**Java-Selenium Course Outline**

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**Core Java:**

1. Programming Language Paradigm.
2. Java Architecture.
3. Object-Oriented Programming ( Abstraction,

Encapsulation,

Inheritance and

Polymorphism ).

1. Syntax (Data Type, Variables, Casting)
2. Operators (Arithmetic, bitwise, relational, logical, assignment)
3. Selection Statements (If, Switch)
4. Control Statement (while, do while, for, for each)
5. Conditional Statements.
6. Access Specifiers.
7. Static,final,finally and finalize.
8. String Manipulation.
9. Exception Handling, Logging, Debugging.

**Advanced Java Concepts:**

1. Reflection-based.
2. Multithreading,
3. Concurrency.

**Data Structure:**

1. Array
2. ArrayList
3. LinkedList
4. Queue
5. Stack
6. Tree
7. Graph
8. Vector
9. Hash Map
10. Hash table

**Selenium Components:**

1. Selenium IDE.
2. Selenium RC.
3. Web Driver.
4. Selenium Grid.

DataDriven,KewWordDriven and Hybrid Framework will be used.

**Backend Testing**: JDBC(Java Data Base Connectivity).

**Data Base:** ORACLE and My SQL.

**Load Testing:** JMeter.

**Testing Framework:** Junit, TestNG.

**External data Source API:** POI/JXL.

**Build Tools:** ANT,Maven.

**Bug Tracking Tool:** JIRA.

**Repository System:** GitHub, SVN, TortoiseSVN.

**Operating System:** Windows,Linux.

**Continuous Integration Server:** Jenkin/Hudson

***Note:*** *Besides class work there will be Code lab and Homework Assignment****.***