

Java Full Stack React JS content

SL No	Modul e	Topic s	Objectives
			 Identify the applications and benefits of HTML Demonstrate creating valid web page withtitle
1	Web UI	HTML - Intro., Structure, Section, Header, Footer	Describe HTML document Structure
			Demonstrate usage of Header, Footer and Section tags appropriately
			Demonstrate usage of Heading, Paragraphs and List tags to compile a document
			Demonstrate usage of image tag to display image
2	Web UI	HTML - Image, Anchor, Table, Block and Inline Elements	Demonstrate usage of anchor tag to navigate between pages
			Demonstrate usage of table tag to display a list of items
			Demonstrate usage of Blocks and Inline to align content within the document
			Demonstrate usage of Form to group input elements and submit form data
			 Demonstrate usage of Input and text area
3	Web UI	HTML – Forms	 Demonstrate usage of Select and Option tag to define list of items
			 Demonstrate linking of form field with Label
			List the options available in HTML5 form fields
			 Explain the need and benefits of CSS
			 Recall correct syntax for defining a style
4	Web UI	CSS – Basics	 Demonstrate various ways of application of styles
			 Demonstrate usage of various selectors
			Demonstrate formatting of HTML elements
			Demonstrate Box Model in CSS
			 Need and Benefits of JavaScript
			Demonstrate various options available to include JavaScript in HTML
			 Demonstrate handling events for validations
5	Web UI	JavaScript - Intro., Functions, DOM	Use functions to handle form validations
			 Use variables to store numbers and text
			Explain Document Object Model
			 Use document object to read form values
			Demonstrate string manipulation using built in methods
			Use method isNaN() to check if form value entered is a number or not

			Use alerts to display messages
			Use form object to submit the form
			Identify the applications and benefits of Bootstrap
7	Web UI	Bootstrap - Intro, Grid System, Nav Bar	Demonstrate bootstrap usage with starter template
			 Demonstrate RWD using Grid System
			 Demonstrate creation of navigation bar
			Demonstrate creation of navigation bar items
			 Demonstrate collapsing navigation items
8	Web UI	Bootstrap - Nav Items, Chrome Dev Tools, Badge, List	Demonstrate troubleshooting UI issues using Chrome Developer Tools
			Demonstrate using badge component
			 Demonstrate using third party icons in web page design
			Demonstrate displaying a list of items
9	Web UI	Bootstrap - Cards	 Demonstrate displaying a card with image, title and body
			Demonstrate displaying list of cards with RWD
			Demonstrate using third party date picker in web page
10	Web UI	Bootstrap - Date Picker, Form Elements, Style Customization	Demonstrate displaying form elements with RWD
			Demonstrate customizing bootstrap styles
			React introduction,
			 Understanding "what" and "why" React
11	SPA	React - Intro, Benefits	React Component Demonstration using codepen
			 Environment Setup for React Application
			 Understanding NPM commands •
			Using VS Code
			 VS Code extensions for ES6, React(formatting and checkstyles)
12	SPA	Reactjs-create project	Helloworld app in React
			React Essential Features and Syntax
			React App Project Directory Structure
			Overview ofWebpack, Babel
			React Component Basic
13	SPA	Reactjs-components	Create React Component
	J. 7.	reading compensation	Understanding JSX
			Limitations of JSX
			Working with Components and Reusing Components
14	SPA	React js- Component, props, state, events,methods	React Components, Props and State
			 Understanding and using Props and State Handling Events with methods
			-
15	SPA	Reactjs – states,data-binding,functions	 Manipulating the State, Two way data-binding
		<i>,</i> , , , , , , , , , , , , , , , , , ,	Functional (Stateless) VS Class (Stateful) Components

