**Prasant**

**EXPERIENCE SUMMARY**

* **Around 16 years** of experience in **Core Java, OOPS**, and developing **N-Tier Architecture Applications** in Client Server and Web technology using **Java/ J2EE and MVC** as Designer/ Developer/ Lead/ Architect
* **Around 9+ years** of work experience in Finance - Derivatives, Fixed Income, Equities, Mutual Fund, Online Trading, Trust/ Trustee Services, Account Opening, Portfolio Management, Investment Banking, Asset Management, Wealth Management, and Risk Management
* **Around 8 years** of experience in **SOA** environment and **more than 5 years** of experience in **ESB**
* **Around 6+ years** of experience in using **Agile methodology** and **around 6+ years** of experience in **Relational Database Management Systems** and **PL/SQL** stored procedure programming knowledge
* Experience in developing software applications in **AngularJS** using components

**EDUCATIONAL QUALIFICATIONS**

* Bachelor of Engineering (Electrical and Electronics), Manipal Institute of Technology

**TECHNICAL SKILLS**

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| --- | --- |
| **J2EE Technologies** | Servlets 2.3/ 2.4/ 2.5, JSP 1.2/ 2.0, EJB2.0, Multithreading, Applets, JDBC 2.0/ 3.0, Java 1.x, JMS, UML Use Case, Class Diagram, Sequence Diagram |
| **Application Servers** | Apache Tomcat Server 5.0/ 6.0, IBM WebSphere Server 6.1/ 7.0, Bea WebLogic Server 8.1/ 10.0, JBoss, RAD 7.0 |
| **ESB** | Mule ESB, JBoss Fuse |
| **API Manager** | CA API Manager, WSO2 API Manager |
| **Web Tools/ Languages** | HTML, XML, INKML, CSS, DHTML, ANT, JavaScript, CSS, Ajax, Widgets, WSDL, Maven, XQL, Web 2.0 RSS, Mashups, Wikis, Rich Internet Applications (RIA), XSL, XSL FO, XSP, Angular JS |
| **Framework** | MVC, Struts 1.0/ 1.1/ 1.2/ 2.0, Hibernate 2.0/ 3.0, Spring 1.0/ 2.5/ 3.0, Cocoon, IBM BTT 6.x/ 7.x, VMWar, Angular JS |
| **Databases** | Oracle 8i/ 9i/ 10g, MS SQL Server 2000/ 2005, DB2 9.0/ 9.5 |
| **Languages** | C, C++ with OOPS, Java 1.2/ 1.3/ 1.4/ 5.0/ 6.0/ 7.0, J2EE 1.3/ 1.4/ 5.0 |
| **Design Patterns** | Factory, Abstract Factory, Singleton, DAO, DTO, Federation Pattern, Façade  , Proxy, IOC, AOP, MVC |
| **Operating Systems** | MS Windows 2003/ 2008/ XP/ Vista, UNIX |
| **Tools** | Eclipse 3.3/ 3.4, Rational Rose, RAD 6.0/ 7.5, Net Beans, Web Sphere Studio |
| **Methodologies** | Agile (Scrum), Rational Unified Process (RUP), UML |
| **Version Control** | Visual SourceSafe (VSS), Clear Case, Clear Quest, CVS |
| **Testing** | JUnit |
| **BI Tools** | OLAP, SSAS, SSIS, SSRS |
| **Content Managements** | FileNet P8 3.x/ 4.x, Content Integrator, CFS, Content Manager, Process Manager, Record Manager, CE 4.x, AE 4.x, PE 4.x, DB2 CM 8.5, Documentum |
| **Protocol** | TCP/IP, Soap, RPC, Rest |

**PROJECT EXPERIENCE**

**1. Project:** MSCI API Management Jan**’18 to till present**

**Client: MSCI, NY**

**Role: Lead Software Engineer**

**Description:** MSCI wants to manage enterprise wide APIs through API Manager and maintain security, throttling and other API policies centrally at the enterprise level

