

FUNDAMENTAL OF JAVA

COURSE CODE: MOOCCSE-A09

DURATION: 7 Weeks.

Course Prerequisites:

You should know how to use a computer at a basic level

Course Outcomes:

1. The fundamentals of Java
2. The building blocks of java program.
3. Conditional Statements
4. Iterative Statements
5. Object-Oriented Programming

Course Description:

This course is designed for the complete beginners to java programming. This course aims to teach programming at a steady pace which will help you to grasp complex java topics in a simple way.

COURSE DETAILS

MODULE 1: (Basic of Java Language Part-1)

TOPIC 1: (Introduction)

- Lecture 1.1: Introduction to Java Language
- Lecture 1.2: Installing JDK & IDE
- Lecture 1.3: First Program in Java
- Lecture 1.4: User Input using Scanner Class
- Lecture 1.5: Comments

MODULE 2: (Basic of Java Language Part-2)

TOPIC 1: (Basic Language of Elements)

- Lecture 1.1: Variables
- Lecture 1.2: Datatypes
- Lecture 1.3: Type Casting in Java
- Lecture 1.4: Operators in Java
- Lecture 1.5: Strings
- Lecture 1.6: Array

MODULE 3: (Conditional Statements)

TOPIC 1: (Conditional Statements)

- Lecture 1.1: If Statement
- Lecture 1.2: If-else Statement
- Lecture 1.3: If-else-if ladder
- Lecture 1.4: Nested if-statement
- Lecture 1.5: Switch Statement

MODULE 4: (Iterative Statements)

TOPIC 1: (Iterative Statements)

- Lecture 1.1: Do-While Loop
- Lecture 1.2: While Loop
- Lecture 1.3: For Loop
- Lecture 1.4: For Each Loop
- Lecture 1.5: Break Statement

Lecture 1.6: Continue Statement

MODULE 5: (OOPs: Object Class Part-1)

TOPIC 1: (Basics of OOPS Concepts in Java)

Lecture 1.1: OOPs Concept in Java

Lecture 1.2: Object and Class

Lecture 1.3: Method

Lecture 1.4: Constructor

Lecture 1.5: Static Keyword

Lecture 1.6: This Keyword

MODULE 6: (OOPs: Object Class Part-1)

TOPIC 1: (Inheritance & Overloading)

Lecture 1.1: Basics Inheritance

Lecture 1.2: Single and Multilevel Inheritance

Lecture 1.3: Hierarchical Inheritance

Lecture 1.4: Basics of Polymorphism

Lecture 1.5: Method Overloading

Lecture 1.6: Super keyword

MODULE 7: (Abstraction & Encapsulation)

TOPIC 1: (Abstraction & Encapsulation)

Lecture 1.1: Abstraction: Abstract Class

Lecture 1.2: Abstraction: Interface

Lecture 1.3: Basic of Encapsulation

Lecture 1.4: Encapsulation: Package

Lecture 1.5: Encapsulation: Access Modifiers

RESOURCES: PDF: Exceptional handling

JDBC with MYSQL

- Types of JDBC Drivers
- JDBC Classes/Interfaces
- JDBC Connectivity Steps
- Establishing connection with the database
- Reading data from database
- Creating Table using Statement
- Insert using Statement
- Update using Statement
- Delete using Statement
- Statement Vs PreparedStatement
- Insert using PreparedStatement
- Update using PreparedStatement
- Delete using PreparedStatement
- CallableStatement:
- CallableStatement:
- ResultSetMetaData
- DatabaseMetaData
- Storing Image
- Retrieving Image
- Storing File
- Retrieving File