Stanford eCorner

Birth of Java

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Video URL: http://ecorner.stanford.edu/videos/1509/Birth-of-Java

Polese describes the development of Java at Sun and the various things that made it a success.

Transcript

Along the line, along the way at Sun I found out about secret project back in 1993 and I was now the product manager of an object-oriented building tool. And I found out about a project inside of Sun called Oak. And Oak was a spin off project. It was actually a stealth project that Scott McNealy and Bill Joy and a few of the core executive team at Sun had funded to take a technology that was designed for a future network world and allow those engineers to run with it and see what they can build. They built a prototype that showed what this technology was capable of but it was a language runtime that was revolutionary and I came from the world of C++ so I knew the difference between you know C++ and sort of traditional programming languages and this. Oak was based on actually C++, subjective Cs, small talk, and many existing programming languages but it added a lot of new capabilities, security, the ability to scale potentially to millions of endpoints, size was very compact, a lot of capabilities that made it a much better programming language for what these engineers were envisioning. James Gosling and a team of brilliant engineers were envisioning this future network world. Nobody knew how that would come about but they built a language, the language runtime to basically deliver services in the future that could meet the needs. When I found out about the project, they also found out they needed a product manager which was great and I was looking for a new challenge. So I joined the team as a product manager of Oak and we first we're aiming at the PDA market, then the set top box market.

This is back in again '93 so these were immature industry still. All the kinks hadn't been worked out. The infrastructure wasn't in place so I started thinking back to my days at Intellicorp realizing that a $20,000 set top box probably wasn't going to ignite a market because Silicon Graphics was one of the firms for example it was making the set top boxes. They weren't ready for mass market at that point and the trials that were being launched, the interactive television trials, huge amounts of money, a lot of press and publicity around these efforts but it was just simply too early. And so we started looking around for other ways to take this technology, this language, the language runtime and launch it. Our goal was ubiquity. We knew we had a very powerful technology. This team had built a phenomenal product and we just needed a way to introduce it to the market. And around that time, Mosaic was created and couple of members of the team found it, realized this is the perfect vehicle on which to introduce Oak. And so, we got the blessing from Scott and management team at Sun.

So basically, create an interactive browser, the world's first interactive browser in this programming language and then actually give the language away, published the spec, make it freely available for anyone to use and download and see what would happen. And that's what we did in the fall of 1994 and we started this effort. In the spring of '95, we actually released it and first quietly and we had some friends and companies we had been working with who developed little applications in this programming language that for example which show an animation in a Web page for the first time, or you could move a mouse

over the image of a human body and see MRI images appearing as slices, cross sections. And this was very, very powerful seeing it for the first time because up until then Web pages can only display static text. And when people saw this for the first time, we were all blown away. When I saw what these guys had developed for the first time, it blew me away and we started to realize the potential of the Web not only this programming language Oak but also the Web. We renamed it Java. We launched it in the spring of '95 and really literally overnight it became a sensation and it's really because of the developers. Developers discovered it, downloaded it, built the applets. And people who saw what was possible with the Web got very, very excited.

Part of it was also timing. That was the era of Windows '95. There's a huge launch that Microsoft was doing at the time. And I think a perception that Microsoft is sort of one the platform worse and suddenly here was potentially a curb that was thrown in and so the press also was fascinated with the potential of Java. So a lot of things went into making Java a success but at the heart of it, it was great technology. It was built right from the ground up by very talented team and then developers took it and ran with it and made it a success that it is today. Sun did a great job and I think Scott and Bill and the team were very visionary in giving this project a chance and the results I'm sure all of you are familiar with.