

SL No	Module	Topics	Sub-Topics	Class Room time	Practice Time	Review Session Time	Date	Remarks	Week	Trainer Team
Orientation of YSD Batch 03							08/01/23		Week 1	Academy
1	Java Fundamentals	Java Basics	Intro to Java, Language basics, JDK and IDE set	2	3.5	0.5	08/02/23			
			Collections, Data Structure, Generics, JVM (memory management, garbage collection)	2	3.5	0.5	08/03/23			
		Java Advanced	Java advanced: Java 8-11 features, Lambda Expressions and Functional Programming	2	3.5	0.5	08/04/23			
							08/05/23	Saturday		
							08/06/23	Sunday		
		Java Advanced	Java concurrency: thread, managing threads	2	3.5	0.5	08/07/23		Week 2	Academy
			ESAD, Exception handling & clean code	2	3.5	0.5	08/08/23			
		OOP Concepts	OOP concepts, Class, Object, Inheritance	2	3.5	0.5	08/09/23			
			Polymorphism, Abstract class, Interfaces	2	3.5	0.5	08/10/23			
		Web Basics	Web Terminology (Website: static vs dynamic, HTTP requests, GET vs POST, Server: Web vs Application)	2	3.5	1.5	08/11/23			
							08/12/23	Saturday		
2	Java Web						08/13/23	Sunday		
		JSP and Servlet	1. Servlet API, Servlet Interface, HttpServlet 2. Servlet lifecycle, RequestDispatcher				08/14/23		Week 3	Academy
							08/15/23	National Mourn Day		
		JSP and Servlet	JDBC introduction, JDBC Driver, Connectivity steps, connection with MySQL	2	3.5	0.5	08/16/23			
			3. Servlet Events and Listener, Servlet Filter	2	3.5	0.5	08/17/23			
			4. JSP life cycle understanding, JSP tags	2	3.5	0.5	08/18/23			
							08/19/23	Saturday		
							08/20/23	Sunday		
3	Design Pattern	Design Patterns Basics	Advantage of Design Patterns, Core Java design patterns	2	3.5	0.5	08/21/23		Week 4	Academy
		Core Design Patterns	Creational Design Pattern (Factory Pattern, Abstract Factory Pattern, Singleton Pattern)	2	3.5	0.5	08/22/23			
			Creational Patter (Builder Pattern), Structural Design Pattern (Adapter Pattern)	2	3.5	0.5	08/23/23			
		J2EE Design Patterns	J2EE Design Patterns 1. Presentation Layer Design Pattern (Intercepting Filter Pattern, Front Controller Pattern)	2	3.5	0.5	08/24/23			
			2. Business Layer Design Pattern (Business Delegate Pattern, Service Locator Pattern) 3. Integration Layer Design Pattern (Data Access Object Pattern)	2	3.5	0.5	08/25/23			
							08/26/23	Saturday		
							08/27/23	Sunday		
4	DevOps	Docker	Docker fundamentals	2	3.5	0.5	08/28/23			
			Deploying Spring (Building and deploying WAR & JAR files, Running Spring Boot in a Docker container)	2	3.5	0.5	08/29/23			

