Core Java

Introduction to Java

+ Environment Setup
+ Variables and User Input
+ Math & Logic
+ String Processing
+ Conditional Statements
+ Loops
+ Methods
+ Arrays
+ Classes & Objects
+ Inheritance, Composition and Polymorphism
+ Generics
+ A word on Java collections

Collections in Java

+ What are collections
+ List collection
+ LinkedList in Java
+ Set and its properties
+ TreeSet in Java
+ HashMap
+ TreeMap
+ LinkedHash Map
+ Writing your own collection classes
+ Arrays class
+ Collections Class
+ Final word on collections

Exception Handling

+ Introduction to Exceptions
+ try-catch exception handling
+ Finally blocks
+ Throwing exceptions
+ Different types of exceptions
+ return from try-catch
+ Creating your own exceptions
+ Different exception in Java
+ Final word on Exceptions

Intro to functional programming

+ functional programming intro
+ Functional Interface in Java 1.8
+ Lambda expressions
+ Comprators with and without Lambdas
+ Map, filter and Reduce
+ Collectors and collections
+ New Time Api

Miscellaneous Topics

+ Introduction to Topics
+ Reading from files
+ Making a network request
+ Using third-party libraries
+ Creating your own libraries
+ Making executable jars
+ Undertanding Java and Javac
+ Code logging
+ Test your code
+ Debug your code
+ Multithreading basics