

JAVA Full Stack Development					
Weekend Schedule	Weekday Schedule	Topic	Sub Topic	Lab Session	Assignments
Day-1	Day-1	Introduction To Fullstack Technologies	<ul style="list-style-type: none"> · What is Fullstack · What are the Requirements to build End to End Web Application? · What are the Challenges in modern web development? 		
HTML- Front End					
Day-1	Day-2	Introduction to Web	<ol style="list-style-type: none"> 1) Overview of Web And web application 2) Overview of Mobile and mobile applications 3) Web VS Mobile 4) Web Designer vs HTML Developer 		
	Day-3	Core concepts of HTML	<ol style="list-style-type: none"> 1 . Elements and Attributes <ul style="list-style-type: none"> -- Tags <ul style="list-style-type: none"> - Introduction - Types - Single Tags / Empty Tags / Void Tag / Self Enclosing Tag - Paired Tags - Semantic Tags - Non Semantic Tags -- Elements <ul style="list-style-type: none"> - Introduction - Types - Inline elements - Block Level - Inline-Block -- Attributes <ul style="list-style-type: none"> - Introduction - Types - Predefined Attributes -Global Attributes - Style - Id - class - Element Specific Attributes - src - alt - type - Custom / User Defined Attributes 		

Day-2	Day-4	Important Tags	<ul style="list-style-type: none"> 1) Text tags -- Headings <h1>---<h6> -- Paragraph -- Lists - Ordered List - Unordred List - Defination List -- Tables -- article -- aside 2) Graphic Tags -- Image Tag -- Figure tag 4) Links -- Anchor - Internal linking(Within Project) - External Linking(from our project to external pages) - (#)HashBased navigation(With-in page) 5) Multi Media Tags - Audio - Video 6) Layout Tags - Div - Section - Header - Main - Nav - Footer 		
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Day-3	Day-5	Forms	<p>1) Whats is forms and why should we create a forms? 2) Form tags and form attributes -- Form - Form attributes - method - action - enc-type - autocomplete - novalidate 3) Form Elements & form element attributes</p> <p>Types - - Input types - text - password - file - hidden - radio - checkbox - submit(Action Items) - reset(Action Items) - Textareab - Dropdown Box - select - option</p> <p>- Attributes of form elements - type - name - placeholder - value</p>		
	Day-6	HTML 5	<p>1) Differences between HTML older version and HTML 5 2) HTML Features with Examples -The DOCTYPE declaration for HTML5 is very simple, <!DOCTYPE html> - The character encoding<meta charset="UTF-8"> - New function for embedding audio(<audio>), video(<video>), graphics (<svg> and<canvas>) - Client-side data storage - Interactive documents</p>		

Day-4	Day-7	HTML 5	<p>2) HTML Features with Examples</p> <ul style="list-style-type: none"> - New structural elements <article> ,<header>,<footer>,<nav>,<section> , and<figure> - New form control calendar, date,time,email,url,search - Javascript enhancement - New HTML5 API's - HTML Geolocation, HTML Drag And Drop, Web storage <p>3) HTML 5 validations Attributes</p>		
CSS- Front End					
Day-4	Day-8	Introduction & Selectors	<p>What is CSS Why Use CSS? How is CSS Used? Creating and Linking a CSS StyleSheet How To Test A Stylesheet</p> <p>Selectors: What is a selector? The Universal/Global Selector The Tag/Element Selector The ID Selector The Class Selector The Attribute Selector The Relationship Selector Psuedo Selector Group Selector Specificity & When To Use Selectors What are Properties? The CSS General Rule</p>		
Day-5	Day-9	coloring & formatting, Fonts & text manipulation	<p>Types of Colors -Coloring Text -Background colors Images/URLs in CSS Other background Properties -Opacity / Transparency -Gradients</p> <p>Fonts & Text Manipulation: Introduction to types of units Text Manipulation Font Size, Bolding & Style Font Families Including external fonts W/Google Fonts Using External Fonts</p>		

