

Let's Fly  
With Us

Thundercube Pvt.Ltd.

# JAVA

## Full Stack Development Course

Teaching Languages

हिंदी

English

Our Courses



[www.javabykiran.com](http://www.javabykiran.com) | [www.thekiranacademy.com](http://www.thekiranacademy.com)



## ☆ About Our Founder ☆



### Mr. Kiran Digrase

Founder and CEO of "The Kiran Academy"



14 years of experience in the financial IT domain.

Worked  
with clients



## Why our Course?



155% Highest  
Hike



₹16 Lakhs  
Highest Salary



40% Hike  
In Demand



738+ Hiring  
Partner



315+ Best  
Industry Experts



100% Placement  
Assurance

## Our Success Journey

# 2014

Established "Java By Kiran"  
institute at Karve Nagar, Pune.

We Become "The Kiran Academy"  
From "Java By Kiran"

# 2018

# 2020

Opened our 2<sup>nd</sup> Branch  
at Pimpri Chinchwad

Opened our 3<sup>rd</sup> Branch  
at Warje, Pune.

# 2021

# 2022

Opened our 4<sup>th</sup> Branch  
at Deccan, Pune.

Opened our 5<sup>th</sup> Branch  
at Chatrapati Squar, Nagpur.

# 2023



## About us

### Vision

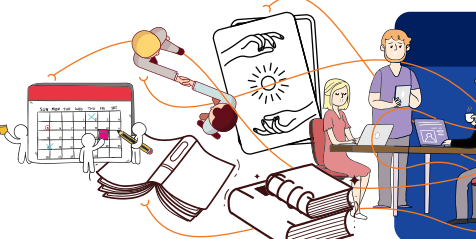
We bridge the gap by providing skilled professional training to students & help them get placed in the company.

### Our Mission

We empower individuals to up-skill for IT software company. We provide comprehensive **Industry focused** live training.



# Common Features

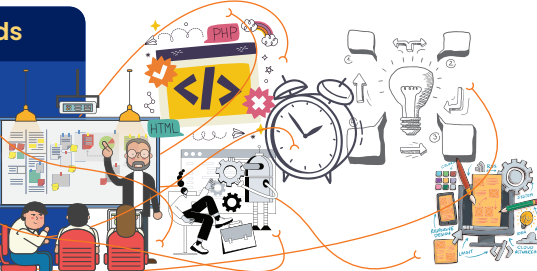


## Test, Assessments & Mocks

- Topic-wise Weekly Test
- Topic-wise Assessments
- Mock Interview Preparation
- One-On-One Discussion
- Interview Feedback On Emails

## Best Practices & Coding Standards

- Naming Conventions
- Code Formatting & Style
- Writing Maintainable & Readable Code
- Code Reusability
- Code Auto-generation
- Real Time Scenarios
- Problem Statements & Solutions


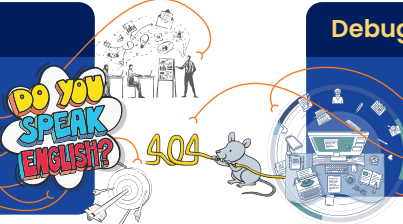


## Soft Skills

- 360° Development
- Resume Building
- Enhancing Confidence
- Logic Building Session
- English Communication

## Debugging & Troubleshooting

- Use of Debugging Tools
- Identifying & Fixing Common Errors
- Handling Industrial Scenarios



## What Makes Us Distinct?

- Exclusive Recorded Sessions
- Flexible Batch Switching Option
- Unlimited Mock Interviews
- 24/7 Live Support
- Personalized One-On-One Discussions
- 100% Transparency
- Comprehensive Technology Packages
- Industry Expert Trainers

