

# JAVA CAPABILITIES

## The Company Profile:

InfoSage Systems is a Global IT Services and Consulting company providing end-to-end IT services and technology solutions to medium and large size enterprises. We aim to provide best of breed solutions with core focus areas encompassing Application development (Microsoft & Java), ERP (Oracle Applications) and Quality Assurance (Software Testing) services. With 350+ employees worldwide (Headquarters in San Jose, USA), we use a low-risk Global Delivery Model (GDM) to accelerate schedules with a high degree of time and cost predictability.

## JAVA (Application Development) Services:

InfoSage has built reputation with proven track record for offering the widest range of services in the application development services industry. We have extensive experience in developing java applications (both product based and project based) using technologies like J2EE, J2ME, JSP, Struts, Websphere and web logic. We have experience with various bug operating systems such as MS Windows, Unix and Linux.

We have experienced group of high-quality software engineers with an object background, and with business and communication skills. Software engineering methodologies using CASE tools and structured programming techniques are followed by all our engineers. The same as our other areas of expertise, the Java development process is maintained in accordance with unified processes; therefore the customer can always be confident of receiving the results that desired when starting the project.

## Case Study – GCAP (Product Development):

### Project Overview

Client is one of the leading entrepreneurs in Dallas with rich experience in Sales/Marketing along with strategy focused consultancy and execution. Client's is currently in the process of developing a new product in partnership with JASS & Associates. The main aim of this product is to target a vast user base for this Generalized Capitalization software, using which even a common person can dynamically create their own tool(s) to meet their business and operational needs.

Due to IP Issues and our NDA with our customer we cannot provide more information on this product without the prior approval from our Customer.

## Technology Overview

- Java & Swings
- Tom Sawyer Tool
- JRules
- SQL Server & JDBC
- Eclipse IDE
- MS Windows Operating System (Development environment)

## KT Process

- Brainstorm sessions, understanding documents and Net meetings
- Client managed Project and KT sessions on requirement basis

## Architecture & Design

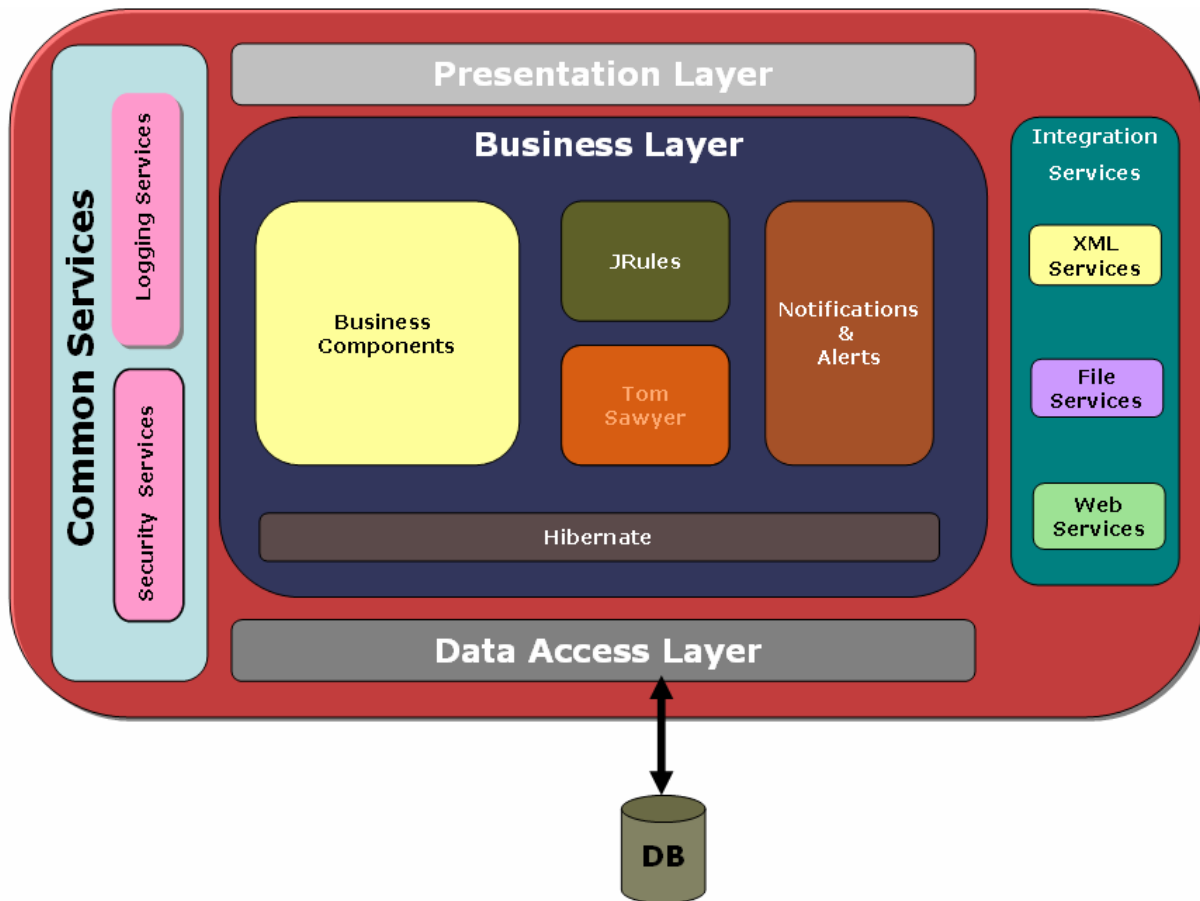
JASS developed the product architecture which was loosely coupled with User Interface, business, and database layers. This architecture would enable the product to be more scalable and extensible both technically as well as functionally.