	Day-10		Introduction The Box Model Padding Border Margin Changing Content Size CSS Borders Margin & Padding Float & Display Types		
		Layout			
Day-6	Day-11		Introduction Flexbox Components Creating a Flex Container Flex Direction & Wrap Content Alignment Flex Item Order Shrink, Grow & Basis The 'Flex' Property Item Alignment		
	Day-12	Flexbox			
			Grid vs Flexbox Introduction Differences Creating a Grid Template Columns & Rows Justify & Align Grid Row & Column Gaps Column & Row Lines Grid Area		
		Grid			
Day-7	Day-13		The Transitions Property Transform property Creating Animations w/Keyframes Adding an Animation Animation Properties		
		Animation & Transitions, Media Queries	Media Queries in css -Introductions -properties		
Project 1 - Individual project on HTML & CSS					
Bootstrap- Front End					
Day-7	Day-14		1)What is Bootstrap 2)History of Bootstrap 3)Versions of Bootstrap 4)Popularity of Bootstrap 5) Bootstrap Documentation - Installing Bootstrap Locally - Install or adding Bootstrap via Cdn link - Adding Javascript cdn link		
		Introduction to BootStrap			

Day-8	Day-15	Layout & Components	<ul style="list-style-type: none"> 1) BreakPoints <ul style="list-style-type: none"> - Extra small - Small - Medium - Large - Extra large - Extra extra large 2) Containers <ul style="list-style-type: none"> - container- fluid - container 3) Columns <ul style="list-style-type: none"> - column - row 4) Gutter <ul style="list-style-type: none"> - Horizontal gutter - Vertical gutter - Row column gutter - No gutter 5) Margins 6) Padding 7) Components in Bootstrap 		
	Day-16	Utilities	<ul style="list-style-type: none"> 1) Background 2) Colors 3) Display <ul style="list-style-type: none"> - none - inline - inline-block - block - grid - flex - inline-flex 4) Float <ul style="list-style-type: none"> - float-start - float-end 5) Position <ul style="list-style-type: none"> - position-static - position-relative - position-absolute - position-fixed - position-sticky 		

Day-9	Day-17	Flex	1) Direction - flex-column - flex-column-reverse - flex-row - flex-row-reverse 2) justify-content - justify-content-start - justify-content-end - justify-content-center - justify-content-between - justify-content-around - justify-content-evenly 3) align-items - align-items-start - align-items-end - align-items-center - align-items-baseline - align-items-stretch 4) flex-fill 5) flex grow & shrink		
	Day-18	Grid	1) Grid options - Extra small (xs) - Small (sm) - Medium (md) - Large (lg) - Extra large (xl) - Extra extra large (xxl) 2) Containers and rows 3) Columns 4) Responsive Breakpoints		
Presentation Session-1 / Practical Case Study Analysis by students					
Project 2 - Individual Project on HTML, CSS & Bootstrap					
Javascript- Front End					
Day-10	Day-19	Introduction to Javascript	1) What is Javascript? Use of javascript? 2) Trend of Javascript? 3) Types of Implementing Javascript? - Inline - Internal - External		
	Day-20	Basics of Javascript	1) What are the Datatypes? Example for each one of them? 2) Variables & Constants? 3) What is Hoisting? 4) Alert, Prompt and Confirm Modals		
Day-11	Day-21	Operators	1) What is Operators? 2) Types of Operators? 3) Examples		
	Day-22	Conditions / Decession making	1) What is decession making? 2) Types of Conditions? 3) Examples for each one of them?		

Day-12	Day-23	Loops / Iterations	1) What is loops? Usage? 2) Types of loops? 3) Entry controlled vs exit controlled loops 4) Examples for each one of them		
	Day-24	DataStorage Techniques & DOM Manupulation	1) What are the types of data storage? 2) Data Structures in JavaScript? 3) Strings & Methods 4) Mutable and Immutable Strings/Objects		
Day-13	Day-25	DataStorage Techniques & DOM Manupulation	1) Arrays & Methods 2) Objects & Methods		
	Day-26	DataStorage Techniques & DOM Manupulation	1) Array of Objects? 2) Object configuration and properties 3) Writable and Enumerable Objects 4) Object Clone		
Day-14	Day-27	DOM & Dom Manupulations	1) What is DOM & Dom Manupulation Metthods? 2) Types of DOM Manupulation Methods? - Dom Selectors - getelementById() - getElementByTagName() - getElementByClassName() - querySelector() - querySelectorAll() Adding Css using Javascript - document.getElementById('idvalue').style.property = 'value'; - Classlist - addClass - removeClass - InnerHTML - Document.write() vs innerHTML		
	Day-28	DOM	- Attaching Event - addEventListener() - Detaching Event - removeEventListener() - Manipulating Elements - createElement() - appendChild() - removeChild() - replaceChild() - Manipulating Attributes - setAttribute() - removeAttribute()		
	Day-29	DOM & Dom Manupulations	Adding Css using Javascript - document.getElementById('idvalue').style.property = 'value'; - Classlist - addClass - removeClass - InnerHTML - Document.write() vs innerHTML		

