SL No	Module	Topics	Sub-Topics	Class Room time	Practice Time	Review Session Time	Date	Remarks	Week	Assigned Trainer	Trainer Team
1	Java Fundamentals	Java Basics	Intro to Java, Language basics, JDK and IDE set	2	3.5	0.5	04/03/23		Week 1		Academy
			Collections, Data Structure, Generics, JVM (memory management, garbage collection)	2	3.5	0.5	04/04/23				
		Java Advanced	Java advanced: Java 8-11 features, Lambda Expressions and Functional Programming	2	3.5	0.5	04/05/23				
			Java concurrency: thread, managing threads	2	3.5	0.5	04/06/23				
			ESAD, Exception handling & clean code	2	3.5	0.5	04/07/23				
							04/08/23	Saturday	Week 2		
							04/09/23	Sunday			
2	Java Web	OOP Concepts	OOP concepts, Class, Object, Inheritance	2	3.5	0.5	04/10/23				Academy
			Polymorphism, Abstract class, Interfaces	2	3.5	0.5	04/11/23				
		Web Basics	Web Terminology (Website: static vs dynamic, HTTP requests, GET vs POST, Server: Web vs Application)	2	3.5	1.5	04/12/23				
		JDBC and Hibernate	JDBC introduction, JDBC Driver, Connectivity steps, connection with MySQL	2	3.5	0.5	04/13/23				
							04/14/23	Bengali New Year			
							04/15/23	Saturday	Week 3		
							04/16/23	Sunday			
		JSP and Servlet	1. Servlet API, Servlet Interface, HttpServlet 2. Servlet lifecycle, RequestDispacher	2	3.5	0.5	04/17/23				Academy
			3. Servlet Events and Listener, Servlet Filter	2	3.5	0.5	04/18/23				
							04/19/23	Laylat al-Qadr			
			4. JSP life cycle understanding, JSP tags	2	3.5	0.5	04/20/23				
							04/21/23	Jumatul Bida			
							04/22/23	Saturday	Week 4		
							04/23/23	Sunday			
3	Design Pattern	SOLID Principles	1. SOLID principles 2. Advantage of Design Patterns, Core Java design patterns, JEE design patterns	2	3.5	0.5	04/24/23				Academy
		Design Patterns	Creational Design Pattern (Factory Pattern, Abstract Factory Pattern, Singleton Pattern)	2	3.5	0.5	04/25/23				
			Creational Patter (Builder Pattern), Structural Design Pattern (Adapter Pattern)	2	3.5	0.5	04/26/23				
		J2EE Design Patterns	J2EE Design Patterns 1. Presentation Layer Design Pattern (Intercepting Filter Pattern, Front Controller Pattern)	2	3.5	0.5	04/27/23				
			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	04/28/23				
							04/29/23	Saturday			
							04/30/23	Sunday			

#	Module	Topic	Description				Date	Note	Week	Trainer	Team
							05/01/23	Inmternational Labor Day			
4	DevOps	Docker	Docker fundamentals	2	3.5	0.5	05/02/23		Week 5		DevOps Team
			Deploying Spring (Building and deploying WAR & JAR files, Running Spring Boot in a Docker container)	2	3.5	0.5	05/03/23				
			Dockerized development env	2	3.5	0.5	05/04/23				
							05/05/23	Buddha Purnima			
							05/06/23	Saturday			
							05/07/23	Sunday			
5	Spring Framework		Self Practice on Dockerized development env	0.5	4.5	1	05/08/23		Week 6		ED Trainer
		Spring Fundamentals	1. Maven or Gradle 2. Spring Framework fundamentals - featuring Dependency Injection, AOP, Spring project architecture, wiring beans	2	3.5	0.5	05/09/23			Rezaur	
		Spring MVC/Spring Boot	1. Rendering web views (Working with Thymeleaf)	2	3.5	0.5	05/10/23			Rezaur	
			2. Advanced Spring MVC (Handling exceptions, Advising controllers)	2	3.5	0.5	05/11/23			Rezaur	
		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	05/12/23			Fahim Faysal	
							05/13/23	Saturday	Week 7		ED Trainer
							05/14/23	Sunday			
		JPA and Hibernate	2. Spring ORM, Hibernate and Spring Integration	2	3.5	0.5	05/15/23			Fahim Faysal	
			Spring Security Core Concepts (Authenticating against database tables)	2	3.5	0.5	05/16/23			Raihan	
		Spring Security	Spring Security Core Concepts (Authorizations)	2	3.5	0.5	05/17/23			Raihan	
		Assignment/Mini Project	Self Practice on Spring Framework Fundamentals (JDBC + JPA)	0.5	5	0.5	05/18/23				
			Self Practice on Spring Security, Evaluation Day		4.5	1.5	05/19/23				
							05/20/23	Saturday	Week 8		ED Trainer
							05/21/23	Sunday			
		Asynchronous/ Non-blocking I/O	Reactive Programming, Netty	2	3.5	0.5	05/22/23			Nishat	
			Spring WebFlux	2	3.5	0.5	05/23/23			Nishat	
		Microservices	Spring Boot Microservices Fundamental, Creating REST services, Consuming REST services	2	3.5	0.5	05/24/23			Khan Abdullah	
			Implementing Spring Cloud Config Server	2	3.5	0.5	05/25/23			Khan Abdullah	
			Service Discovery with Netflix Eureka Server	2	3.5	0.5	05/26/23			Khan Abdullah	
							05/27/23	Saturday	Week 9		
							05/28/23	Sunday			
		Assignment/Mini Project	Sel Practice/Exam on RESTFul APIs, Creating APIs through Microservices, Evaluation Day		4.5	1.5	05/29/23				DevOps
		Web Services/API	Introduction to Amazan Web Services	2	3.5	0.5	05/30/23				

