## My Interview Experience with JPMC

**Technology: JAVA J2EE** 

**Experience: 5 Years** 

**Company Name: JPMorgan Chase** 

## First Round (Technical 1)

**Duration:** 1 Hour 15 mins

Interviewer: (He took my resume and started with) - Hey Ashok, how are you doing?

Me: I am doing great. Thanks for Asking..! How about you?

Interviewer: Doing good...! Explain about yourself?

Me:

- I am having over all 5 years of experience in Java J2EE technologies. In these 5 years of time i have worked in analysis, design, development of both web based applications and Integration based applications.
- I have Good work experience in developing various applications using JAVA/J2EE technologies like Java, JDBC, Servlets, Jsps, Struts 1.x & 2.x, Spring IOC, Spring AOP, Spring MVC, Hibernate, Web Services, RESTful Services and Design Patterns.
- Experienced on UML designing, modeling, Use case diagrams, Flow diagrams and Sequence diagrams using Microsoft Visio and EA (Enterprise Architect)
- Experience with Software Development Processes & Models: Agile, Waterfall, & Spiral Models.
- Experience in developing User Interfaces using JSP, XML, HTML, CSS, JavaScript, JQuery and Angular JS
- Experience in creating Correspondence templates using HPExtream designer
- Experience in creating Templates, Pages, Sections, Flow charts in HPExtream designer
- Experience in using and implementing Design Patterns
- Experience in working with batches to perform business operations in bulk
- Excellent skills in developing Persistence layer to interact with the databases using JDBC and ORM Frameworks
- Having good work experience with Automation Testing using Selenium WebDriver
- Having good work experience with Performance Testing using JMETER tool
- Experience in dealing with both on-shore and offshore team mates

Interviewer: Good Ashok, you mentioned HPExtream, I am hearing this for first time ... what is it for?

Me: HPExtream is a licensed tool from HP Company... now it acquired by Open Text Company.

HP Exstream is a multichannel customer communication management (CCM) solution that empowers us to make the most of every customer touch point by creating insightful, impactful, real-time customer communications. We are using this tool to generate PDFs in bulk mode. It provides set of tools to design our pdf templates with tables, sections, paragraphs, automated rows, graphs etc...

Interviewer: Cool, you mentioned related Testing tools like Selenium and JMETER. Do you know testing also?

**Me:** Yes, in my previous company I have played SDET role (Software Developer and Tester). I know both Development and Testing.

Interviewer: Superb... Can we start Technical discussion?

Me: Yeah, sure...

Interviewer: How can you rate yourself in JSE out of 5?

Me: I can rate myself 4 out of 5 (Then he started interview with below questions)

## **Questions Asked From JSE**

- 1. What is Static Control flow?
- 2. What is Instance Control flow?
- 3. Can I access an instance field from static context?
- 4. Can I call a static method through the object reference?
- 5. What is the difference between Comparator and Comparable?
- 6. What are fail-fast collections in java?
- 7. Difference between HashMap and HashTable?
- 8. How HashMap works internally?
- 9. What is Random Access? Is it class or Interface?
- 10. Which collection classes you have used in your project and why?
- 11. Write pseudo code to iterate a map?
- 12. What is constructor? Can a class contain more than one constructor?
- 13. What is Exception?
- 14. What is checked and unchecked exception?
- 15. Which one u prefer to handle exception try-catch or throws?
- 16. In your project how u handle the exception in which layer and how u map?
- 17. If 2 thread try to access my collection Object at same time then is there any problem? If yes how can I handle this?
- 18. What is synchronization, and what are the various places where we can use it?
- 19. Can I declare a class as private?
- 20. Can a class use both implements and extends keywords? If yes which one should be first?
- 21. How many ways are there to create Thread?
- 22. What is Executor Service?
- 23. Did you get a chance to use Multi-Threading? In Which scenario you have used multi-threading in your current project?
- 24. What is Copy Constructor?
- 25. What is deep cloning and shallow cloning?
- 26. What are the new features in Java 8 and Java 9?