Day-15	Day-30	Functions	What are Functions in JavaScript? When and where to use Functions? 6 Ways of declaring Functions		
	Day-31	Functions	Arrow Functions Advantages and Disadvantages Immediate Invoke Function Declare Function as Class/Expression setTimeout and setInterval		
Day-16	Day-32	Functions	Generator Functions Anonymous Functions Reusable Functions Function Advantages and Disadvantages		
	Day-33	Forms & Events	1) What is forms and validations? 2) Events and Event handling - Types of events - Keyboard events - keyup - keydown - keypress(deprecated) - Mouse events - click - dblclick - hover - mouseover - mousemove - mouseleave - contextmenu - Form events - submit - blur - focus - reset - change - Page events - load - scroll - resize		
Day-17	Day-34	Forms & Events	- What is event Bubbling And Capturing? - Event loop - Event Lifecycle		
	Day-35	Forms & Events	- Types of form validations - field validations - form validation - Regular expressions - form validation using regex - form validation without regex		

Day-18	Day-36	Error Handling	1) What are the types of errors in JS? - syntax errors - type errors - assignment errors - reference errors - others 2) How to handle the errors? 3) What is exception handling? - try block - catch block - finally block - throw block - custom error messages		
Day-19	Day-37	OOJS	1) Object oriented Principles - Data abstraction - Data Encapsulation - ES5 - Object Literal - Object Constructor - Es6+ - Classical - Polymorphism - Operators Overloading - Function Overloading - Inheritance - Types of inheritance - Js Supported Types Example- -Es5 - Prototypal Inheritance - Es6+ - Classical Inheritance		
Day-19	Day-38	OOJS	Getter and Setter Spread and Rest Operators Ajax Call in JavaScript		
Day-20	Day-39	OOJS	Closures Race Condition		
Day-20	Day-40	ES6 Concepts	Strict Mode Module Export and import Block Scoping Template literals		
Day-21	Day-41	JSON	Call Backs, Async Await and Promises Call, Apply and Bind		
Day-21	Day-42	Asynchronous JavaScript & Es6+ Features	JSON Structure JSON Parse and Stringify ES5 vs ES6		

Day-22	Day-43	HTML 5 Features	2. HTML5 Canvas 3. HTML5 Web API's 4. HTML5 Geo Tags, Drag and Drop		
	Day-44	HTML 5 Features	1. Web Storage – Local vs Session 2. Overview of PWA 3. Web Service Workers 4. Browser Tools – Chrome, Firefox and Edge		
Presentation Session-2 / Practical Case Study Analysis by students					
GIT					
Day-23	DAY-45	GIT	Fast introduction to GIT commands, Simple Rebase Example, Setup for rebasing conflict, Abort a Rebase, Rebase Conflict and Resolution, Pull with Rebase (GitHub)		
Project 3 - Group Project using HTML ,CSS ,BOOTSTRAP,JAVASCRIPT					
Core Java- Back End					
Day-23	DAY-46	Java Introduction	· Introduction To Java · Java History · Why Java		
Day-24	DAY-47	JVM, Class & Objects	· JVM · Class, Objects, Data Types · Variables · Type Casting		
	DAY-48	OOPS	· Object Oriented Programming Concepts --Abstraction --Encapsulation		
Day-25	DAY-49	OOPS	Polymorphism Inheritance · Java Coding Standards		
	DAY-50	Java Coding standards	Package – Creating package, naming package Java Keywords · Module resolution declaration merging		
Day-26	DAY-51	Java Coding standards Contd.	· Access Specifiers – Public, Private, Protected, Default - Static Concept – Block, Variable, Method, Class · Scanner Class		
	DAY-52	Control Statement	· Control Statement – If, If...else, Nested if...else and SwitchCase - Flow Statement- for, while, do..while ". Constructor- Default, Parameterized · Inheritance · Extends, super and this keyword		
Day-27	DAY-53	Exception Handling	· Method Overloading, Method Overriding - Interface - Abstract Class · Garbage Collection · Marker Interface		
	DAY-54	Exception Handling Contd.	· Serialization - Transient · Exception Handling ". Exception Handling- try, catch, throw, throws, finally		

