**Deloitte Pre Hire Training**

**Java Course Content**

**Total Duration: 5 Days 8 hrs. per day**

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| **Subject** | **Topics** | **Software version** | **Theory** | **Lab** |
| **Day 1 First Half**  **Day 1 Second Half** | **Introduction to SDLC**   * Initiation Phase * System Concept Development Phase * Planning Phase * Requirement Analysis Phase * Design Phase * Development Phase * Integration and Test Phase * Implementation Phase * Operations and Maintenance Phase   **Software Engineering Process**   * Software Engineering Process * Characteristics of Software * Seven Principles of Software Engineering   **System Analyst**   * Software Requirement Specifications * Software Design * Software Development Life Cycle * Data Flow Diagram   **UML Diagrams**   * Use Case Diagram * Class diagram * Object Diagram * Sequence Diagram * State Diagram * Collaboration Diagram * Component Diagram |  | **3**  **3** | **1**  **1** |
| **Day -2** | (**Note:**   * Since most of the core java concepts are already getting covered in e-learning, the theory part will be minimized and more hands on/ practice time will be there for participants. * New Unit test, Industrial standard practice and Exception handling will be mandatory used and implemented in all the Hands on session   )  **Hands on session**   * JDK configuration * IDE – Eclipse introduction compile/basic debug/run * Practice session on classes and objects, methods (static and instance), arrays, arrays of objects, GC, constructors*,* * Assignment of the day * Group discussion * Recap of the day’s Topic * Daily quiz | JDK 1.8 | **2** | **6** |
| **Day -3** | * Recap   **Hands on session**   * Creating interface, implementation, access across different package, overriding, final modifier, Object superclass method overriding, (toString, equals, hashcode) implementing comparable interface, sorting or objects, run time polymorphism implementation, calling constructors of sub and super class, inner and nested classes, anonymous classes. * Assignment of the day * Group discussion * Recap of the day’s Topic * Daily quiz | JDK 1.8 | **2** | **6** |
| **Day - 4** | * *Recap* * String, String Builder, String Buffer classes. Collections: List, Set, Map, D-queue, integrated scenario based practice. Collection and object, sort, collections algorithms * Hands on session * Assignment of the day * Group discussion * Recap of the day’s Topic * Daily quiz | JDK 1.8 | **2** | **6** |
| **Day-5** | * Recap * IO Stream, serialization, de- serialization, read write of text data, binary data, File managing ,creation, deletion, copy, folder managing, random access. * Practice on Util package, String Tokenizes, Date Time * JDBC, Dao, Connection Object, statement, prepared statement, callable statement, scrollable, transaction management, concurrence control. * Hands on session * Assignment of the day * Group discussion * Recap of the day’s Topic * Daily quiz | JDK 1.8 | **3** | **5** |