# INDEX .....









Full Stack  
Developer

# JAVA





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## Back-end

1. Core Java ..... 
2. Servlet..... 
3. JSP..... 
4. Spring..... 
5. Spring-boot... 
6. Hibernate ..... 





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## Database

1. MySQL..... 
2. MongoDB... 

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## Front-end

1. HTML ..... 
2. CSS..... 
3. JavaScript..... 
4. Angular..... 



### 1. HTML Basics

- HTML Introduction
- HTML Document Structure
- HTML Syntax



### 2. Text Formatting

- Headings (`<h1>` to `<h6>`)
- Paragraphs (`<p>`)
- Line Breaks (`<br>`) & Horizontal Rules (`<hr>`)
- All Basic Tags

### 3. Lists

- Ordered Lists (`<ol>`)
- Un-ordered Lists (`<ul>`)
- List Items (`<li>`)

### 4. Links and Anchors

- Hyperlinks (`<a>`)
- URLs & Paths
- Link Text
- Link Targeting

### 5. Marquee Element

- Element Introduction & Attributes
- Creating Scrollable Text & Images

### 6. Images

- Image Tag (`<img>`)
- Image Source (`src` Attribute)
- Image Dimensions (Width and Height Attributes)
- Alt Text (`alt` Attribute)

### 7. Forms

- Form Tag (`<form>`)
- Input Fields (`<input>`)
- Textareas (`<textarea>`)
- Select Menus (`<select>`)

### 8. Div and Spans

- Block-level Elements (`<div>`)
- Inline Elements (`<span>`)

### 9. Iframe

- Embedding Videos
- Embedding Maps
- Embedding Social Media Feeds
- Displaying External Content
- Displaying Advertisements

### 10. HTML Comments

- Adding Comments

### 11. CSS Linking

- Linking External CSS (`<link>`)

## 1. Introduction to CSS

- What is CSS and its role in web development.
- Inline, internal, and external CSS.
- CSS syntax and basic structure.

## 2. CSS Selectors & Properties

- Understanding CSS selectors
- Applying styles using element, class & ID selectors
- Changing text and background colors
- Adjusting font properties (size, family, weight)

## 3. CSS Borders

- Exploring different border styles
- Adjusting border width and color
- Creating decorative borders
- Adding rounded corners to elements

## 4. CSS Margins and Padding

- Exploring margin properties for spacing control
- Setting margins for individual sides
- Using shorthand margin notation for efficiency
- Creating spacing between elements
- Combining Margin and Padding

## 5. CSS Fonts

- Customizing text styles with font properties
- Choosing font families & font stacks
- Adjusting font size, weight, style, and color

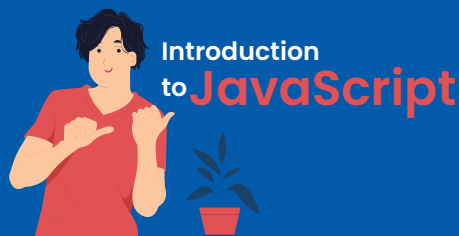
## 6. CSS Tables

- Styling HTML tables and their elements
- Setting borders and spacing for table cells
- Alternating row colors for better readability

## 7. CSS Background & Images

- Setting background color and images
- Controlling background repeat & position
- Creating image galleries with CSS





# Introduction to JavaScript

## 1. Introduction to JavaScript

- Introduction to JavaScript
- Role in web development.
- Setting up a basic HTML file & adding JavaScript.
- Variables, data types, and basic operations.
- Control structures: if statements & loops (for, while).
- Introduction to functions and their usage.

## 2. Variables and Data Types

- Declaring variables
- Primitive data types

## 3. Control Flow

- Conditional statements (if, else if, else)
- Switch statements
- Loops (for, while, do...while)
- Break and continue statements.