**Responsibilities:**

* Interacted with different business group and understood the requirement
* Defined the Use Cases and documented the same
* Deployed VMs in Azure Cloud
* Developed Front End web application using HTML5, CSS3, JavaScript, Bootstrap and Angular
* Created, imported and Published SOAP and REST APIs in CA layer7 API Manager
* Defined and applied OAuth2 authentication to the APIs
* Applied TLS2 security policy to the APIs
* Implemented orchestration
* Defined policies in CA API gateway policy Manger
* Integrated ForgeRock Open DJ with CA API Manager
* Used CA API Gateway Policy Manger 9.1.0 and Developer Portal
* Published REST service using Developer Portal
* Applied Evaluate JSON path Expression, Asymmetric key Decryption, Base64 Decode, Limit Availability, Apply Rate Limit, Limit Message Size, Apply Throughput Quota, Validate JSON Schema, Validate Against JSON Document Structure Threat, Include Policy Fragment Assertions
* Installed the OAuth Toolkit (OTK)
* Configured OTK User Authentication against ForgeRock IDP
* Defined assertions and creating policies in Gateway Policy Manger
* Installed CA API Gateway Policy Manager
* Used SoapUI for REST call testing

**Environment:** JDK1.8, Eclipse Mars, Core Java, SOA, Angular RESTful Web Services, CA API Manger 9.1.0, Azure Cloud, Virtual Machines, SOAP API

2**. Project:** MIFID2 April**’17 to till Dec ’17**

**Client: UBS,** **Weehawken**

**Role: Lead Software Engineer**

**Description:** UBS is building a framework to comply to MIFID2 regulations which seeks to make EU OTC derivative market safer by laying a set of regulations which the financial companies needs to adhere to.

**Responsibilities:**

* Interacted with different business group and understood the requirement
* Defined the Use Cases and documented the same
* Developed, published and invoked REST GET, POST, PUT, DELETE APIs for CRUD operation of Outage information
* Implemented Angular service calls using Angular Factory and also used Angular for making restful API calls and data binding.
* Developed, published and invoked REST GET, POST, PUT, DELETE APIs for CRUD operation of Cost information
* Used JPA for persistence.
* Used Java programming for helper and DAO layer
* Developed Spark java component to transfer data from Oracle to Hadoop.
* Developed Spark java component to transfer data from Cassandra to Hadoop.
* Followed Agile Methodology for biweekly sprints using Rally
* Used SoapUI for REST call testing

**Environment:** JDK1.8, Intellij, Core Java, Micro services, RESTful Web Services, Spring Boot 1.5.1, Spring Data 1.13,JPA 2.1, Hibernate 5, Oracle 11g, Maven,SOAP API, Big data, Hadoop, Angular Hive, Apache Spark, Cassandra

3**. Project:** UBS RPP **Oct’16 to Mar’17**

**Client: UBS, Weehawken**

**Role: Lead Software Engineer**

**Description:** UBS is building enterprise Cloud infrastructure. The UBS FUSE RPP is built on Red Hat JBoss Fuse platform to provide the core capabilities and integrations required to operate Micro services

**Responsibilities:**

* Exposed Citix Netscaler load balancer capability in UBS Cloud Infrastructure as a service(IAAS)
* Developed RESTful POST web services for creating load balancer micro services
* Developed RESTful GET web services for read load balancer micro services to return the entire structure of a load balancer by load balancer id
* Developed RESTful DELETE web services to remove load balancer micro services
* Deployed the application in Cloud Foundry (PAAS)
* Used Java programming for helper and DAO layer
* Followed Agile Methodology for biweekly sprints using Rally
* Used SoapUI for REST call testing
* Used JAX RS API and Apache CXF

**Environment:** JDK1.8, Eclipse Mars, Core Java, SOA, RESTful Web Services, Apache CXF, Jackson, Red Hat JBoss Fuse, Apache Camel, GIT, Maven, Agile

**Client**: **CLS, NY Jul’15 to Sep'15**

**Role: Lead Software Engineer**

**1. Project:** Online Merchant Financing

**Description:** An application is developed where CLS bank will be able to do netting and settlement of FX for its members

**Responsibilities:**

* Developed RESTful POST web services for creating Instructions from the member banks
* Developed RESTful GET web services for getting the status of Instructions
* Developed RESTful GET web services to get the Obligation amounts/ transaction state/ settlement amount
* Used JAX RS API and Jersey framework, JAXB and Jackson to convert JSON to Java object and Java Object to JSON and finally to Protobuff
* Interacted with the business to understand business requirement and prepared design doc

**Environment:** JDK1.8, Eclipse, Core Java, IBM WAS 7.x, Tomcat 8.0, Big Data NoSQL Apache Cassandra, SOA, Jersey 2.2.1, Jackson, AngularJS

