

## Jim Barritt

### Tech Lead, Developer, Lead Consultant



Jim has over 14 years experience as a software engineer. He has worked on projects from mobile computing through accountancy software, online travel and news media industries. He joined ThoughtWorks one year ago as a lead consultant and is excited to bring his experience to such a highly skilled and focused company. Jim has previously worked for several years as a technical lead and has a strong interest in the beauty of object oriented design. He has coded with most of the Java API's from swing to the connector architecture of JEE. He has had extensive experience in designing and implementing software frameworks, particularly involving meta-data driven systems. Jim is also excited about the agile process and has enabled clients to take up agile principals in his roles previous to TW. Before joining TW, Jim completed a Master of Science degree at the Victoria University of Wellington, New Zealand, for which he received a first class degree. His thesis topic was computer simulation of insect foraging behavior and its effects at multiple scales.

### ThoughtWorks Experience

#### **Client: Financial Spread Betting Company, Lead Consultant**

Jim worked on this project as a Lead consultant, providing technical experience and support for a new TW team with less Java experience. It was a Greenfield project and allowed Jim time to work at a low code level, being instrumental in shaping the design of the system under intense time pressures. Jim was on the project in the early stages where he helped firm up the technical architecture. It also provided further experience with HTTP based apis. At the beginning of the project Jim also worked with the client developers and was successful in gaining their trust and helping them to develop both technically, and understand agile practices.

#### **Client: Voice to Text processing company, Tech Lead**

Jim rolled onto this project to cover for the tech lead, who was on holiday. The project was highly technical and has an unusual technical profile in that there was no UI and performance was critical. The system involved creating a HTTP based service to could store and retrieve files at a very high performance level. Jim initially worked with the team during the performance-testing phase. This involved a rigorous and methodical approach and deep technical involvement in tweaking the JVM garbage collector. It also involved some interesting work in automating deployment of both the application and the performance harness (JMeter) into the performance environment. Subsequently Jim worked with client developers to integrate the software to the existing infrastructure. This was a messaging middleware application written in C#. There were several major challenges to this work. Firstly the program management situation was rather complex, with the project manager being made redundant half way through the project. The code-base of the middleware was very complex and had little test coverage. Jim soon became recognized as the Tech Lead for this team (it had not been an explicit definition with the client) working with several client devs and a QA. The team had no previous experience of agile methodologies. Jim was able to successfully begin mentoring them into the process of stories, story walls and automated testing. At the same time he was also delivering production code and outwardly managing expectations to the program management. This was a very challenging role which demonstrated Jim's abilities to work on many dimensions whilst still remaining focused on delivery. He received very received positive feedback for his ability to deal with the situation both from fellow TW developers and client developers. He felt it was a valuable learning experience in terms of consultancy.

## **Client: Guardian Unlimited, Tech Lead**

Jim started on this project as a developer for his first project for TW. He spent a short time working on various teams and becoming familiar with the code base. Working in such a large team, he recognized the need for a wider technical communication channel than was provided by pair programming and tech lead / architect communications. With this in mind he suggested a bi-weekly group get together for all the developers called "Design Time" the leaders of the project agreed this and Jim subsequently became the driving force to ensure these meetings took place. Everyone seemed to enjoy them and found them a useful addition to the communication channels, especially for achieving a collective understanding of aspects of the architecture of the system. Jim facilitated these meetings, with members of the team presenting on different topics. The idea has been accepted and will continue under the supervision of GU staff after the TW roll off. Of particular interest was that the client saw enough value in the meeting to allow it to occur within work time rather than during non-billable time (e.g. lunch).

Jim soon demonstrated his leadership skills standing in for tech leads and subsequently mentoring GU staff in the role, whilst also working as a developer which gave him a great insight into the way the process was working at the ground level. After a few months, Jim was asked by the client to step into a Tech / Team lead role where he was responsible for delivering a major component of the GU project, the migration of the Guardian Blogs into the new Platform. There were a couple of very intense and high-pressure iterations where Jim led a team of 10 developers, 2 QA's and 2 Client side developers. This was a great experience and helped to refine his ideas about running teams within such a large project. During this time, a second team was also working on stories for this project, and Jim acted as a technical consultant to this team. The requirements for this work were received very late and changed frequently, which demonstrated Jim's ability to work with the client, respond to change and facilitate effective communication within his team, all to very strict deadlines. Once the software was complete, Jim came in to support the launch to the live site, which involved a 24-hour day, demonstrating his commitment to the client and the task in hand.

