**Java Role**

* **Required Skills**: (Focus areas colored in blue)
  + Core Java (8), J2EE, Spring
  + JavaScript, AJAX
  + Unix/Linux Scripting, Shell Scripting
  + SQL, DB2, Writing SQL including stored procedures
  + XML, JSON
  + Junit, BDD
  + Web application development utilizing the J2EE Java framework, Databases, Middleware (Soap/Xml/Messaging/RESTful services)
  + Development of Service Oriented Architecture application
  + Object Oriented Design, Design Patterns, Data structure algorithms
  + Trouble-shooting skills, with the ability to quickly identify and document the root cause of issues
  + Good communication Skill
* **Good to have**
  + Websphere
  + ExtJS 5.x, jQuery, Angular, HTML, CSS
  + Python
  + Development experience in the financial/banking industry
* **Domain**
  + <https://www.edx.org/professional-certificate/iimbx-risk-management-in-banking-and-financial-markets>
* **Sample Interview Questions & Focus Areas**:
* Core Java concepts
  + OOPS and solid principles (overloading, overriding, scope, hierarchy etc.,)
  + How indexing and hashing works in hashmap
  + Runnable and callable and executor service
  + Set Internal implementation
  + Situational based questions on threads and concurrency (static and non-static synchronization, waitless-locking)
  + Java keywords (volatile , atomic, immutable object)
  + Synchronization, Serialization etc.
  + Exceptions and memory management (gc collectors)
  + Some programming related to array, strings, stack and queue, linkedlist (Find duplicates in arrays, how do you make anagrams from a string)
  + Exception Handling
  + Collections (HashMap, TreeMap, PriortyQ)
  + Common sorting algorithms and their time complexity
* Design patterns
* Data structures and application of them within projects
  + Situational based data structures and algorithm questions
* Spring framework, Initializr, Spring Boot and REST services with Spring
* Design concepts in services, integration, security and best practices (Only for Round 2)
* Database concepts (SQL concepts, Query performance tuning)
* Unit testing, basic build/release processes
* **Interview Preparation and Readiness**:
  + Smart Preparation – Prepare against the above questions and focus on key skills mentioned above
  + Prepare for the crisp introduction and highlighting the core expertise aligning to the key skills mentioned above and practice ahead of the interview
  + Prepare the list of your key project experiences and problems you solved in past projects, as it relates to job requirements
  + Identify few key contributions (design improvements, enhanced customer experience, automation, best practices) you can highlight in your recent projects aligning to the focus areas above
  + Showcase your ability to pick up new skills quickly in new client environment to address the question on “How quickly can you come up to speed in a tough environment like MS?”
* **Communication Expectations**:
  + If question is not clear, either ask question again or paraphrase your understanding of the question to make sure you got it right
  + Speak slowly and confidently
  + Think before you speak
  + Check with interviewer if you answered their question or you need to clarify further
  + If you think you messed up an answer, apologize and start over with the answer. It’s OK!
  + Towards the end, ask the interviewer “*Is there any other aspect of my experience or skill that I can share with you that might not have been uncovered during the course of our conversation?*”