**Client**: **Amex, NY Oct’14 to Jun'15**

**Role: Senior Software Engineer**

**2. Project:** Online Merchant Financing

**Description:** An online application is developed where a merchant can go and apply for loan, get the offer, upload supporting documents, accept the offer and sign online

**Responsibilities:**

* Developed RESTful POST web services for sending the contract document from AMEX to DocuSign
* Developed RESTful POST web services for viewing the contract by merchant and signing online
* Developed RESTful GET web services to get the signed contract from DocuSign to AMEX
* Developed RESTful POST web services for uploading of supporting documents from Merchant to AMEX
* Set the security authentication in request header
* Java IO programming for picking up a PDF file, converted into Input Stream then Byte Stream and encoding it to base 64, writing it to Data Output Stream of the Output Stream of Connection and attaching it as web service POST request body
* Java IO programming to convert Input Stream to Byte Stream then decode using Base64 and writing it as PDF file through File Output Stream
* Used XML XPath to retrieve Envelope ID from first web service response and Embedded View URL from response of second web service call
* Coded JSP UI layer for calling web services through Java Action class on click of Finish button after the Merchant online signing is complete
* Used Java Session for storing envelope ID as response of first web service call and use it in second and third web service call request. Storing the ID value in the session in Java Action class and retrieving session value in the JSP
* Retrieved finish event from the request of landing page
* Used core Java Collection HashMap and core Java generics
* Followed Agile Methodology for biweekly sprints using Rally
* Used SoapUI for web services call testing
* Used JAX RS API and Jersey

**Environment:** JDK1.7, Eclipse, Core Java, IBM WAS 7.x, Tomcat 7.0, Oracle 11g, SOA, Apache HttpClient, RESTful Web Services, Hibernate 3, Jersey 2.21

**Client**: **BNY Mellon, NY Jun’12 to Sep’14**

**Role: Project Lead**

3**. Project:** Enterprise Payment Hub Way

**Description:** BNY Mellon is developing an enterprise payment hubway. It is a single point of entry for any kind of payment through the bank, like trading or portfolio management services or asset management services. A SOA solution using Mule ESB is developed for the purpose. It is called OPF which processes swift messages

**Responsibilities:**

* Estimated project effort, time and resources needed for various tasks and components of the application
* Managed and Coordinated a team of 30 people both, onsite and offsite of different groups like development, testing, monitoring, deployment, back-end, Developed high level plan for project estimates
* Designed and developed Java Components for different business services and deployed the web service layer
* Documented the Detail Design document and did SOA Orchestration and SOA governance
* Analyzed WAS logs to ascertain whether it is environment or data or DB issue and Raising JIRA issues
* Monitored HP Diagnostics Dashboard for performance issues, Monitored HP Open view messages and troubleshooting
* Followed Agile Methodology for biweekly sprints, Documented FRD and Created Release Management Documents

4**. Project:** VaR Back Testing

**Description:** BNY Mellon is required to implement VaR Backtesting in order to comply with the regulatory requirements of Basel 2.5. The company is required to divide its portfolio of positions subject to market risk regulatory capital into a number of significant sub-portfolios. For each sub-portfolio, the company is required to calculate the p-Value on each weekday

**Responsibilities:**

* Core Java programming to parse CSV files and calculate p-Value
* Used Collection APIs such as Hash Set, HashMap. Array List and generics and File IO – File Input Stream, Data Input Stream, Buffered Reader, File Writer, and Print Writer to read and write in file
* Used JSK 1.7 new features of try with resources, multiple catch in a single block and limited type interference for generics
* Used Core Java programming for pre-processing of the Clean P&L files to generate input feeds specific to FX Spot Forward and FX Nostro records
* Implemented a check sum functionality to validate whether all records in the VaR position reports (input files) have been accounted for in the output reconciliation reports
* Used Shell programming to create a directory structure in order to handle date-rollover on the production server for VaR Backtesting
* Used Shell Programming to send emails with the reconciliation results as attachments and transfer reports to the Windows server so that the business users can verify and validate the results

**Environment:** UNIX, JDK 1.7, Eclipse Indigo, Core Java, IBM WAS 7.x, IBM MQ 7.x, HP Diagnostics, Oracle 11g, SOA, MS Project, IBM Rational Application Developer, Mule ESB, Boss