			<ul style="list-style-type: none"> · String Concept ---String Basics – -String Methods – String Buffer - String Builder 		
	DAY-55	String Concept			
Day-28	DAY-56	Collection Framework	<ul style="list-style-type: none"> – Custom Immutable Class - Collection Framework "--Collection Basics "-- Iterator Interface -- Methods of Collection Interface --- List(Array List,Linked List and Vector) 		
	DAY-57	Set & Map	<ul style="list-style-type: none"> Set(Hash Set,Tree Set) --- Map(Hash Map, Tree Map, Hashtable) - Collection Framework Advance Concepts --- Comparable Interface 		
Day-29	DAY-58	Comparator	<ul style="list-style-type: none"> "--- Comparator Interface "--- Collections class "--- Differentiate Comparable and Comparator 		
	DAY-59	Java Enum	<ul style="list-style-type: none"> "- Java Enum "- Date Concept - File Handling Concept --- File Handling Basics 		
Day-30	DAY-60		<ul style="list-style-type: none"> "-- Create Folder -- Create File- .txt, .pdf, .xlsx, .docs, etc -- Write File "-- Read File "-- Delete File 		
	DAY-61	Thread	<ul style="list-style-type: none"> Thread 1. Concept, Lifecycle 2. Extends Thread 3. Implement Runnable Interface 		
Day-31	DAY-62	Thread Contd.	<ul style="list-style-type: none"> 4. Thread Priorities 5. Thread Methods Multithreading 		
Day-32	DAY-63	Thread Synchronization	<ul style="list-style-type: none"> Thread Synchronization 1. Synchronization 2. Object Locking 3. Inter Thread Communication 		
Presentation Session-3 / Practical Case Study Analysis by students					
Day-32	DAY-64	JDK	<ul style="list-style-type: none"> JDK 1.8.0 New Features with Hands-on 1. Lambda Expression 2. Functional Interface 		

	DAY-65	JDK Contd.	3. Default Method in Interface 4. Static Method in Interface 5. Method References		
Day-33	DAY-66	JDK Contd.	6. Date Time API 7. Stream API 8. Collectors		
	DAY-67	JDK Contd.	For each Loop 10. String Joiner Class 11. Parallel Sort 12. Optional Class		
Day-34	DAY-68	JDBC	2) J2EE 2.1) JDBC 1. JDBC Introduction 2. JDBC Architecture		
Day-35	DAY-69	JDBC Contd.	3. Database Overview 4. JDBC Basics 5. My SQL 6. Create Database, 7. Create Table		
Presentation Session-4 / Practical Case Study Analysis by students					
	DAY-70	My SQL	8. Insert, Update, Delete 9. Truncate 10. SQL Join		
	DAY-71	My SQL Contd.	10.1 Inner Join 10.2 Left Outer Join 10.3 Right Outer Join		
Day-36	DAY-72	My SQL Contd.	10.4 Full Outer Join 11 Aggregate Function 1. MIN 2. MAX 3. AVG, 4. SUM, 6. COUNT		
	DAY-73	My SQL Contd.	SQL HAVING Clause 13. GROUP BY 14. ORDER BY 15. SQL Aliases 16. SQL LIKE Operator		
Day-37	DAY-74	My SQL Contd.	17. SQL In 18. SQL Between 19. SQL Null Values 20. SQL TOP 21. SQL LIMIT		
	DAY-75	My SQL Contd.	22. SQL Stored Procedures 23. Java Application Using JDBC Connectivity 24. Handling SQL Exceptions		

