

FRONT-END

- Introduction
- Different types of Applications
- Application Architecture

HTML

- Introduction to HTML
- Basic Structure of HTML
- HTML Editors
- HTML Tags
- Paragraphs, Headings and Text
- Formatting Tags
- HTML Lists
- HTML Images
- HTML Tables
- HTML Forms
- HTML Media

SAAS

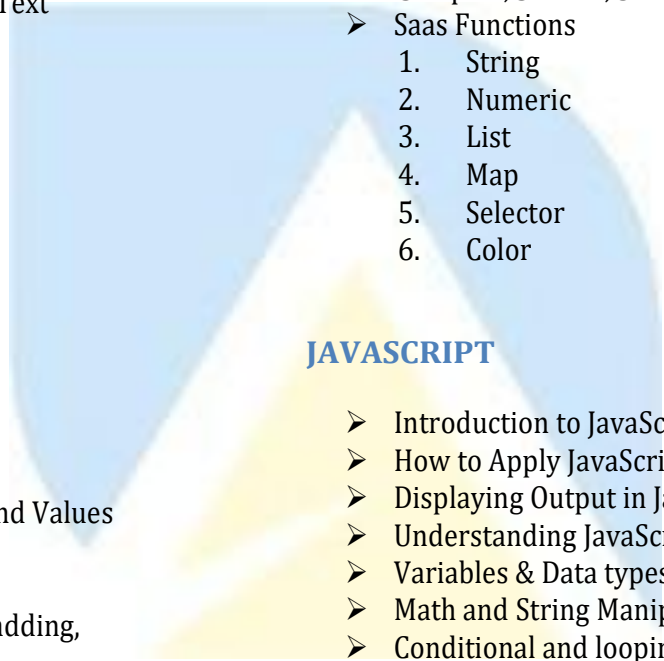
- Introduction to Saas
- Installation
- Variables
- Nesting
- @import,@mixin,@extend
- Saas Functions
 1. String
 2. Numeric
 3. List
 4. Map
 5. Selector
 6. Color

CSS

- Introduction to CSS
- Types of CSS
- CSS Properties, Selectors and Values
- Applying CSS to HTML
- CSS colors
- CSS Box Model, Margins, Padding,
- Borders
- CSS Text & Font Formats
- CSS Advanced Topics (Effects, Animations, Shadows, Etc.,)

JAVASCRIPT

- Introduction to JavaScript
- How to Apply JavaScript
- Displaying Output in JavaScript
- Understanding JavaScript Syntax
- Variables & Data types Operators
- Math and String Manipulations
- Conditional and looping Statements
- Functions
- Validations
- Events



FRONT-END

JQUERY

- Introduction to jQuery
- jQuery Features
- Installing jQuery
- jQuery Syntax
- jQuery Ready Function
- jQuery Selectors
- jQuery Actions
- jQuery Custom Functionality
- jQuery Libraries
- jQuery Validation
- jQuery Slideshow
- jQuery Dropdown
- jQuery UI
- jQuery Accordions
- jQuery Tabs
- jQuery Tooltips
- jQuery Autocomplete

TYPESCRIPT

- Typescript Introduction
- Typescript Simple and Special Types
- TypeScript Arrays
- TypeScript Tuples
- TypeScript Object Types
- TypeScript Functions

BOOTSTRAP

- Introduction to Bootstrap
- Bootstrap Setup
- Bootstrap Containers
- Bootstrap Grids
- Bootstrap Tables
- Bootstrap Buttons, Navbars, Alerts
- Bootstrap Carousel
- Bootstrap Forms

ANGULAR

- Introduction to Angular
- Environment Setup
- Installing Angular CLI
- Directory Structure of Angular
- Angular Fundamentals
- Angular Building Blocks
- Angular Data Binding
- String Interpolation
- Directives and Pipes
- Forms
- Routing

WEB HOSTING

- Introduction to Hosting
- Git and Github
- Creating and Merging Repositories
- Push and Pull Requests

BACK-END

INTRODUCTION

- Java Language & Java Platform
- Java Technologies
- History of Java
- Execution Model Of Java
- First Java Program
- The JDK Directory Structure
- IDE
- Similarities between C & Java
- Differences between C & Java

STANDARD EDITION OF JAVA

- JDK
- PATH
- CLASSPATH

DATA TYPES

- What are data types?
- Int
- Float
- Char
- Double
- Boolean
- Short
- Long
- Byte

METHODS

- What are Methods?
- Method Structure
- Declaration Of Methods
- Calling Of Methods
- Defining Methods
- Method Parameters Scope
- Why static methods?