**Client**: **JPMC, NY Jul’11 to May‘12**

**Role: Lead Developer**

5. **Project:** WSS Service Desktop

**Description:** In SOA environment there is a Service Desktop Application which is responsible for creating workflow on receipt of email

**Responsibilities:**

* Used core Java programming to develop reports from the error message stored in database as xml blob
* Used Collection APIs such as Hash Set, Array List, Collection frequency to evaluate the frequency of each error data and File IO to read and write in file
* Used SoapUI to test the Web Service calls to various services which SD uses to get Client, Contact, Income and Billing Information
* Installation and configuration of ESB Mule
* Installation and configuration of James
* Followed Agile Methodology

**Environment:** UNIX, JDK1.6, Eclipse, WebSphere Application Server 7.0, Core Java, Mule, James, JBoss

6**. Project:** COE Asynchronous Call

**Description:** This is an e-commerce portal and application having portfolio management and online trading features for exchanges like NASDAQ, NYSE. For the financial advisors, this project is aimed to give details like foreign or domestic exchange traded and name of the exchange of the symbol selected by the FAs asynchronously before finally submitting the page for trading

**Responsibilities:**

* Followed Agile Methodology
* Installed RAD 7.0 and Ajax programming to make asynchronous call to the server from the client
* Servlet programming to process the request sent by the client at the server end
* Core Java File IO programming to read a file and lookup for the symbol information in the file at the server
* Used LOG4J for error logging and Unit Testing

**Environment:** UNIX, Mainframe, RAD 7.0, WebSphere Application Server 7.0, Ajax, Servlet, JavaScript, Core Java, JDK 1.6, JSP, Boss

**IBM Sep’08 to June’11**

**Designation: Senior Software Engineer**

**1. Project:** SSP Schedule Service/

**Description:** In SOA environment there is Mule ESB which routes the service request from the consumers to the appropriate service provider. At times there is outage of the service provider. The consumer must know regarding the planned outage and incase of unplanned when is the expected time for it to be up and running. A scheduling service for the ESB is created using iCal that will help achieve it. One can create outage schedule service, update schedule service, fetch service or delete the schedule service

**Responsibilities:**

* Followed Agile Methodology and Used Hibernate for Object Relational Mapping
* Involved in Core Java coding for functionalities like not to create duplicate schedule service, schedule to be created only after 5 minutes of current time, schedule duration to be more than 5 minutes of current time, no update of past schedule
* Exception handling - Created user defined exception using throw and sending appropriate message to the consumer
* Exposed it as web service, built using Ant 1.2, deployment in JBoss, writing test cases, testing request in SoapUI
* Used Web Services (XML, WSDL, SOAP) for communicating data
* Documented in wiki

**2. Project:** XML Parser Performance Evaluation

**Description:** Performance testing is done to evaluate which is the fastest parser. Several SAX, DOM, STAX based parsers like VTD XML, XERCES, Piccolo, XPP3, StAX, Woodstox, Java native DOM are tested using Apple in house framework. It is measured in multithreading environment and using parameters such as CPU and memory consumption and in various time buckets and rate achieve it

**Responsibilities:**

* Followed Agile methodology and Installed Eclipse Helios
* Core Java coding for parsing 8kb of data using various DOM, pull and push parsers
* Used Thread Local and Java Concurrency Reentrant Lock, Count Down Latch in multithreading environment, File IO for reading the data, Java generics and exception handling
* Performed Testing using Apple in-house framework in various buckets and multithreading environment
* Compared the result of various parser testing and came to the conclusion which is the fastest parser
* Documented in wiki

**Environment:** Linux/ MAC, Oracle 11g, Axis 1.2, Eclipse Galileo, Web Service, SOAP, SoapUI, JDK 1.6, ANT 1.2, JBoss 6.0, Hibernate 3.0, Wiki, Mule ESB

**3. Project:** Account Opening and Loan Origination Solution

**Description:** Portal SOA assets were developed that will help in the account opening, loan origination process and content management of the banking and finance industry using IBM Banking and Transformation Toolkit and FileNet P8