## **Questions Asked From Hibernate:**

- 1. If JDBC is there why hibernate?
- 2. Can I reuse the session? If yes how if no then what is the problem?
- 3. What is the difference between level-1 and level-2 cache?
- 4. Difference between get and load methods?

- 5. Difference between update and saveOrUpdate methods?
- 6. How to insert record using Hibernate?
- 7. What is the state of object?
- 8. What is the lazy attribute and how it works?
- 9. What are ID generators in Hibernate?
- 10. What is Composite Primary Key? How to map using Annotations?
- 11. How u configure data Source and name of the data Source?
- 12. What is Service Registry in Hibernate?
- 13. What is relation between JPA and Hibernate?
- 14. Tell me some annotations from Hibernate?
- 15. What is HQL queries?
- 16. How to call Stored Procedures using Hibernate?
- 17. How to map entity classes with One-To-Many relationship using Annotations?
- 18. What is cascade and fetch in Hibernate?
- 19. Write hibernate configuration file?
- 20. Can we use properties file for Configuration?

### **Questions Asked From Spring:**

- 1. What is dependency injection?
- 2. How many ways we can start IOC?
- 3. What are the Differences between BeanFactory and ApplicationContext?
- 4. How many objects will be created for a Bean by IOC?
- 5. What is depends-on in spring?
- 6. What is Method-Replacement?
- 7. If I inject non-singleton bean into singleton what is the result?
- 8. What is lookup method injection?
- 9. What is lazy attribute?
- 10. What is auto-wiring?
- 11. What is Row Mapper?
- 12. What is AOP?
- 13. Explain about Around Advice?
- 14. What is Point cut?
- 15. How to write Point cut expression?
- 16. Explain Spring MVC Architecture?
- 17. What are the spring MVC annotations you used in your project?

- 18. Why we need Dispatcher Servlet?
- 19. For every request I have to trace the IP address of user how can we do this?
- 20. What is View Resolver?
- 21. How to integrate spring with Hibernate?
- 22. What is Spring Boot?
- 23. Where to change embedded tomcat server Port number in Spring Boot project?
- 24. I have a spring project, can we migrate into Boot?
- 25. What is @Request Body and @Response Body?

## **Questions Asked From Webservices & Restful Services**

- 1) What is difference between Top Down and Bottom Up approach in SOAP Web Services?
- 2) What is WSDL? Why we need WSDL?
- 3) Can you explain WSDL structure?
- 4) Why we need SOAP? How Many Sections will be there in the SOAP?
- 5) What is sun-jaxws.xml file?
- 6) Tell me some annotations from JAX-WS API?
- 7) What is SOAP Handler?
- 8) What is JAX-RS API?
- 9) Name some implementations of JAX-RS API?
- 10) When SOAP is already available, why people are going for RESTful services?
- 11) How to set different status code in HTTP response?
- 12) How you will handle exceptions in REST application?
- 13) Write some JAX-RS annotations?
- 14) What is @BeanParam?
- 15) What are differences between @PathParam and @QueryParam annotations?
- 16) Are you using XML or JSON?
- 17) Can one method produce multiple formats of the data?
- 18) Can you write the code to convert java obj to json?
- 19) How you will develop Secured Resources in Rest application?
- 20) What is WADL?

Cleared First Round and got call for Second Technical Round

## **Second round (Technical 2)**

**Duration: 45 mins** 

In this round also interviewer Asked Self Introduction and Some questions from JSE, Hibernate and spring and Restful Services (Which are already covered in First Technical round):)

Cleared second round and got call for Third round i.e. Project Manager round

## **Questions Asked In Third Round (Project Manager)**

**Duration: 45 mins** 

### 1. Brief yourself?

Ans: As mentioned earlier in Technical round 1 I have explained about myself.

### 2. Why you want to leave your current company?

Ans: My current project development & testing phase is going to end in next month and we don't have any upcoming projects in Pipe line. If there is no project available then I might get allocated to Production Support projects. But as I am in starting stage of the carrier I don't want to work on Product Support. I am looking this change to work on Development.

#### 3. Give your project overview?

**Ans:** Explained about my project (Health Insurance application) how people will enroll into insurance policies, how data will be collected, Eligibility Determination, Benefit Issuances and Correspondence generations etc.