Java J2EE technology was chosen for the development of this product. Java is a platform independent development and deployment platform, which provides high end technologies for product development.

Current product delivers a rich user interface through the use of advanced Java Swings. It also uses Java based Tom Sawyer tool for graphical representation, to interpret complex information. The business layer factors with good performance by using components like JRules for the Rule based logic and ASM for dynamic class creation. Finally, the database layer uses Hibernate as an interface to the database, to provide the flexibility of database independence.

All Application design was done using Rational Rose. Sequence diagrams, collaboration diagrams and class diagrams were designed and all the skeleton code was derived out of Rational Rose.

Below is the high level product architecture diagram for reference.



## Research & Development

While the product was evolving, JASS had to invest its resources and time in doing multiple Proof of concepts (POC) on the open source tools available on the web. Our customers faced the challenges of "Time to Market" and ensure that the initial product development is complete with a budget he had before the revenue flows into him by purchasing the product by his customers.

**JRules:** (<http://www.ilog.com/products/jrules/>)

As the product was evolving JASS proposed to integrate the product with an open source rules engine instead of developing and creating a new rules engine, as stated above, the goal was to reduce cost, not to reinvent the wheel and more importantly provide our customer Time to Market.

One of the requirements of the product was to allow the user to manipulate the rules as and when required. JASS through its COE (Center Of Excellence) did several POC's on various available product and Identified JRules as the best one which suited the customer requirements and the overall architecture.

**Tom Sawyer:** (<http://www.tomsawyer.com/home/index.php>)

Another Flexibility required within the product was to visualize the interpret information. Again JASS COE did several POC's and finally recommended the Tom Sawyer Tool because of its flexibility and ease of integration with the overall architecture.

**Hibernate:**

The product had to be unique with no dependency on any other products for its implementation and operation. One of the challenges that surfaced during the time was how to separate from databases. The solution was provided by the Hibernate technology in Java. Today the product can work seamlessly on any databases that are commercially available in the market.

**Development & QA**

Four developers, one QA test engineer and project management support from JASS. Support from COE teams. Product development phase-1 was completed and demonstrated successfully to potential end-users. Currently phase-II priority matrix implementation & testing is in progress.