#	Category	Topic	Description				Date	Day	Week		Owner
									Week 9		Team
6	AWS	Implementation	AWS Services (S3, DynamoDB, SQS, Cache, Search, RDS) from Java	2	3.5	0.5	05/31/23				
		Implementation	Host java services in AWS	2	3.5	0.5	06/01/23				
		Assignment/Mini Project	Self Practice on cloud based development & hosting	0.5	3.5	2	06/02/23				
							06/03/23	Saturday	Week 10		Academy
							06/04/23	Sunday			
7	Front-end	Front-End Basics	HTML: Introduction,Enviournment setup(VS-Code setup), Tag , Attributres, Four important tag (Doctype, HTML. Head, body) ,meta , List, image, link, formatting, Table, form, scmantic html	2	3.5	0.5	06/05/23				
		CSS	Introduction, css syntax stracture, types of css , size, color, margin, padding, fonts, selector , Specificity, Inheritance, Box Model, table, form, print query, Pseudo element	2	3.5	0.5	06/06/23				
			CSS flex, grid	2	3.5	0.5	06/07/23				
			Media query, transition, key-frame	2	3.5	0.5	06/08/23				
		Assignment/Mini Project	Self Practice on Converting One Figma page to ensure Pixel-perfect and responsive Website design	0.5	5	0.5	06/09/23				
							06/10/23	Saturday	Week 11		ED Trainer
							06/11/23	Sunday			
	Front-end		Self Practice on Converting one Adobe XD into Website to ensure Pixel-perfect and responsive Website design	0.5	3.5	2	06/12/23				
		Bootstrap	Bootstrap GRID system, component and covert one page using Bootstrap	2	3.5	0.5	06/13/23				
		JavaScript	Introduction, Enviournment setup, hello JS, variable type, array, different type function, if else, loop, object, map, filter, reduce, deep copy ,slaw copy	2	3.5	0.5	06/14/23				
			Dom manupulation	2	3.5	0.5	06/15/23				
		React Basics	What is React js? React js enviournement setup? Hello by create-react-app	2	3.5	0.5	06/16/23				
							06/17/23	Saturday	Week 12		ED Trainer
							06/18/23	Sunday			
9	Front-end	React JS	React component types, special highlight on Functional compoenent	2	3.5	0.5	06/19/23				
			React js propos and reusable compoent ,	2	3.5	0.5	06/20/23				
			Different types of events, Form management in React	2	3.5	0.5	06/21/23				
			React Hooks: UseState, useEffect React API call by using fetch and axios and differences	2	3.5	0.5	06/22/23				
			React Router for multi page routes, Debugging and Front-End Testing	2	3.5	0.5	06/23/23				
							06/24/23	Saturday			
							06/25/23	Sunday			Academy
				1	4.5	0.5	06/26/23				
	Mid Term Project			0.5	5	0.5	06/27/23				

									Week		Academy Trainer
10	Mid Term Project				0.5	5	0.5	**06/28/23**		**Week 13**	
			Mid Term Project Evaluation	3		3	**06/22/23**				
	Unit Test & Integration Test	Testing Fundamentals	1. Difference between unit test, integration test, system test and acceptance test	2	3.5	0.5	**06/23/23**				
							06/24/23	Saturday			
							06/25/23	Sunday			
11	Unit Test & Integration Test		2. Junit: Introduction to Junit, assertion, ignore test, time test, exception test, parameterized test	2	3.5	0.5	**06/26/23**			**Week 14**	**Academy Trainer**
		Mockito	Junit: suite test, mocking using mockito	2	3.5	0.5	**06/27/23**				
		Integration Testing	Introduction to Integration test, Testing with @SpringBootTest	2	3.5	0.5	**06/28/23**				
							06/29/23	**Eid Ul Azha**			
				111.5	**227**	**40.5**					

One more month will be utilized for the Final Project.