## 4. Functions

- Declaring functions
- Parameters and arguments
- Return statements

## 5. DOM Manipulation

- Introduction to the (DOM)
- Selecting and modifying DOM elements

## 6. Using Popup Boxes

- Alert boxes
- Confirm boxes
- Prompt boxes



## Angular & TypeScript



## 1. Introduction to TypeScript .....

- Why learn TypeScript?
- Differences between JavaScript and TypeScript
- Advantages of TypeScript
- Disadvantages of TypeScript
- Environmental setup (Node.js, TypeScript)
- Basic syntax

Identifiers   Keywords   Comments

## 2. TypeScript Fundamentals .....

### 1. Data Types in TypeScript

- number, string, boolean, void, null, undefined

### 2. Type Assertions Variables

- Inferred Type   • Global Scope   • Class Scope   • Local Scope

### 3. Operators

- Arithmetic   • Logical   • Relational   • Bitwise
- Assignment   • Ternary/Conditional

### 3. Control Statements

- If Statement   • If-else Statement   • Else-if and Nested if
- Switch Statement

### 4. Loops

- While Loop   • For Loop   • Do-while Loop

### 5. Functions

- Optional Parameter Functions
- Default Parameter Functions
- Anonymous Functions
- Rest Parameter Functions

## 3. Advanced TypeScript .....

- Arrow Functions (Fat Arrow Functions)
- TypeScript Arrays
- Push & pop Methods
- Splice Method
- Slice Method
- forEach Method
- JSON Objects
- Array of Objects
- Class & Object Properties
- Constructors
- Interfaces
- Inheritance



Introduction to Angular >>>>



## 1. What is Angular?.....

- Angular Version History
- Architecture of Angular Apps
- Setting up the Environmental Setup
- Structure of Angular Projects
- Creating Components Manually
- Creating Components through CMD
- String Interpolation

## 2. Data Binding, Handling Events & Directives

- String Interpolation vs Property Binding
- Property Binding
- Class Binding
- Style Binding

### 1. Event Binding

- (click), (change), (keyup), (keydown)
- Mouse Events

- Two-Way Binding
- Directives
- Structural Directives (ngIf, ngIf else, ngFor)
- ngStyle
- ngClass

## 3. Component Interaction, Input & Output Properties, Pipes, Services & Dependency Injection.....

### 1. Component Interaction

- @Input() and @Output() Decorators

### 2. Pipes

- Inbuilt Pipes
- Creating Custom Pipes
- @Pipe Decorator

## 4. HTTP Services and Observables.....

- What is a Service?
- Dependency Injection in Angular
- Introduction to HTTP
- Error Handling
- Introduction to Observables
- Injectable Decorator
- Connecting to the Backend
- Using HTTP Services
- 1. CRUD Operations with HTTP**
  - GET, POST, PUT, DELETE

## 5. Routing in Angular.....

- What is Routing?
- Configuring Routes
- Using the Router-outlet Tag
- Routing Using Router-link Directive
- Programmatic Routing
- Sending Data through Routing
- Lazy Loading Concepts

## 6. Bootstrap and Template-Driven Forms.....

- Overview of Bootstrap
- Bootstrap Grid System
- Using the Form Control Class
- Validation of Template-Driven Forms
- ngForm Directive
- ngValue Directive
- ngSubmit Directive
- FormControl



## Back-end

## Core Java



### 1. Introduction to Java

- Brief history and importance of Java
- How Java fits into the world of programming languages
- Benefits and features of Java

### 2. Setting Up Development Environment

- Installing JDK (Java Development Kit)
- Configuring the PATH environment variable
- IDE's like Eclipse
- Eclipse keyboard shortcuts

### 3. Foundations of Java

- Data types
- Variables
- Creating classes
- Methods
- Creating objects
- Object class
- User-defined variables
- Operators
- Control statements
- Loop structures
- **Practical use cases & real-world examples**

### 4. Core Concept

- Package and Import
- JDK and JRE
- JVM
- JIT
- Class communication
- Instance Block
- Static Block
- **Company use cases & real time examples**

### 5. Logic Building

- Programs on string
- Programs on array
- Program on control statements

### 6. Object-Oriented Programming (OOP)

- Classes and objects.
- Encapsulation.
- Inheritance
- Polymorphism
- Abstraction
- **Company scenarios & real-life examples**

### 7. Access Specifier / Modifier

- Private
- Default
- Protected
- Public
- **Company scenarios & real-life examples**



## 8. Useful Keywords

- Static
- Final
- Super and this
- Synchronized
- Abstract
- Company Scenarios & real-life examples