**QA Activities were**

- Preparation of Test Plan and Strategy
- Identifying and preparation of test environment
- Write test cases
- Create RTM (Requirements Traceability Matrix)
- Execute test cases and report defects. Track and close defects.
- Causal Analysis for defects
- IQR (Internal Quality Audits) & PQG (Project Quality Group Audits)
- Release Notes

**Project Management**

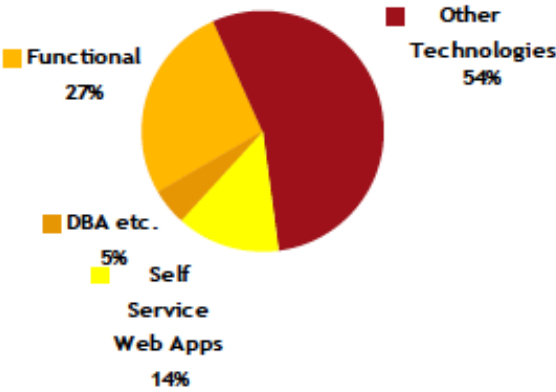
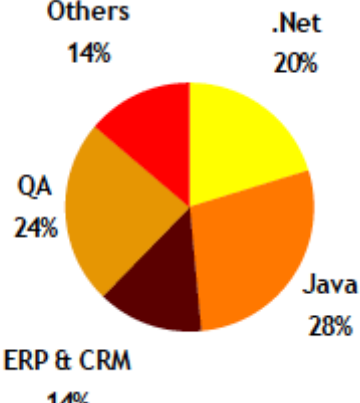
- Project Manager Identified at the project inception phase
- Project Plan which includes schedule plan, resource plan (HW, SW, HR), Communication plan, Quality plan, Risk Plan and Mitigation Strategy, Project Tracking mechanism, Metrics collection, Plan for Internal Audit, PMR, PMX & PQG Audit.
- Process tailoring and implementation
- Weekly Conference Calls (project status update & KT sessions)
- DSR (Daily Status Report), WSR (Weekly Status Report) and TSR (Time Sheet Report)
- Weekly Summary Report – At the end of each week, JASS creates a weekly report to provide client additional information.

- Monthly Reports
- Quarterly project review meetings
- Up-front communication & process adherence to reduce geographical distances and to work as a single global teams

### Final Delivery

Till date, we have successfully delivered overall product user interface, phase-I business & database requirements and completed the documentation.

### Associates Profile:

<p><b>Total Global Strength : 354</b></p> <p>Functional and Project Management Skills : 94            Self Service Web Application Products : 49            Other Technologies : 193            Systems Admin/Apps DBA : 18</p>	 <p>A pie chart illustrating the distribution of associate skills. The largest segment is 'Other Technologies' at 54%, followed by 'Functional' at 27%, 'Self Service Web Apps' at 14%, and 'DBA etc.' at 5%.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Functional</td> <td>27%</td> </tr> <tr> <td>DBA etc.</td> <td>5%</td> </tr> <tr> <td>Self Service Web Apps</td> <td>14%</td> </tr> <tr> <td>Other Technologies</td> <td>54%</td> </tr> </tbody> </table>	Category	Percentage	Functional	27%	DBA etc.	5%	Self Service Web Apps	14%	Other Technologies	54%		
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<p><b>Technology Profile of InfoSage: 74</b></p> <p>Microsoft Skills : 15            Java Skills : 21            ERP &amp; CRM Skills : 10            QA Services : 18            Staffing &amp; consulting services: 10</p>	 <p>A pie chart illustrating the technology profile of InfoSage. The largest segment is 'Java' at 28%, followed by 'QA' at 24%, '.Net' at 20%, 'ERP &amp; CRM' at 14%, and 'Others' at 14%.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>.Net</td> <td>20%</td> </tr> <tr> <td>Java</td> <td>28%</td> </tr> <tr> <td>ERP &amp; CRM</td> <td>14%</td> </tr> <tr> <td>QA</td> <td>24%</td> </tr> <tr> <td>Others</td> <td>14%</td> </tr> </tbody> </table>	Category	Percentage	.Net	20%	Java	28%	ERP & CRM	14%	QA	24%	Others	14%
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