### 4. How many modules are there in your project? And what are those?

Ans: Explained about Modules in My Project

#### 5. Explain your project execution flow?

Ans: Explained my project execution flow

### 6. What are your roles and Responsibilities in your project?

Ans: In My project requirements will be given by functional team. After receiving the requirements

- I will analyze the requirements and I will draft all my queries w.r.t requirements
- I will set up call with functional team for clarifications with Manager approval
- After getting all inputs from functional team , I will start Technical design document for the requirement and send the TDD for review to lead
- After getting approval for the TDD, I will start my development part
- Once development is completed I will do unit-testing and commit the code into repository server
- I will do integration testing with cross modules in project and prepares Dev integration testing checklist document and submit the testing results to my lead
- I will support for SIT and UAT phase to resolve the issues which are identified in SIT and UAT phase

### 7. Which SDLC methodology following in your project?

Ans: Agile

### 8. What is diff between SDLC and STLC?

Ans: Explained about Software Development cycle and Software Testing life cycle

#### 9. How you will get the requirements from client?

**Ans:** We don't have direct interaction with Client. My Project functional team staying in US and they will collect requirements from the Client and they will design FDD and shares those FDDs in SharePoint location to offshore team members

#### 10. What is TDD?

**Ans:** Technical Design Document. It describes detailed design about what we are doing like which classes are creating and what is the relation between those classes, what tables are newly creating, what existing tables are modifying in Database, confirmations and Assumptions from functional team, class diagrams, sequence diagrams, flow diagrams will be part of TDD

#### 11. Which tool you are using to prepare class diagrams and sequence diagrams?

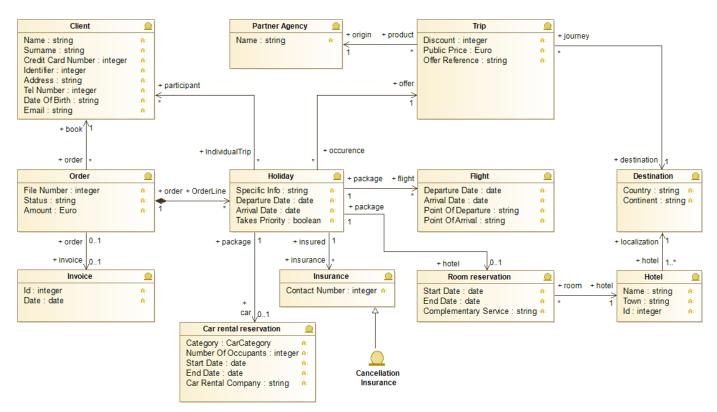
Ans: Enterprise Architect (EA) (Some ppl will use Microsoft Visio, STAR UML etc.)

#### 12. What is the difference between Class diagram and Sequence diagram?

Ans: I have explained Class diagram and Sequence diagram by drawing sample pictures on paper

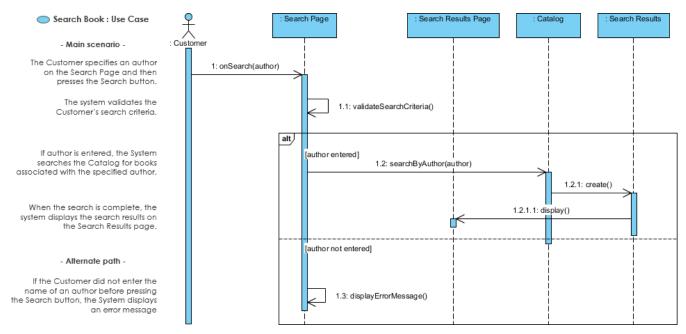
<u>Class Diagram</u>: In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

#### **Sample Class Diagram**



<u>Sequence Diagram:</u> A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios.

#### **Sample Sequence Diagram**



#### 13. How you will do code review?

Ans: Using SONAR QUBE

#### 14. What is unit-testing? Which tool you are using in current project for unit-testing?

**Ans:** UNIT TESTING is a level of software testing where individual units/ components of a software are tested. The purpose is to validate that each unit of the software working as expected.