CONTROL FLOW STATEMENT

- What are Control Flow Statements?
- If - Statement
- Else if Statement
- Conditional (Switch) Statements

OPERATORS

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Conditional Operators

LOOPS

- For Loop
- While Loop
- Do While Loop
- Break Statement

OBJECT ORIENTED PROGRAMMING(OOPS)

- Class & Object
- Encapsulation
- Attributes (Properties)
- Operations (Methods)Reference Vs Object
- Real-time Object Oriented Examples

CONSTRUCTOR

- No Argument Constructor
- Parameterized Constructor
- Constructor Overloading
- Explicit Vs Implicit Default Constructor

WRAPPER CLASSES ACCESSIBILITY MODE

- Private?
- Protected
- Default
- Public

INTER OBJECT COMMUNICATION

- Message
- Message Passing
- Message Sender
- Message Receiver

ARRAYS

- What is an array?
- Declaring an array
- Initializing an array
- One Dimensional array
- Two Dimensional arrays
- Multi Dimensional arrays

STATIC MODIFIER

- Static Variables
- Static Methods
- Static Blocks
- Static Classes

INHERITANCE

- Inheritance in Java
- Use of Inheritance
- Single Inheritance
- Multi-level Inheritance
- Hierarchical Inheritance
- Hybrid Inheritance
- Method Overloading
- Method Overriding
- Super Class-Sub Class
- Abstract Classes
- Abstract Methods

POLYMORPHISM

- Static Polymorphism
- Dynamic Polymorphism
- Static Vs Dynamic Binding

INTERFACE

- Interfaces Vs Abstract Class
- Role of Interfaces in Real time
- Interfaces Inheriting from other Interfaces
- Declarative Multiple Inheritance using Interfaces

PACKAGES

- What is a Package?
- Advantages of Packages
- Types Of Packages
- Naming Convention
- Steps For Creating Packages
- The import Statement
- Static Imports
- CLASSPATH and Import
- Defining Packages
- Scope of Packages

STRING HANDLING

- String
- String Buffer
- String Handler

EXCEPTION HANDLING

- Types of errors
- Need of Exception Handling
- Try, Catch, throws, Finally
- Try with resources
- Exception Hierarchy
- User Defined Exceptions

IOSTREAMS

- Byte-Oriented Streams
- Character Oriented Streams
- Java.io.File Class
- Object Serialization



MULTITHREADING

- Multi-tasking Vs Multi threading
- Life Cycle of Thread
- Java.lang.thread Vs Java.lang.runnable
- Developing Multithreaded Applications
- Synchronization
- Dead-Lock
- Inter-thread communication

JDBC

- Introduction To JDBC
- JDBC Architecture
- Types Of JDBC Drivers
- Creating a Database & Table
- Getting Information from Database
- Obtaining Result Set Information
- Connecting a Java Program to DB
- Prepared Statement & Statement classes in java
- Inserting, Updating & Deleting data

Java Servlets

- what is a web application
- Java servlets
- Servlet lifecycle
- Servlet Context
- Session Management
- Building the first servlet
- Deploying the servlet

SPRING BOOT

- Rest Api & Web Service Creation
- Integration with JDBC Template
- Integration with Hibernate

JSP

- What is a JSP page
- Basic HTML tags
- JSP Tag Library
- JSP Page Lifecycle
- Creating first dynamic web page

MVC ARCHITECTURE

- Introduction to MVC
- MVC Architecture
- Advantages of MVC
- Three-tier architecture

HIBERNATE FRAMEWORK

- Technologies for Persistency
- Introduction to ORM
- Hibernate Architecture
- Hibernate API
- Configuration Properties
- Inheritance in Hibernate
- Component Mapping
- Collection Mapping
- One-to-many, Many-to-many Relations
- HQL (Aggregate Function ,clauses ,Criteria)

DATA-BASE

DATABASE

- Database Handling With Mysql
- Java Mysql Database Access
- Create Database Connection
- DML And DDL Operations With Databases
- Performing Transactions
- Handling Database Errors
- Disconnecting Database
- Database Handling With Mongodb
- Sql Vs Nosql
- Establishing A Connection
- Accessing Database
- DML And DDL Operations