

Java Workshop at Department Of Computer Science, Rollwala Computer Center

Two days hands-on workshop on Java 8 New Features

Introduction

Java 8 is the biggest release of Java till date. It has changed the way we write Java code. Java has now embraced functional paradigm. The goal of this workshop is to cover some of the most important Java 8 features and how they can help developers in their day to day programming.

In this hands-on workshop, we will cover following topics:

Contents

1. Revisiting Generics Generic classes, interfaces and methods Declaring variables of generic types Using unbounded wildcard Using bounded wildcard (upper and lower bound) Super-type sub-type relation between bounded wildcard	2. Changes in interface static methods default methods in interface inheritance rules Multiple inheritance of behavior not just types Functional interface
3. Syntax of lambda expression Automatic type inference of input parameters Shortcuts for implementing with single statements Example using ActionListener and Comparator Method reference and Constructor reference	4. The common Functional interfaces (java.util.function package) Predicate, Consumer, Supplier, Function, UnaryOperator and BinaryOperator Variants of the above components 43 interfaces from java.util.function package
5. Introduction to misc. classes added in Java 8 Revisiting Comparator<T> Optional<T> and primitive variants Interfaces like Spliterator<T> and their primitive variants Some new utility classes like StringJoiner, Objects, IntSummaryStatistics, etc.	6. Understanding Stream Stream<T> and its primitive variants Introduction to Stream API Intermediate and Terminal Operations on streams
7. Advanced usage of Stream Reduction operation using reduce and collect methods Using Collector Using factory methods for Collectors	8. New Date and Time APIs LocalDate, LocalTime, LocalDateTime Instant, ZonedDateTime Period and Duration partial dates
9. Introduction to modularity in Java 9 Understanding modules in Java 9	

Objectives

By the end of this workshop, you will have learnt:

- Java Lambda Expressions
- Method and constructor references
- New Functional Interfaces
- Streams
- Enhanced Collections API
- Additional new features

Pre-requisites/Who should attend

If you are a Java developer with some professional programming experience, this workshop is for you. To get the most from this course, attendees should have programming experience with Java 5 features.

About Faculty

Our faculty Mr. Pravin Jain:

- An established well versed, experienced, excellent corporate trainer on Java.





