▪ IntroductiontoMicroservicesArchitecture ▪MicroservicesandSOAPbasedservices comparisons	5	10
	14	Creating MicroServic es usingSpring Boot	▪CreatingFirstSpringBootProjectusing: Initializer, Eclipse, STS ▪ Creating a Microservice Component usingSpringBoot(SpringRESTandMapba sed Datastructuretostoredata) ▪SpringBootApplicationusing Spring-RESTandSpring-JPA	5	10
GIT	16	GITandGCP	Ideaaboutsourcecodeandversion managementtools. IdeaaboutBasicgit commands. Introductiontocloud, IntroductiontoGCP, deploying a spring boot app on GCP using GCP services **FullstackProject**	5	10
	18	Final project-real time		5 66	10 130