



# Full Stack Web Development **FOUNDATION**

**Code  
Create  
Conquer**

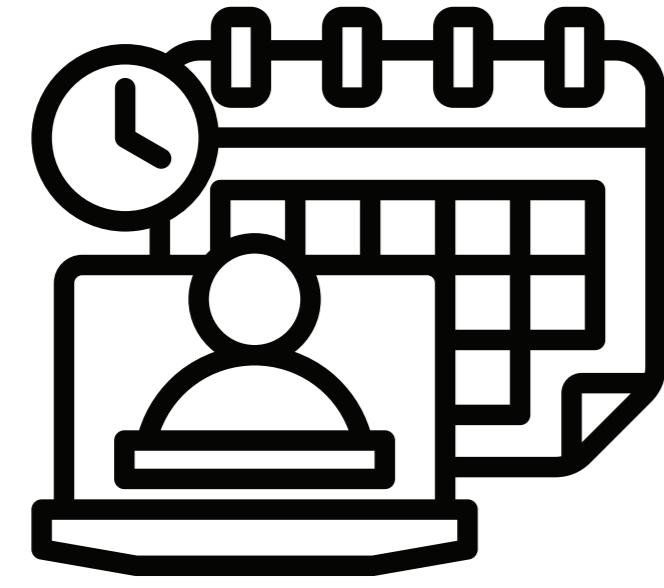


# Course Overview

## FSWD Foundation



**Placement:** We provide **100%** placement opportunities, starting from day one and continue supporting you until you are successfully placed.



**Course Duration:** The course duration is **4.5** months. But you will be placement ready in the initial **2** months of the course.



**Course Fee:** ₹ **30000/-** The course fee remains same for both the mode of learning i.e, **Online and Offline.**



- 
- ▶ Evolution of HLL
  - ▶ Assembler and Compiler
  - ▶ Primary Components of Computer
  - ▶ Platform Independence
  - ▶ Object Orientation
  - ▶ Command line arguments
  - ▶ Pattern Programming
  - ▶ Data Types
  - ▶ Wrapper classes
  - ▶ Operators
  - ▶ Types of Variables
  - ▶ Pass by Value & Reference
  - ▶ Arrays
  - ▶ Strings
  - ▶ Types of Methods
  - ▶ Method overloading
  - ▶ Encapsulation
  - ▶ Constructor
  - ▶ Static
  - ▶ Inheritance
  - ▶ POJO class
  - ▶ Method Overriding
  - ▶ Polymorphism
  - ▶ Access Specifiers
  - ▶ Aggregation & Composition
  - ▶ Abstraction
  - ▶ Final keyword
  - ▶ Interfaces
  - ▶ Singleton Design Pattern
  - ▶ Exception Handling



- ▶ Multithreading
  - ▶ Synchronized
  - ▶ Collections
  - ▶ List
  - ▶ Set
  - ▶ Queue
  - ▶ Maps
  - ▶ Hashing Algorithm
  - ▶ Comparable & Comparator
  - ▶ Boxing & Auto Boxing
  - ▶ File Handling
  - ▶ File writer & File reader
  - ▶ BufferedWriter(), PrintWriter()
  - ▶ Serialization & Deserialization
- 
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# JDBC & JEE

## JDBC

- ▶ JDBC Introduction
- ▶ Batch Processing in JDBC
- ▶ ACID properties
- ▶ Transaction Management
- ▶ DAO Design Pattern

## JEE

- ▶ JEE introduction
- ▶ Tomcat server
- ▶ Servlet Hierarchy & Life Cycle
- ▶ Static & Dynamic Response
- ▶ Get & Post
- ▶ Request Dispatcher
- ▶ Servlet Chaining
- ▶ forward( ) v/s include( )
- ▶ Cookies
- ▶ forward( ) v/s sendRedirect( )
- ▶ Servlet Config & Context
- ▶ JSP

**HIBERNATE**

- ▶ Introduction to Hibernate
- ▶ Hibernate Configuration
- ▶ CRUD Features
- ▶ @OneToOne
- ▶ @OneToMany
- ▶ @ManyToMany
- ▶ Eager Loading vs Lazy Loading
- ▶ get() vs load()
- ▶ Hibernate Life Cycle

**SPRING CORE**

- ▶ Introduction to Spring
- ▶ Inversion of control
- ▶ Dependency Injection
- ▶ Scope of Bean
- ▶ Bean Lifecycle
- ▶ Annotations
- ▶ Java configure file





## SPRING ORM

- ▶ Hibernate integration with spring framework
- ▶ CRUD operations with spring framework
- ▶ DAO design patterns
- ▶ Service design patterns

## SPRING MVC

- ▶ Web server
- ▶ Web application
- ▶ Web resources
- ▶ Web MVC Configuration
- ▶ Request sending
- ▶ Response sending
- ▶ Reading form data
- ▶ Mail sending
- ▶ CRUD operation with database