Day-38	DAY-76	My SQL Contd.	25. DriverManager 26. ResultSet 27. Connection 28. Statement 29. Prepared Statement, 30. Collable Statement		
Day-39	DAY-77	My SQL Contd.	31. DB Connectivity Steps 32. Store Image in SQL 33. Read Image in SQL 34. SQL Queries using SQLYog		
Presentation Session-5 / Practical Case Study Analysis by students					
	DAY-78	JDBC	35. JDBC CRUD Application		
	DAY-79	Servelet	2.2 Servlet 2.2.1 Servlet Basics 2.2.2 Need of Server Side Programming 2.2.3 Servlet Life Cycle 1 Init()		
Day-40	DAY-80	Servelet Contd.	2 Service() 2.1 doGet() 2.2 doPost() 3 Destroy() 2.2.4 Servlet Hello World Application, 2.2.5 Web.xml Structure		
	DAY-81	Servelet Contd.	2.2.6 Servlet Directives- include(), forward(), sendRedirective() 2.2.7 HttpServletRequest, HttpServletResponse in Servlet 2.2.8 Servlet and JDBC Integration		
Day-41	DAY-82	Servelet Contd.	2.2.9 Servlet, HTML 5, MySQL, Tomcat using Real Time Login Application		
	DAY-83	JSP	2.3 JSP 2.3.1 JSP Basics 2.3.2 Creating dynamic Web content with JSP 2.3.3 Scriptlet 2.3.4 Declaration		
Day-42	DAY-84		2.3.5 Servlet, JSP, MySQL, Tomcat Login Application		
Day-43	DAY-85		2.3.6 Servlet, JSP, MySQL, Tomcat CRUD Application		
Presentation Session-6 / Practical Case Study Analysis by students					
Project 4 - Group Project using Frontend(HTML,CSS,JS,Bootstrap) and Backend(Core Java, Advanced Java, JDBC,SERVERLETS and MYSQL)					
Day-43	DAY-86	Hibernate	3. FRAMEWORK 3.1. Hibernate 1. Hibernate Introduction 2. Hibernate Basics 3. Hibernate Architecture		
	DAY-87	Hibernate Contd.	4. Hibernate Session 5. Hibernate SessionFactory 6. Hibernate Configuration 7. Hibernate Configuration Offline 8. Hibernate with HBM		

Day-44	DAY-88	Hibernate Contd.	9. Hibernate with Annotation 10. Hibernate Validator 11. Hibernate CRUD		
	DAY-89	Hibernate Contd.	12. Hibernate Association Mapping 1. One to One Mapping 2. One to ManyMapping 3. Many to OneMapping 4. Many to Many Mapping		
Day-45	DAY-90	Hibernate Contd.	13. Hibernate Aggregation 14. Hibernate Named Queries 15. Hibernate Native SQL 16. HQL- Hibernate Query Language		
	DAY-91	Hibernate Contd.	17. Hibernate HCQL- Criteria Query Language		
Day-46	DAY-92	Hibernate Contd.	18. Hibernate Application with Mysql DB-CRUD 19. Diff. save(), saveOrUpdate(), update(), persist() and merge() 20. Diff. get() and load() 21. Hibernate vs. JPA		
	DAY-93	Hibernate Contd.	22. Hibernate Application with Mysql DB, JSP-User Interface-CRUD		
Day-47	DAY-94	Spring Framework	3.2. Spring Framework 1. Spring Framework Introduction 2. Spring Basics 3. Inversion of Control 4. Dependency Injection,5. Beans Scope		
	DAY-95	Spring Framework Contd.	5.1 Singleton 5.2 Prototype 5.3 Request 5.4 Session 5.5 Global-Session,6. Auto wiring		
Day-48	DAY-96	Spring MVC	7. Spring Annotations 3.3. Spring MVC 1.Spring MVC Basics 2. Spring MVC Hello World Application 3. Spring MVC Restful Web Services Basics, 4. Spring MVC without Maven, 5. Spring MVC with Maven		
	DAY-97	Spring MVC Contd.	6. Maven basics 7. Spring MVC Application Deployment 8. Spring MVC Application Deployment Log files 9. Spring MVC WAR File Creation Steps		
Day-49	DAY-98	Spring MVC Contd.	10. Spring, Hibernate, Mysql, Maven- CRUD Operation		
	DAY-99	Spring MVC Contd.	11. Java, Spring, Spring Security, Algorithm, Hibernate, Maven, Mysql IntegrationApplication		

