S.No	Topic	Sub topic	No. of Hours
	Java Fullstack Syllabus		
1	What is Full Stack Development? What is Java Full Stack?	Introduction, Roles, Advantages	1
2	Java Fundamentals	Setup, Syntax, Data Types, Operators, Control Flow (if-else, loops, switch), OOP (Classes, Objects, Inheritance, Polymorphism, Abstraction), Exception Handling, Collections Framework	4
3	GIT and Version Control	Basic Commands (init, clone, add, commit, push, pull), Branching, Merging, Remote Repositories (GitHub)	3
4	JSP and Servlets	Servlet Lifecycle, HTTP Requests/Responses, JSP Syntax & Directives, Session Management, Cookies, Basic MVC with Servlets & JSPs	4
5	Project: Building a Simple Web Application		1
6	Introduction to React.js	Setting up a React project (Create React App)	2
7	React Components, Props, and State	Functional and class components	3
		Managing component state	3
8	Handling User Events and State Management	Event handling in React	3
		Basic state management patterns	6
9	Building Interactive User Interfaces	Combining components, props, and state	1
10	Introduction to Spring	Dependency Injection (DI), Inversion of Control (IoC)	4
11	Spring Core	Beans, ApplicationContext	3
12	Spring MVC	Controllers, Views, Model	3
13	Project: Building a Simple Spring MVC Application		2
14	RESTful Web Services	Introduction, API Design, HTTP Methods (GET, POST, PUT, DELETE)	4
15	Spring Boot	Introduction, Auto-Configuration, Embedded Servers, Starters	4
16	Building RESTful APIs with Spring Boot		4
17	MongoDB	NoSQL database concepts Documents and collections Data modeling in MongoDB (embedding vs. referencing) MongoDB Querying: CRUD operations (Create, Read, Update, Delete) Query operators and aggregations Spring Data MongoDB: Connecting to MongoDB with Spring Boot Defining MongoDB repositories Performing database operations with Spring Data MongoDB	6
19	Project: Building a RESTful API with Spring Boot & Database Integration		2
20	JUnit	Introduction to Unit Testing, Annotations (@Test, @Before, @After), Writing Test Cases	4
21	Implementing Unit Tests		3
		Total no. of hours	70