



Java Platform, Standard Edition (Java SE)

From Yes-M Systems LLC

Length: Approx 4 weeks/40 hours

Audience: Students with experience in object-oriented programming

Student Location – To students from around the world

Delivery Method: Instructor-Led – Live online Training

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A. Course Summary

About this Course:

This 40+ hour/4 week course is designed to give students a solid knowledge in the basics of Java SE Programming, Object Oriented Programming Concepts, Packages, Thread Programming, Collections Framework, I/O Streams and Swing API. Each concept will be discussed using interactive class notes along with relevant built-in examples/applications. This course is taught by experienced instructors with 10+ years of development and training experience.

This course will allow the students to understand various core Java concepts including:

- (i) Learning the basics of Java SE Programming
- (ii) Learn core concepts of Java programming
- (iii) Understanding Object Oriented Programming Concepts
- (iv) Packages, Thread Programming
- (v) Collections Framework, I/O Streams.
- (vi) Learn how to use IDE for Java application development
- (vii) Use Eclipse Indigo 3.7.1 for Java EE Developers
- (viii) Exposure to lots and lots of working examples
- (ix) Hands-on examples via class work and/or home work

AT COURSE COMPLETION

You would be able to develop data driven Java application for desktops by implementing OOP concepts and swing API.

B. Contact us for more details:

Company name: Yes-M Systems

Website: <http://myyesm.com>,

Phone numbers (USA): 678-643-7777, 678-248-0302

Phone number (India): 91-8220006968

Kudzu Reviews: <http://www.kudzu.com/m/Yes-M-Systems-30363491/reviews/>

Facebook: <http://www.facebook.com/yesmsystems>

Youtube: <http://www.youtube.com/yesmsystems>

C. Java Platform, Standard Edition (Java SE) Course Details

1. Basics of Java

- 1.1 Introduction to Java Platform Standard Edition (Java SE)
- 1.2 Java programming Basics
- 1.3 Introduction to Java Development Tools
- 1.4 Exploring your Java Class & Compiling and Interpreting Applications

2. Types, Values, Variable & Operators

- 2.1 The Kinds of Types & Values
 - 2.1.1 Primitive Types and Values
 - 2.1.2 Reference Types and Values
 - 2.1.3 Parameterized Types
- 2.2 Type Variables
 - 2.2.1 Variables of Primitive Type
 - 2.2.2 Variables of Reference Type
 - 2.2.3 Practical (Hands-on Working Examples)
- 2.3 Kinds of Variables
 - 2.3.1 Practical (Hands-on Working Examples)
- 2.4 Data Type Casting
 - 2.4.1 Practical (Hands-on Working Examples)
- 2.5 Java Arrays, Multi-Dimensional Arrays
 - 2.5.1 Practical (Hands-on Working Examples)
- 2.6 Using Operators
 - 2.6.1 Practical (Hands-on Working Examples)

3. Flow Control

- 3.1 Conditional Statements
- 3.2 Looping Statements
- 3.3 Practical (Hands-on Working Examples)
- 3.4 Branching Statements Practical (Hands-on Working Examples)

4. Classes & Methods

- 4.1 Declaring Classes
 - 4.1.1 Generic Classes and Type Parameters
 - 4.1.2 Practical (Hands-on Working Examples)
- 4.2 Defining Methods
 - 4.2.1 Passing Parameters by Values

4.2.2 Generic Methods

4.2.3 Use Static methods, JavaBeans Naming & & Var-Args

4.2.4 Practical (Hands-on Working Examples)

4.3 Develop Constructors

4.3.1 Practical (Hands-on Working Examples)

5. Object Oriented Programming (OOP) Concepts

5.1 Describe Encapsulation, Use Polymorphism & Inheritance

5.1.1 Practical (Hands-on Working Examples)

5.2 Method Overriding, Overloading & Constructor Overloading

5.2.1 Practical (Hands-on Examples)

5.3 Develop Interfaces, Abstract Classes & Nested Classes

5.3.1 Practical (Hands-on Working Examples)

6. Packages

6.1 Defining and Importing packages

6.2 Access and non-Access Specifiers

6.2.1 Practical (Hands-on Working Examples)

6.3 Explore java.lang package - Using String & Wrapper classes

6.3.1 Practical (Hands-on Working Examples)

7. Exception Handling

7.1 About Java Exception Handling & Exception Hierarchy

7.2 Using try-catch Blocks

7.2.1 Practical (Hands-on Working Examples)

7.3 “throws” keyword, throwing(throw) an Exception & “finally” Statements

7.3.1 Practical (Hands-on Working Examples)

8. Threads

- 8.1 Introduction to Java Multithread Programming
- 8.2 Creating a Thread – Implementing Runnable & Extending Thread
 - 8.2.1 Practical (Hands-on Working Examples)
- 8.3 Creating Multiple Threads and Joining Threads
- 8.4 Java – Thread Synchronization
 - 8.4.1 Practical (Hands-on Working Examples)
- 8.5 Interthread Communication and Java Thread Deadlock
 - 8.5.1 Practical (Hands-on Working Examples)