16	SPA	Reactjs-rendering concepts	Parent – Child Communication, Dynamically rendering contents
17	SPA	React- List, keys	Showing Lists, List and keys
18	SPA	React- styles	Styling components,css styling
19	SPA	React-styles	Scoping styles using inline styles
			Describe the need and benefits of Java
			Demonstrate compilation and execution of a Java program
			 Describe the difference between JDK, JVM and JRE
21	Java	Intro, Platform, Syntax, Variables	 Explain how Java is platform independent
			 Write a valid java program with correct file name, compilation error free, comments, spacing and indentation
			Demonstrate usage of variable with assignment of value
			Explain the importance of keywords
22	Java	Keywords, Operators, Conditional Statements	 Use the arithmetic operators in an expression
			 Demonstrate getting user input from keyboard
			Use conditional statements
			 Demonstrate creation and usage of String
23	Java	String, Arrays, Loops	 Demonstrate creation and manipulation of Arrays
			Use loops to execute block of statements
	Java		Write reusable / modular methods
24		Methods, Class, Object, static	 Describe Class & Objects
			 Explain the benefit of wrapper classes
			 Define and use static variables (class variables)
25	Java	OOPS - Encapsulation, Inheritance	 Demonstrate Encapsulation
25	Java	OOI 3 · Encapsulation, infletitance	Demonstrate Inheritance
26	Java	OOPS - Polymorphism, Abstraction	 Demonstrate Polymorphism
20	Java	GGT G T Glymorphiom, 7 bouldedon	Demonstrate inheritance using Abstract class
27	Java	Interface, Object methods	 Demonstrate Inheritence using Interface
21	Java	menace, object memous	Demonstrate usage of Object class
			 Demonstrate usage of packages
		Package, Modifier, Exceptions	 Explain usage of Access Modifiers
28	Java		 Explain the need and benefit of custom exception
			Explain Unchecked Exceptions
			Demonstrate creation and usage of custom exception
29	Java	Collections - Introduction, List	Explain Collections Framework
			Demonstrate usage of List
30	30 Java	Collections - Map, Set	Demonstrate usage of Map
			Demonstrate usage of Set
31	Java	File Handling, Date API	Demonstrate reading and writing a text file Demonstrate managing data and time
		Demonstrate managing date and time	

Explain Math-Throading Spring REST Movern - Build, Deplay, Life Cycle and POM Spring REST Spring REST Movern - Build, Deplay, Life Cycle and POM Spring REST Spring RES	32	Java	Annotations, Threads, GC, JUnit	Explain how memory management works in Java
Demonstrate implementation of JUINT Epaths in the most and benefits of Micros Sellup maver for command line Sellup mav	32	Java	Annotations, Threads, GO, John	
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Write valid UPDATE statement to change data by a specific criteria Write valid DELETE statement to remove data from a table by a specific criteria	42	SQL	Introduction, CREATE, INSERT, UPDATE, DELETE	Explain CREATE statement with unique and not null constraints
Write valid DELETE statement to remove data from a table by a specific criteria			Statements	Write valid INSERT statement to add data into atable
· · ·				Write valid UPDATE statement to change data by a specific criteria
43 SQL ALTER, DROP, SELECT Statements • Explain ALTER and DROP statements in SQL				Write valid DELETE statement to remove data from a table by a specific criteria
	43	SQL	ALTER, DROP, SELECT Statements	Explain ALTER and DROP statements in SQL

			Write valid SELECT statement to query, filter data and sort data from a table
			Use arithmetic operators to compute values from multiple columns
44	SQL	Arithmetic, Logical Operators and Functions	 Use logical operators to filter data based on single and multiple criteria
			 Define SQL Built-in functions
			 Use aggregate functions with GROUP BY and HAVING clause
			Explain Normalization and its forms
45	SQL	Normalization, INNER JOIN	 Create table with referential integrity
			 Write valid SELECT statement with INNER JOIN
			Write valid SELECT statement with OUTER JOIN
			Explain the need and benefit of ORM
			Demonstrate the need and benefit of Spring Data JPA Explain about core objects of hibernate framework
	Spring Data JPA		Explain ORM implementation with Hibernate XML Configuration and Annotation Configuration
46		ORM - Intro to ORM, Spring Data JPA & Hibernate	Explain the difference between Java Persistence API, Hibernate and Spring Data JPA Demonstrate implementation of DML using Spring Data JPA on a single database