**Responsibilities:**

* Involved in Developing Web Application with Full Software Development life Cycle (SDLC) from Design to Deployment using agile methodologies
* MVC architecture is implemented by struts, spring and BTT framework
* Developed a controller Servlet that dispatches request to appropriate Action Classes
* Configured the struts-config.xml
* Presentation layer development using JSP, HTML for registration Page
* Struts Validator framework is used to do client side validations
* Set the development environment on RAD and integrated with WebSphere Application Server 7.0
* Implementation of Single Sign On(SSO) for Role Based Permission(RBP)
* Installed IBM BTT 6.0/7.0, IBM FileNet P8 – AE, CE, PE, CFS 4.x
* Used Web Services (XML, WSDL, SOAP) for communicating data between different applications
* Used Spring AOP for cross cutting concerns and IOC for dependency injection
* Used Hibernate for performing the Database Transactions and Object Relational Mapping
* Extensively worked on BTT jsptaglibs web 2.0, widgets, mashups, RSS, JavaScript, CSS
* Wrote Test cases using JUnit to validate the application flows in different scenarios in the standalone application

**Fidelity Investments Sep’06 to Aug’08**

**Designation:** Software Developer/ Analyst in E-Business/ E-Commerce dealing in online trading

**1. Project:** Short Term Redemption Fee Waiver

**Description:** This is an e-commerce portal and application having portfolio management and online trading features for exchanges such as NASDAQ, NYSE. This helps the correspondent in maintaining the portfolio of their clients and trading various securities like Mutual Fund, Fixed Bond, Equities, and Derivatives. If a Mutual Fund is redeemed before the locking period there is Redemption Fee Waiver attached to it which the customer has to pay. But under certain circumstances this redemption fee can be waived. This project seeks to add functionality that will allow correspondents to have the ability to assign, validate and process Redemption Fee Waivers to mutual fund orders placed through Streetscape while trading

**Responsibilities:**

* Involved in the complete Agile Methodology Software Development Life Cycle (SDLC) and UI development in Core Java, JSP, HTML
* Front end is based on MVC architecture using struts, Tiles and Validator framework
* Involved in Configuring tiles-def.xml, Web.XML and struts-config.xml according to the strut framework
* Used LOG4J for error logging at the development box and used ANT and Maven for building the deployable EAR/WAR components
* Used Spring Framework’s IOC Dependency Injection to inject Service Object using Service Locator Design Pattern into Action Classes
* Extensively worked on Spring Bean wiring, Spring DAO and Spring AOP modules
* Used WebSphere Application Server for deploying various components of application
* Developed the application using WSAD and deployed in WebSphere Application Server
* Implementation of Single Sign On(SSO) for Role Based Permission(RBP)
* Requirement analysis and Project Estimation

**2. Project:** OTR Wire Field Expansion

**Description:** This is an e-commerce web portal and application having portfolio management and online trading features for exchanges such as NASDAQ, NYSE and trading various securities like Mutual Fund, Fixed Bond, Equities, and Derivatives. This project is aimed to enhance CACTUS wire processing to meet regulatory requirements associated with federal regulations on wire transfers as defined by Anti Money Laundering and Risk groups within Fidelity Brokerage Company

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle of Agile Methodology
* Involved in the design of the project and represented the requirements through the diagrams using UML
* Designed the Web-Tier using Struts MVC and developed user interface using JSP, HTML, DHTML and JavaScript
* Used Spring Framework’s IOC Dependency Injection to inject Service Object using Service Locator Design Pattern into Action Classes
* Extensively worked on Spring Bean wiring, Spring DAO and Spring AOP modules
* Used Data Structures such as HashMap generics
* Involved in developing test cases for testing the application using JUnit
* Developed the core business functionality using WebSphere Studio (WSAD) as IDE
* Developed the User interface screens using HTML and JSP
* Implementation of Single Sign On (SSO) for Role Based Permission (RBP)
* Project Estimation

**3. Project:** RSA Beacon

**Description:** This is an e-commerce portal and application having portfolio management and online trading features for exchanges like NASDAQ, NYSE and trading various securities like Mutual Fund, Fixed Bond, Equities, and Derivatives. This project is aimed at addressing the ongoing need to offer enhanced security on rep and consumer sites. This particular initiative contemplates a third party vendor solution to receive and retain a site’s user-level information for additional verification upon each successful login. This RSA Beacon project seeks to add a one pixel transparent image URL to a post-login landing page that will pass client site unique identifiers for each users work session. The image URL will be entitlement driven at the client level and will be called only once per successful login