## 9. Input/Output (I/O) Streams

- Reading & writing data to files
- Output stream.
- Input stream
- Company scenarios & real-life examples

## 10. Exception Handling

- Why exception handling
- Understanding exceptions & errors
- Handling exception
- Exception hierarchy
- Types of exception
- Try
- Catch
- Throw
- Throws
- Finally
- User defined exception
- Company scenarios & real-life examples

## 11. Multithreading

- Thread Introduction
- Creating & managing threads
- Extending thread class
- Implementing runnable interface
- Thread life cycle
- Demon thread & non-demon thread
- Useful methods
- Company scenarios & real-life examples

## 12. Garbage Collection (GC)

- Memory management
- Demon thread concept
- Importance of finalize() method
- System.gc() & runtime.gc()

## 13. Utility Classes

- String class
- String manipulation and formatting
- StringBuffer
- StringBuilder
- Wrapper classes
- Math class
- Arrays class
- Company use cases and real time examples

## 14. Collections Framework

- Introduction to collection framework
- Interfaces of collection framework

List Set Map

- Frequently Used Classes of Collection Framework

- |               |                  |                  |               |
|---------------|------------------|------------------|---------------|
| 1. ArrayList  | 4. HashSet       | 7. HashMap       | 10. HashTable |
| 2. Vector     | 5. TreeSet       | 8. TreeMap       |               |
| 3. LinkedList | 6. LinkedHashSet | 9. LinkedHashMap |               |

- Collections utility class
- Introduction to generics
- Importance and implementation of generics
- Data structure using collection
- Auto boxing
- Comparator and comparable
- Iterators
- forEach loop
- forEach() methods
- Company use cases and real time examples

## 15. Java 8 features

- Lambda expressions
- Company use case of lambda expressions
- functional interfaces
- Default and static methods in Interface
- Stream API with collections
- Date and time API
- Company use cases and real time examples



Introduction to Advance Java Concepts >>>>



# Advance Java

## 1. Introduction to Advanced Java Concepts

- Introduction to advanced Java and its significance
- Understanding the need for advanced features & libraries

## 2. Java Database Connectivity (JDBC)

- JDBC architecture and drivers
- Connecting to databases (MySQL, Oracle, etc.)
- Executing SQL queries using Java
- Statements & prepared statements
- Handling resultSets
- Interview questions practices

## 3. Java Servlets.....



- Introduction of Servlet
- Servlet lifecycle and request processing
- Handling forms and user inputs
- Session management
- Integration with database
- Interview questions practice

## 4. Model-View-Controller (MVC) Servlet

- Understanding MVC architecture
- Implementing MVC with servlets and JSP
- Developing a complete web application
- Solving company's use cases
- Separation of Layers:  
Models, Views and Controllers (Industrial)
- Interview questions practice



## 5. Java Server Pages (JSP).....

- Introduction to JSP and its advantages
- JSP architecture and page directives
- Scripting elements: `<% %>` and `<%= %>`
- Standard actions: `jsp:include`, `jsp:forward`, etc.
- JSTL (JavaServer pages standard tag library)
- Interview questions practice

## 6. Web Services and APIs

- Developing RESTful web services
- JSON

## 7. Hibernate

- Introduction to ORM
- Hibernate framework overview
- Mapping entities to database tables
- Operations using hibernate
- Inbuilt function of hibernate
- Criteria & query
- HQL (Hibernate query language)
- Solving company use cases
- Interview questions practice (Industrial)

## 8. Spring Framework .....



- Introduction to Spring
- Dependency injection and inversion of control (IoC)
- Spring annotations
- Database integration with spring (Industrial)
- Aspect-oriented programming (AOP) with spring
- Interview questions practice

## 9. Spring Boot and Microservices .....



- Creating spring boot applications
- Dependency injection
- Spring boot annotations
- Auto-configuration and starter dependencies
- HTTP methods
- Spring boot hibernate integration
- Building RESTful APIs with spring boot
- Solving company use cases
- Introduction to microservices architecture
- Controller and REST endpoints (Industrial)
- Returning plain text or JSON responses.
- API testing using POSTMAN
- application.properties & configuration (Industrial)
- Hands-on practice with project (Industrial)
- Interview questions practice