### 15. How you will debug your code?

Ans: I have explained about debugging process with Break Points, F5, F6, F7, F8, and Drop to frame etc.

#### 16. If any exception occurs in Production, how you will trace the issue?

**Ans:** Using Log files.

#### 17. Have you ever heard about Splunk?

Ans: Splunk is a log file analyzer tool. Prod logs will be pointed thru Splunk

#### 18. What is Scrum and Sprint?

#### Ans:

The framework, which is often part of agile software development, is named for a rugby formation. Everyone plays a role. When it comes to product development, Scrum roles include product owner, Scrum master and Scrum development team.

**Scrum master:** This team member serves as a facilitator. The Scrum master is responsible for ensuring that Scrum best practices are carried out and the project is able to move forward.

**Scrum development Team:** This is a group that works together for creating and testing incremental releases of the final product.

**The Scrum process:** It encourages practitioners to work with what they have and continually evaluate what is working and what is not working. Communication, which is an important part of the process, is carried out through meetings, called Events. Scrum Events include:

**Daily Scrum:** The Daily Scrum is a short stand-up meeting that happens at the same place and time each day. At each meeting, the team reviews work that was completed the previous day and plans what work will be done in the next 24 hours. This is the time for team members to speak up about any problems that might prevent project completion.

**Sprint Planning Meeting:** A Sprint refers to the time frame in which work must be completed, and it's often 30 days. Everyone participates in setting the goals, and at the end, at least one increment -- a usable piece of software -- should be produced.

**Sprint Review:** This is the time to show off the increment.

**Sprint Retrospective:** A Sprint Retrospective is a meeting that's held after a Sprint ends. During this meeting, everyone reflects on the Sprint process. A team-building exercise may also be offered. An important goal of a Sprint Retrospective is continuous improvement.

#### 19. What is triaging?

**Ans**: When project is delivered to testing team, they will identify some bugs and report those bugs using bug reporting tools like Bugzilla and Zira. Before assigning those defects to developers directly Developers and Testers get into a call for understanding in which scenario defect is identified. This discussion related defects among developers and testers is called Triaging.

#### 20. How tester will report the bug in your code?

Ans: Using JIRA (Bug Reporting Tool) (We can Bugzilla also)

#### 21. In your resume you mentioned Linux operating system, tell me some Linux commands?

Ans: I have explained some Linux commands like tail, head, copy, vim, ls, -ltr etc.

#### 22. How many environments available for your project?

Ans: DEV, SIT, UAT, PILOT and PRODUCTION)

#### 23. Which source code repository server you are using in project?

Ans: SVN (You can say CVC, Clear Case, GIT HUB etc.)

#### 24. What is the complex situation you have faced in your project, how you resolved it?

**Ans:** I have explained one daily batch execution scenario which takes much time to process all the triggers and I have told that we resolved this issue with Parallel instances using ORA-HASH and Executor Services)

Interviewer: Good Ashok, nice to talk with you.... Do you have any questions for me?

Me: Yup, I have few questions.

Interviewer: Go head

#### Me:

- o Is this recruitment for Resource pool or for specific project?
- What is functional domain of this project?
- O How big is the team size for this Project?
- Is there any chance to get Onsite Opportunity?

Interviewer: Answered all my questions and told me to wait outside, our HR will get back to you...

After 15 mins..... HR came (Lady) took me to her cabin for HR Discussion and asked few questions

# **HR Discussion**

HR: Hey Ashok, how are you doing?

Me: I am good, thanks for asking... how are you doing?

HR: Fine Ashok, Its already late... I don't take much time... Just give me 10 mins we can wrap up our discussion

Me: No problem... you can take our own time... Anyhow i took half day leave from my Manager.

**HR:** Oh is it... good..! Ashok, I got positive feedback from Both Technical and Project Round Panel members.... Congratulations... You are selected...

Me: Thankyou...!

HR: What is your notice period?

Me: 2 months

HR: Is it negotiable?

Me: No

HR: Okay, How much hike you are expecting...?

Me: xxxxxxxxxxx....

Package discussion continued for next 3 mins... and done with HR interview and HR told that we will get back to you in 3 business... You can leave for the day.

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