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle and Agile Methodology
* Involved in the design of the project and represented the requirements through the diagrams using UML
* Core Java development as action components and UI development using JSP, HTML, JavaScript in MVC
* Used Spring Framework’s IOC Dependency Injection to inject Service Object using Service Locator Design Pattern into Action Classes
* Extensively worked on Spring Bean wiring, Spring DAO and Spring AOP modules
* Used data Structures such as HashMap and Array List
* Developed test cases for testing the application using JUnit
* Developed the core business functionality using WebSphere Studio as IDE
* Used ClearCase version control for source code
* Interacted with and monitored coding done by offshore team of developers
* Implementation of Single Sign On(SSO) for Role Based Permission(RBP)
* Engaged in Project Estimation

**4. Project:** Fidelity Trustee Services

**Description:** This is an e-commerce portal and application having portfolio management and online trading features for exchanges such as NASDAQ, NYSE. Advisor Channel is an application for the use of financial advisors and Trustees. The advisors/trustees can maintain and view the portfolio details of their clients on this application. They can also trade various security types like Fixed Income, Equities, and Derivatives using this application

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle and Agile Methodology
* Involved in the design of the project and represented the requirements through the diagrams using UML
* Core Java development as action components and UI development using JSP, HTML, JavaScript in MVC
* Used Spring Framework’s IOC Dependency Injection to inject Service Object using Service Locator Design Pattern into Action Classes
* Extensively worked on Spring Bean wiring, Spring DAO and Spring AOP modules
* Involved in developing test cases for testing the application using JUnit
* Developed the core business functionality using WebSphere Studio as IDE
* Used ClearCase version control for source code
* Interacted with and monitored coding done by offshore team of developers
* Implementation of Single Sign On(SSO) for Role Based Permission (RBP)

**Environment:** UML, Java 1.4, JSP 1.2, Servlets 2.3, Log4j, WebSphere Studio 5.0, WebSphere Application Server 5.0, Struts 1.1, Spring1.0, UNIX, XML, JavaScript, JDBC, CVS, HTML, Web Services, JUnit, Rational Rose, RAD6.0, IBM WebSphere Server 6.1

**HP, Bangalore Sep’04 to Aug’06**

**Designation: Software Developer**

1 **Project:** COFFEI

**Description:** COFFEI (Common Forms Framework for Electronic Ink) is a common framework for various interactive and non-interactive input devices that are used to fill up the Forms. This application is generally form filling application, but here you can fill the form using a non-interactive paper based pen-like devices and you can edit and review the form submitted using interactive pen based tablet pc like devices

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle
* Core Java development for API Libraries for the framework
* Used multi- threading programming like wait, notify, sleep
* Used Web Services (XML, WSDL, SOAP) for communicating data
* Used JMS for asynchronous call
* Database connection code using JDBC and PL/SQL programming

2**. Project:** HP-Digital Pen and Paper Form Automation System

**Description:** The HP Forms Automation System (HP FAS) is an end-to-end enterprise solution that drastically improves the way data from paper forms is gathered and processed. With HP FAS, you can print digital paper forms and fill them out with a digital pen. The handwritten strokes will be automatically captured as they are drawn and will be stored in the digital pen for later processing in the corporate backend systems

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle
* Involved in the design of the project and represented the requirements
* Used multi- threading programming like wait, notify, sleep
* Core Java development for API Libraries for the framework
* Database connection code using JDBC and PL/SQL programming

**Symphony, Bangalore Oct ’03 to Sep 04**

Client - Pepsi Co. Inc. Chicago, IL Jun’02 to Sep’04

**Designation: Software Developer**

**Description:** WhitelLight 4.2 enables to both understand historical data and explore potential future actions and outcomes using interactive analysis.

**Responsibilities:**

* Participated in all the phases of Software Development Life Cycle
* Involved in the design of the project and represented the requirements through the diagrams using UML
* Core Java development for the API Libraries
* Used multi- threading programming like wait, notify, sleep
* Used Web Services (XML, WSDL, SOAP) for communicating data
* Used CVS version control for source code
* Used JUnit for unit testing
* OLAP Cube modeling using and MDX

**Environment:** UML, Java 1.2, JSP 1.1, Log4j, WebSphere Studio 5.0, WebSphere Application Server 5.0, Tomcat 3.x, XML, Web Services, JUnit, Rational Rose, Oracle 8i, MS SQL Server 2000