## 10. Model-View-Controller (MVC) Spring Boot

- Understanding MVC architecture
- Implementing MVC with spring boot
- Developing web application
- Separation of Layers:  
Models, Views and Controllers (Industrial)
- Interview questions practice

## 11. Project for Resume



### 01 Project Building

### 02 Project Explanation for Placement

### 03 End-to-End Module Wise Preparation

### 04 Face to Face Interview Preparation

## 12. Advanced Java Tools and Libraries

- Apache maven for project build management
- Tomcat server
- Git & GitHub tracking tool
- Unit testing
- Postman

## 7. Advanced SQL Concepts

### • Grouping and Aggregating Data

- GROUP BY Statement
- HAVING Clause

### • Subqueries and EXISTS Operator

- Subqueries
- EXISTS Operator

### • Comparison with ANY and ALL Operators

- ANY Operator
- ALL Operator

### • Joining Tables

- INNER JOIN
- LEFT JOIN (LEFT OUTER JOIN)
- RIGHT JOIN (RIGHT OUTER JOIN)
- FULL JOIN (FULL OUTER JOIN)

## Database



## Introduction to Database



### 1. Introduction

- Definition and importance of databases.
- Overview of SQL (Structured Query Language)

### 2. Database Fundamentals

- Explanation of databases as structured data repositories
- Types and applications of databases (relational, NoSQL, etc.)
- Role of databases in various industries

### 3. SQL Essentials

- Introduction to SQL as the language for managing databases
- Categories of SQL statements (DDL, DML, DQL)
- Significance of SQL in data manipulation and retrieval

### 4. Installation of MySQL

- Steps to install MySQL
- Configuring database server settings
- Command-line and graphical tools for MySQL

### 5. Exploring SQL Statements

#### • Data Definition Language (DDL)

- CREATE statement
- ALTER statement
- TRUNCATE statement
- DROP statement
- RENAME statement

#### • Data Manipulation Language (DML)

- INSERT statement
- UPDATE statement
- DELETE statement

#### • Data Query Language (DQL)

- SELECT statement

### 6. SQL Query Basics

- Data filtering
- Logical operators
- LIKE operator & wildcard characters
- IN and BETWEEN operators
- ORDER BY
- Handling NULL values.
- Aggregate functions
- String, Date & Time functions

#### Our Courses





Scan to Apply

# EAT SLEEP CODE

# REPEAT

## Our Top Courses



**Java Full Stack Development**



**Python Full Stack Development**



**AWS**



**Selenium Software Testing**



**MERN**  
MongoDB | Express JS  
React JS | Node JS



**C#.NET**

**Personality Development / Soft Skills**

**English Communication**

# TheKiranAcademy

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**Higher IT-Courses  
Institute & Placement Centre**

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### Corporate Office & Branch

Add: 403, 2<sup>nd</sup> Floor, Park Plaza, above Birla Super Market, State Bank Nagar, Shramik Vasahat, Karve Nagar, Pune, Maharashtra 411052

### Branch: Deccan

Add: 2<sup>nd</sup> floor, Rainbow Plaza, Jangali Maharaj Rd, opp Modern High School, Shivajinagar, Deccan Gymkhana, Pune, Maharashtra 411005

### Branch: Chinchwad

Add: KUNAL PLAZA, 2nd Floor, Old Mumbai - Pune Hwy, Pimpri-Chinchwad, Maharashtra 411019

### Branch: Warje

Add: 1<sup>st</sup> floor, The Kiran Academy, Dr Ambedkar Chowk, above Royal Car Decor, Warje Jakat Naka, Warje, Pune, Maharashtra 411058

### Nagpur

1st Floor, 190/A H.No.227, Ring Rd, near Chatrapati Hall, Chatrapati Nagar, Nagpur, Maharashtra 440015

Counselor  
Number:

**Helpline No. 9075 777 123**