## SPRING BOOT

- ▶ Spring boot Auto Configuration
- ▶ Spring data JPA
- ▶ Spring boot logger (log4j)
- ▶ Spring boot embedded Web server
- ▶ Spring boot starter

## PROJECT DETAILS

- ▶ An Web application with technologies like
- ▶ Hibernate 5
- ▶ Spring 5
- ▶ Lombok library
- ▶ MySQL database
- ▶ JSP pages

Note: project description will not be disclosed

Project Migration to spring boot



- ▶ Data and Database
  - ▶ ER diagram
  - ▶ Entity
  - ▶ Attribute
  - ▶ Relationship
  - ▶ Cardinality ratio
  - ▶ ER diagram to Relational Schema
  - ▶ Datatypes
  - ▶ Constraints
  - ▶ Primary Key
  - ▶ Foreign Key
  - ▶ Operators
  - ▶ Functions
  - ▶ Order by clause
  - ▶ Group by clause
  - ▶ Having clause
  - ▶ Subqueries
  - ▶ Joins
  - ▶ Stored Procedure
  - ▶ Normalization
- 
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**HTML**

- ▶ Introduction
- ▶ Text Formatting
- ▶ Audio, Video & Image Formatting
- ▶ Tables Attributes
- ▶ List in HTML
- ▶ Hyperlink & Hypertext
- ▶ Block & Inline Elements
- ▶ Forms In HTML
- ▶ Fundamentals Of HTML
- ▶ Iframe, Meta Tag

**CSS**

- ▶ CSS Introduction
- ▶ Selectors
- ▶ Specificity
- ▶ Inheritance & Cascading
- ▶ Box Model In CSS
- ▶ Display Flex, Positioning



## JAVASCRIPT

- ▶ Introduction to JavaScript
- ▶ Keywords(var,let,const)
- ▶ Variables
- ▶ Operators
- ▶ Control statements
- ▶ Functions(User-defined and Built-in)
- ▶ Objects
- ▶ Array
- ▶ Events
- ▶ Form and form validations
- ▶ DOM

## BOOTSTRAP

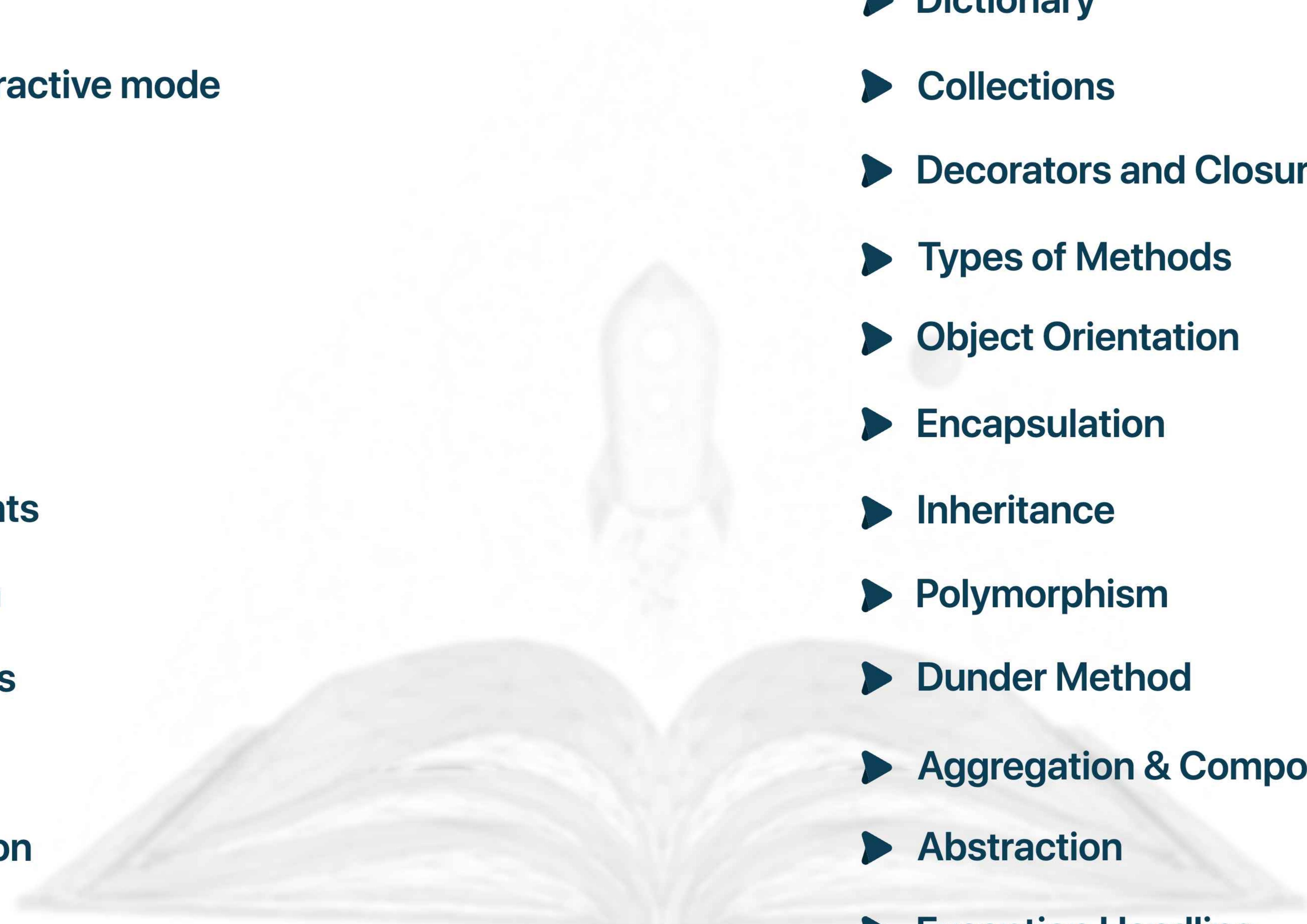
- ▶ Introduction
- ▶ Tables
- ▶ Images
- ▶ List Groups
- ▶ CSS Classes
- ▶ CSS Forms
- ▶ CSS Dropdowns
- ▶ Heading and typography
- ▶ Navbar
- ▶ Templates