Towards the end of his time at GU, Jim also became involved in the management of a release, stepping up to the role when the client member of staff was on holiday. This was another exciting experience in facilitation that has helped to shape his ideas about running large teams of developers. It involved coordinating across the entire project ( 5 Teams each of 6 developers) the wrapping up of the code in terms of bug fixing and communication with the client about exactly what features would be released, alongside technical collaboration with the systems team to ensure a smooth release. The release was the first major release with minimal TW presence for GU and went smoothly on time despite high pressure and last minute issues.

In summary, Jim had a great experience at the Guardian, exercising and strengthening his broad understanding of the software development process and technical understanding of software design. One of the challenges of the project was the large number of people involved and this allowed Jim a great opportunity to refine his knowledge and ability in facilitation. He has presented some of his thoughts internally to TW on the subject of "Collaborative Design" which was a result of his thinking on the subject. He also gave this presentation at the client site.

## **Other Experience**

### **Technical Lead, Opodo Ltd**

Opodo is an online travel company that has a strong presence in Europe. Jim was the technical lead for a project concerning the Hotel booking section of the online offering. This project involved a backend of XML messaging integrated with a JEE domain model and JSP / Struts web-end. Jim was responsible for the architecture and

design of a new module to implement a pricing engine to allow Opodo to sell contract specific hotel rooms and control discounting. Jim introduced an agile methodology to the team using a highly iterative approach and attempting to involve the whole team in the design process, promoting group code ownership. Complex business requirement documents were converted to Use cases (or stories).

## **Framework Architect, Systems Union Group Ltd (now Infor)**

Systems Union are a provider of an enterprise accountancy software package called SunSystems. Jim worked as part of the Architecture team developing a JEE based application framework to support rapid development of new modules for the package. This role was highly technical and resulted from several years of working in the R&D department investigating the use of JEE technologies, after initial prototypes of distributed object systems were developed using C++ and RPC. Jim was responsible for the architecture of the presentation layer (both web and PC based. He was also heavily involved in the design and construction of the backend services which were at the core of the framework. The framework itself was meta-data driven, allowing business domain objects to be specified and configured at runtime, reducing the coding effort involved. Jim was also the architect for a rapid development project in Shanghai, China for which he developed a lightweight framework based on the patterns described in Martin Fowler's "Patterns of Enterprise Architecture".

## **IT Director, ESPDirect Ltd**

Jim was a founding director of a small (approx 10 employees) direct marketing company in Oxford. His role was to be responsible for the entire IT infrastructure as well as bespoke software development for use both in-house and for external clients. This position taught Jim a great deal about the mechanics of company organization and dealing with clients in the early phases of a project pitch, and allowed him the freedom to explore software design.

## **Software Engineer, FGS Computer Systems Ltd**

Jim worked for FGS after finishing his undergraduate degree in Zoology. This gave him his first taste of the world of commercial software and involved working on site, under pressure and responding to and gaining the confidence of clients. FGS specialized in mobile computing solutions for van sales companies and this afforded Jim experience of working in this domain, including accompanying drivers in the field for support. It was here that Jim first discovered the basic principals of agile software processes. He worked on a client project which had become a disaster. Every time the users tried to use a feature and error would display. Jim told them to fax a screen print of each error as it happened over to him. This became his backlog. Each day he would receive in the beginning around 20 faxes, fix a small bug and then deploy the code remotely back to the client for the next morning. His was able to track his progress by the decreasing stack of faxes arriving each day until there were none left, by which point he had completely re-written the system in an incremental manner.

## **Skills**

- **Programming Languages:** C#, Java, Javascript, JQuery, C++, Pascal, Visual Basic, R (statistical package), XML, XSLT, SQL
- **Java Specific Experience:** JAVA 6, Spring, Hibernate, XML, XSL, DOM/SAX, Servlet JSP, RMI, JNDI, Java Beans, JMS, Swing, Infobus
- **Distributed Computing:** RESTFUL HTTP services, EJB Sessions / entities, XML Web Services, RMI, sockets, DCOM and COM/COM+, RPC

- **Databases:** MS SQL Server, Oracle, JDBC, DB2
- **Tools:** IntelliJ, Eclipse, NetBeans, Visual Studio, Visio, JUnit, Maven, ANT, XML Spy, Rational Rose, DreamWeaver, JUDE, TTogetherJ
- **Servers:** WebSphere, WebLogic, Resin, Jetty, Tomcat, JBoss
- **Domains:** Flower Wholesalers, Van Sales, Direct Marketing, Accounting, Online Travel, Voice to text processing, online spread betting
- **Methodologies:** XP, RUP

## Education

- **A Grade (Distinction) Msc Ecology and Biodiversity 2008, Victoria University of Wellington, New Zealand. Computer simulation of Insect foraging behaviour and its effects at multiple scales.**
- **Bsc (Hons) Zoology 1994 – University of Edinburgh, UK (Honours project: computer simulation of evolutionary and ecological genetics of meta-populations)**