Day-50	DAY-100	Spring Security	3.4. Spring Security 1. Spring Security Basics 2. Spring Security Features 3. Spring Security Authentication 4. Spring Security Encryption, 5. Password Encryption by using Spring Security		
Day-51	DAY-101	Spring Security Contd.	6. Spring Security Login Form 7. Spring Security Authentication 8. Spring Security Maven Dependency		
	DAY-102	Spring Security Contd.	9. Spring Security CRUD- Signup and Login Application		
Presentation Session-7 / Practical Case Study Analysis by students					
Day-52	DAY-103	Spring Boot	3.5. Spring Boot 1. Spring Boot Introduction 2. Spring Boot Basics 3. Why Spring Boot 4. Spring Boot Features		
	DAY-104	Spring Boot Contd.	5. Main Goal of Spring Boot 6. Creating Project- Spring Initializer 7. Spring Boot Hello World Application 8. Spring Boot Devtool Dependency- Spring Boot – How to Reload Changes Without Restarting the Server		
Day-53	DAY-105	Spring Boot Contd.	9. Spring Boot Actuator 10. Spring Boot Build Systems 11. Spring Boot Code Structure 12. Spring Boot Runners 13. Spring Boot Tomcat Port Number 14. Spring Boot with RESTful Service 15. Spring Boot with Logger		
	DAY-106	Spring Boot Contd.	16. Deploy Spring Boot Applications on External Tomcat Server 17. Spring Boot – Common Application Properties (application.properties) 18. Spring Boot, Hibernate with RESTful Web Service 19. Spring Boot, Spring Data with RESTful Web Service		
Day-54	DAY-107	Spring Boot Contd.	20. Spring Boot, Hibernate CRUD Application 21. Spring Boot, Spring Data JPA CRUD Application		
	DAY-108	Spring Boot Contd.	22. Spring Boot, Spring- JDBCTemplate CRUD 23. Spring Boot, Hibernate, MySQL, Project Lombok CRUD Application		
Day-55	DAY-109	Spring Boot Contd.	24. Spring Boot with XML Payload using Postman API 25. Spring Boot with JSON Payload using Postman API 26. Spring Boot CORS Support		
	DAY-110	Spring Boot Contd.	27. Java QR Code Generator Basics 28. Spring Boot QR Code Generator Hands on Session 29. Spring Boot QR Code Reader Hands on Session		

Presentation Session-8 / Practical Case Study Analysis by students

Day-56	DAY-111	JPA	3.6. Spring Data- JPA 1. Spring Data JPA Basics 2. Spring Data JPA Introduction 3. Spring Data JPA Architecture 4. Spring Data JPA application.properties file 5. JPA Repository		
	DAY-112	JPA Contd.	6. CRUD Repository		
Day-57	DAY-113	JPA Contd.	7. Spring Boot, Spring Data JPA CRUD using Postman API 8. Spring Boot, Spring Data JPA, Project Lombok CRUD using Postman API Hands on Session		
	DAY-114	Junit	3.7. JUnit- Mockito Framework		
Day-58	DAY-115	JDBC	3.8. Spring- JDBCTemplate 1. Spring JDBCTemplate Introduction 2. RowMapper 3. Builder 4. Spring Boot, JDBCTemplate using Postman API Hands on Session		
	DAY-116	Web Services	4. WEB SERVICES 4.1. SOAP Web Service 4.2. RESTful Web Service		
Day-59	DAY-117	Design Pattern	5. Design Pattern 5.1. Singleton Design Pattern 5.2. Builder Design Pattern 5.3. Factory Pattern 5.4. Abstract Factory Pattern 5.5. Prototype Pattern 5.6. Facade Pattern		
	DAY-118	Adapter Pattern	5.7. Adapter Pattern 5.8. Filter Pattern 5.9. Composite Pattern 5.10. Decorator Pattern 5.11. Proxy Pattern 5.12. Iterator Pattern 5.13. Bridge Pattern 5.14. Flyweight Pattern 5.15. MVC Pattern		
	DAY-119	Microservices	6. MICROSERVICES 6.1. MicroservicesIntroduction 6.2. Microservices Architecture 6.3. Microservices Project Structure 6.4. Microservices Frameworks 6.5. Spring Boot with Microservices Basics		