9. Collection Framework

- 9.1 Introduction to Collection classes & Interfaces
- 9.2 Core Collections Interfaces: List, Set & Map
- 9.3 Collection Classes – Lists, Sets, Maps & Using an Iterator
 - 9.3.1 Practical (Hands-on Working Examples)
- 9.4 Storing User-defined classes in Collections
- 9.5 Legacy Classes & Interfaces: Enumeration, Vector & Hashtable
 - 9.5.1 Practical (Hands-on Working Examples)
- 9.6 Autoboxing and Unboxing
 - 9.6.1 Practical (Hands-on Working Examples)

10. I/O Streams

- 10.1 Overview - Stream I/O in Standard I/O (java.io Package)
- 10.2 Byte Based I/O & Byte Streams
 - 10.2.1 Byte Arrays
 - 10.2.2 File I /O Byte Streams
 - 10.2.3 Buffered I/O Byte Streams
- 10.3 Formatted Data streams - Java DataInput / DataOutput Streams
 - 10.3.1 Practical (Hands-on Working Examples)
- 10.4 Character Based I/O & Character Streams
 - 10.4.1 Char Arrays
 - 10.4.2 File I /O Character Streams
 - 10.4.3 Buffered I/O Character Streams
 - 10.4.4 Practical (Hands-on Working Examples)
- 10.5 Object Serialization using the java.io package
 - 10.5.1 Practical (Hands-on Working Examples)
- 10.6 Using PrintStream & PrintWriter

11. Swing

- 11.1 Describe the key features of Swing
- 11.2 Add components to a JFrame using the ContentPane
- 11.3 Using WindowBuilder - Java GUI designer
- 11.4 Write Swing Applications using Swing components
- 11.5 Event Handling
- 11.6 Creating Data Driven Swing Based GUI Application

Disclaimer: Yes-M Systems and/or their instructors reserve the right to make any changes to the syllabus as deemed necessary to best fulfil the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means.

D. About Yes-M Systems:

- a. Established in 2005 (Atlanta, GA, USA), 10th year in business.
- b. A+ accreditation from US Better Business Bureau (<http://www.bbb.org/atlanta/business-reviews/internet-consultants/yes-m-systems-in-duluth-ga-27431372>)
- c. Received the “Best of 2012” and “Best of 2013” awards from US-based Kudzu (<http://www.kudzu.com/m/Yes-M-Systems-30363491/reviews/>)
- d. Trained close to 3000+ students from all over the world.
- e. Experienced, passionate and committed trainers
- f. IT Training in various technologies including Java, Dot Net, SAP, Oracle, QA, BA etc (See Courses We offer section for more information)
- g. Professional guidance/help with resumes and interview preparations.
- h. Recruiter help with marketing/jobs
- i. Certification at the end of the training.

E. Courses we offer:

A. QA and BA courses:

- QA [Quality Assurance or QA Testing]
- BA [Business Analysis or Business Analyst]
- QA and BA as a single course (Integrated QA+BA) at a reduced fee.
- Advanced/specialization courses:
 - a. 60-hour Selenium course with Core Java
 - b. ETL Testing
 - c. Advanced Mobile Testing
 - d. Advanced QTP
 - e. Any combination of a, b, c, d.
- Certification QA
 - a. QTP
 - b. ISTQB
 - c. Quality Center
- Healthcare and Finance specialization
 - a. Healthcare as a Domain Class
 - b. Healthcare BA [Business Analyst with specialization in Healthcare]
 - c. Healthcare QA [Business Analyst with specialization in Healthcare]
 - d. Healthcare QA [Quality Assurance or QA Testing]
 - e. Business analyst with Finance specialization.
 - f. Quality Assurance with Finance specialization

B. Java courses:

- a. Core Java
- b. Advanced Java
- C. Combination of Core Java and Advanced Java

■ Healthcare and Finance specialization

- a. Healthcare as a Domain Class
- g. Healthcare BA [Business Analyst with specialization in Healthcare]
- h. Healthcare QA [Business Analyst with specialization in Healthcare]
- i. Healthcare QA [Quality Assurance or QA Testing]
- j. Business analyst with Finance specialization.
- k. Quality Assurance with Finance specialization

D. Microsoft Courses:

- a. Dot Net
- b. Microsoft Business Intelligence [MS BI]
- c. Sharepoint
- d. MS SQL Server

E. SAP Courses:

- a. SAP FICO
- b. SAP MM
- c. SAP HR
- d. SAP BO
- e. SAP BI
- f. SAP HANA

F. Oracle Courses:

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- a. Oracle Financial
 - b. Oracle DBA
 - c. PL/SQL

G. Other Courses:

- a. Hadoop
- b. Hadoop with Java
- c. Salesforce
- d. Project Management (PMP)
- e. Maximo
- f. Tableau
- g. Informatica
- h. Cognos

Yes-M Systems LLC