# DSA

## DATA STRUCTURE & ALGORITHM

- 
- ▶ Introduction
  - ▶ Time Complexity
  - ▶ Mathematics
  - ▶ Bit Manipulation
  - ▶ Recursion
  - ▶ Arrays
  - ▶ Matrices
  - ▶ Linked List
  - ▶ Doubly Linked List
  - ▶ Circular Linked List
  - ▶ Stack
  - ▶ Queue Data Structures
  - ▶ Tree Data Structures
  - ▶ Dynamic Programming

 **PYTHON**

- 
- ▶ Evolution of HLL
  - ▶ Script mode, Interactive mode
  - ▶ Datatypes
  - ▶ Functions
  - ▶ Modules
  - ▶ Operators
  - ▶ Control Statements
  - ▶ Lambda Function
  - ▶ Types of Variables
  - ▶ Strings
  - ▶ Regular Expression
  - ▶ Data Structure
  - ▶ List, Tuple, Set
  - ▶ Dictionary
  - ▶ Collections
  - ▶ Decorators and Closures
  - ▶ Types of Methods
  - ▶ Object Orientation
  - ▶ Encapsulation
  - ▶ Inheritance
  - ▶ Polymorphism
  - ▶ Dunder Method
  - ▶ Aggregation & Composition
  - ▶ Abstraction
  - ▶ Exception Handling
  - ▶ Loggers

## APTITUDE

- ▶ Percentages
- ▶ Ratios
- ▶ Averages
- ▶ Number Systems
- ▶ Time & Work
- ▶ Probability
- ▶ Permutation and Combination
- ▶ Relations
- ▶ Mixtures & Allegations
- ▶ Clocks
- ▶ Calendar
- ▶ Ages

## PERSONALITY DEVELOPMENT

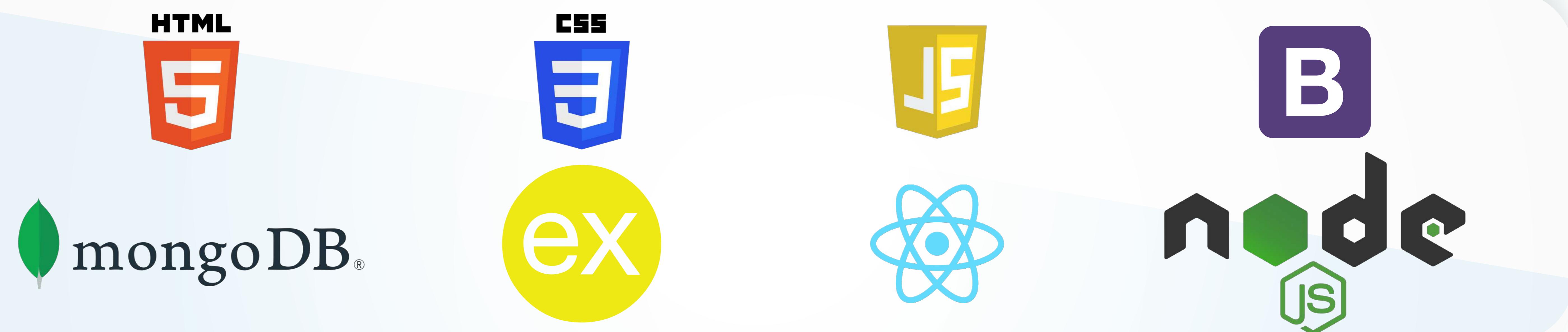
- ▶ Introduction to soft skills
- ▶ Creative thinking and time management
- ▶ Public speaking and presentation skills
- ▶ Interview skills
- ▶ Communication skills
- ▶ Confidence building techniques
- ▶ Professional tips
- ▶ Resume building steps
- ▶ Resume Templates

# COURSES

## FSWD Foundation



## FSWD Advanced



## FSWD Ultimate



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## TAP ACADEMY



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