Day-60	DAY-120	Spring Boot with Microservices	6.6. Spring Boot with Microservices Coding Standards 6.7. Spring Boot with Microservices Builder Design Pattern 6.8. Spring Boot with Microservices QR Code Generator 6.9. Spring Boot, Hibernate, Maven, MySQL CRUD Application- POSTMAN API 6.10. Spring Boot, Spring Data- JPA, Maven, MySQL CRUD Application- POSTMAN API		
Day-61	DAY-121	Spring Boot with Microservices Contd	6.11. Spring Boot, Spring Data- JDBCTemplate, Maven, MySQL CRUD Application 6.12. Spring Boot, ORM, Microservices with Project Lombok 6.13. Spring Boot, CORS, Spring Data[JDBCTemplate], Microservices CRUD with Project Lombokusing React JS		

Presentation Session-9 / Practical Case Study Analysis by students

S.no	Topic Name	Presentation Topics
1	HTML, CSS, Bootstrap	HTML Semantic and non Semantic Tags
		HTML 5 New Features and Tags
		HTML 5 Forms
		HTML CSS Animations
		HTML CSS Layout & Design
		Flexbox, Grid & Media Queries
		Bootstrap Layout & Design
		Bootstrap Attributes and Properties
		CSS Alternatives
		HTML CSS Bootstrap Design Principles
		Bootstrap Alternatives
2	JavaScript	CDN
		JavaScript Basics
		DOM Manipulations
		Forms & Validations
		Functions in JS
		OOPS in JavaScript
		Closures
		Asynchronous JS
		Regex in JS
		Objects and Arrays (DS) in JS
		ES6 JS Features
		JS Debugging
		JSON & XML
		Storage & Service Workers
JavaScript Web API		
		Java Basics
		Java Class, Constructor & Object

3	Core Java	Abstract and Encapsulation in Java
		Inheritance in Java
		Exceptional Handling in Java
		Polymorphism
		Collections
		Data Structures in Java
		Multi Threading
		Strings in Java
		File System in Java
4	JDK, JDBC	JDBC Connections
		Java 1.8 Features
		Lambda Expressions
		JDBC Architecture
		String Joiner Class
5	Database	Data Base Overview
		Select Query
		Operators, DML, DDL & TCL
		DB CRUD Operations
		DB Setup and Config
		DB Normalisation
		PLSQL
		MySql
		MongoDB
		Postgress
		RestAPI DB Connection
		Joins in DB
		Do's and Don't's in DB
6	JSP and Servlet	Servlet Lifecycle
		Methods in Servlet
		Cookies
		Session Tracking
		Servlet config, context and Dispatch
		Filters
		JSP Servlet Config
		JSP Actions
		JSP Examples
		JSP DB Connection
		MVC in JSP
		JSP Forms
		JSP Client Server
Java Beans		

7	Spring Core & Hibernate	Spring Inversion of Control
		Beans Lifecycle
		Setter, Method & Field Injection
		Controller and Views
		Request Params & Mapping
		Spring MVC Overview
		Spring MVC Configuration
		Multiple Controllers
		Regex in Spring
		Built in Validation Rules
		Validating number ranges
		Hibernate Overview
		Hibernate Configuration
		Hibernate JDBC
		Hibernate Annotations
		Read, Update and Delete Objects with Hibernate
		Query object and JPA
		Hibernate ORM
		Select & Pagination in HQL
		Integration with Spring
		Hibernate vs JDBC
Interface of Hibernate		
Session Factory		
Hibernate Architecture		
8	Spring Boot	Spring Boot Maven
		SB Initial & setup
		SB Annotations
		SB Actuator
		SB DMS and Properties
		SB MVC & Database
		SB Rest API & Security
		Restful Webservices
		Client API and Data Exchange
		Spring JAR Files
		OOPS in Springboot
		Spring HTTP Methods
		Spring Rest Template
JPA Architecture		
SOAP Webservice		

9	JPA, Microservices, Design Patterns	Adapter Patterns
		Design Patterns
		Microservices Framework
		Maven
		Microservices Architecture