	DevOps	Docker	Dockerized development env	2	3.5	0.5	08/30/23		Week 5	DevOps Team
			Self Practice on Dockerized development env	0.5	4.5	1	08/31/23			
5	Spring Framework	Spring Fundamentals	1. Maven or Gradle	2	3.5	0.5	09/01/23		Week 5	DevOps Team
			2. Spring Framework fundamentals - featuring Dependency Injection, AOP, Spring project architecture, wiring beans				09/02/23	Saturday		
							09/03/23	Sunday		
							09/04/23			
		Spring MVC/Spring Boot	1. Rendering web views (Working with Thymeleaf)	2	3.5	0.5	09/05/23		Week 6	ED Trainer
			2. Advanced Spring MVC (Handling exceptions, Advising controllers)	2	3.5	0.5	09/06/23	Shuba Janmashtami		
		JPA and Hibernate	1. Spring Framework Fundamentals - Reading and writing Data with JDBC, Persisting Data with Spring Data JPA, ORM	2	3.5	0.5	09/07/23			
			2. Spring ORM, Hibernate and Spring Integration	2	3.5	0.5	09/08/23			
							09/09/23	Saturday		
							09/10/23	Sunday		
		Spring Security	Spring Security Core Concepts (Authenticating against database tables)	2	3.5	0.5	09/11/23		Week 7	ED Trainer
			Spring Security Core Concepts (Authorizations)	2	3.5	0.5	09/12/23			
			Practice on Spring Security and Q&A session			2	09/13/23			
		Assignment/Mini Project	Mini project on Spring Framework Fundamentals (Spring Boot, JDBC, JPA, Security)	0.5	5	0.5	09/14/23			
			Mini project on Spring (Spring Framework, Spring Boot, Hibernate, JPA, Security) Evaluation Day		4.5	1.5	09/15/23			
							09/16/23	Saturday		
							09/17/23	Sunday		
		Asynchronous/ Non-blocking I/O	Reactive Programming, Netty	2	3.5	0.5	09/18/23		Week 8	ED Trainer
			Spring WebFlux	2	3.5	0.5	09/19/23			
		Microservices	Spring Boot Microservices Fundamental, Creating REST services, Consuming REST services	2	3.5	0.5	09/20/23			
			Implementing Spring Cloud Config Server	2	3.5	0.5	09/21/23			
			Service Discovery with Netflix Eureka Server	2	3.5	0.5	09/22/23			
							09/23/23	Saturday		
							09/24/23	Sunday		
		Assignment/Mini Project	Self Practice/Exam on RESTful APIs, Creating APIs through Microservices, Evaluation Day		4.5	1.5	09/25/23		Week 9	DevOps Team
6	AWS	Web Services/API	Introduction to Amazon Web Services	2	3.5	0.5	09/26/23			
		Implementation	AWS Services (S3, DynamoDB, SQS, Cache, Search, RDS) from Java	2	3.5	0.5	09/27/23			
							09/28/23	Eid-e-Milad un-Nabi		
		Implementation	Host Java services in AWS	2	3.5	0.5	09/29/23			
							09/30/23	Saturday		
							10/01/23	Sunday		

7	Mid Term Project	Assignment/Mini Project	Mid Term Project development	0.5	5	0.5	10/02/23	Week 10	Academy	
			Mid Term Project development	0.5	5	0.5	10/03/23			
			Mid Term Project development	0.5	5	0.5	10/04/23			
			Mid Term Project development	0.5	5	0.5	10/05/23			
			Mid Term Project development	0.5	5	0.5	10/06/23			
							Saturday			
							Sunday			
8	Front-end	CSS	Mid Term Project Evaluation	3		3	10/09/23	Week 11	Academy	
			CSS flex, grid, Media query, transition	2	3.5	0.5	10/10/23			
			Bootstrap GRID system, component and covert one page using Bootstrap	2	3.5	0.5	10/11/23			
		JavaScript	Introduction, Environment setup, hello JS, variable type, array, different type function, if else, loop, object, map, filter, reduce, deep copy	2	3.5	0.5	10/12/23			
			Dom manupulation	2	3.5	0.5	10/13/23			
							Saturday			
						Sunday				
		React JS	What is React js? React js enviournement setup? Hello by create-react-app	2	3.5	0.5	10/16/23			
			React component types, special highlight on Functional compoement	2	3.5	0.5	10/17/23			
			React js propos and reusable component	2	3.5	0.5	10/18/23			
			Different types of events, Form management in React	2	3.5	0.5	10/19/23			
			React Hooks: useState, useEffect React API call by using fetch and axios and differences	2	3.5	0.5	10/20/23			
							Saturday			
							Sunday			
		React JS	React Router for multi page routes, Debugging and Front-End Testing. Assigning mini project.	2	3.5	0.5	10/23/23	Week 12	ED Trainer	
							10/24/23			Vijaya Dashami
		Mini Project	Mini Project development on ReactJS and evaluation	0.5	4.5	2	10/25/23			
		9	Testing	Introduction to Testing	Unit Testing, MockMVC, Mockito	2	3.5			0.5
Integration Testing	2				3.5	0.5	10/27/23			
							10/28/23	Saturday		
							10/29/23	Sunday		
	Final Project		Final Project Idea Demonstration	2	3.5	0.5	10/30/23	Week 13	Academy and ED Trainer	
				101	212.5	38.5				