

Empire Techs

Rajdhani Complex, OfficeNo. A/408, 4th Floor, Near Shankar Maharaj Math Pune - Satara Road,Pune-411043 (+91) 9975708774 / 9623922545 Email:info@empiretechs.in Website:empiretechs.in

Core Java Syllabus

Basics of Java

- o Origin
- o Use
- o Installation
- o Frameworks
- o Paid sources v/s Unpaid Sources

Programming Fundamentals

- o Variables
- o Data Types
- Naming Conventions
- o Basic logistics

OOPS Concepts

- Object and classes
- o Constructor
- o Blocks
- o Keywords (this, super and final)
- o Polymorphism
- Composition and Aggregation (HAS-A)
- o Inheritance (IS-A)
- Exception Handling
- o Encapsulation

Arrays

- Concept and basic examples
- o Puzzles

String

- Concept and Basic examples
- o Puzzles
- o Puzzles on String arrays
- o StringBuffer
- o StringBuilder

• Deep dive into Inheritance.

- o Refreshing the concept
- o Frequently asked puzzles



Empire Techs

Rajdhani Complex, OfficeNo. A/408, 4th Floor, Near Shankar Maharaj Math Pune - Satara Road,Pune-411043 (+91) 9975708774 / 9623922545 Email:info@empiretechs.in Website:empiretechs.in

• Deep dive into Exception Handling

- o Try-catch block
- Try-catch and finally block
- o Keywords (throw and throws)
- o Try with resources
- o Puzzles

File Handling

- o Read and write file
- Creation of receipts and billis (retailer system)
- Application (password protected pdf file)
- o Maintenance of Flat file system

Multithreading

Serialization

Networking

- o Concept
- Socket Programming
- Chat Application

MySQL Database

- o CRUD Operations
- o Stored Procedures
- o Triggers
- o Joins
- o MySQL Workbench
- o SQLyog

Swings and AWT

- o Camera access application
- o Billing and Mailing application
- o QR Code scanner Development
- o Data miner tool application
- o Integration with other applications (like notepad, csv, etc.)
- o Text to speech handler
- Working with OCR
- Handle WEKA and MEKA with Java



Empire Techs

Rajdhani Complex, OfficeNo. A/408, 4th Floor, Near Shankar Maharaj Math Pune
- Satara Road, Pune-411043
(+91) 9975708774 / 9623922545
Email:info@empiretechs.in
Website:empiretechs.in

• Collection Framework

- o Lists
- o Maps
- o Sets
- o Comparable v/s comparator

• Crucial Application development

- o MySQL operations
- o File Handler
- o API Integration
- o On Demand integration