Java History

Background information about Java and how the background affected its development

Java: History

- Computers of the past

Image © University of Pennsylvania
Java: History (2)

- The invention of the microprocessor revolutionized computers

From the “Intel museum” www.intel.com

Image courtesy of James Tam

Java: History (3)

- It was believed that the logical next step for microprocessors was to have them run intelligent consumer electronics
Java History (4)

- Sun Microsystems funded an internal research project “Green” to investigate this opportunity.
  - Result: A programming language called “Oak”

Alumnus James Gosling was voted as the fourth greatest IT person of all time.

Blatant advertisement: James Gosling was a graduate of the U of C Computer Science program.

Java History (5)

- Problem: There was already a programming language called Oak.
- The “Green” team met at a local coffee shop to come up with another name...
  - Java!
Java: History (6)

• The concept of intelligent devices didn’t catch on.

• Project Green and work on the Java language was nearly canceled.

Java: History (7)

• The popularity of the Internet resulted in Sun’s re-focusing of Java on computers.

• Prior to the advent of Java, web pages allowed you to download only text and images.
Java: History (8)

- Java enabled web browsers allowed for the downloading of programs (Applets).
- Java is still used in this context today:
  - Facebook (older version)
  - Hotmail (older version)


Java: Write Once, Run Anywhere

- Consequence of Java’s history: platform-independence
Adding Java Code To A Webpage

- The code can be run through a web browser instead of manually invoked via the command line.
  - These Java programs are ‘applets’
  - How to create a simple Java applet:
    - [http://docs.oracle.com/javase/tutorial/deployment/applet/getStarted.html](http://docs.oracle.com/javase/tutorial/deployment/applet/getStarted.html)
  - How to get an applet to run when your web page is accessed

Java: Write Once, Run Anywhere

- Consequence of Java’s history: platform-independent

<table>
<thead>
<tr>
<th>Mac user running Safari</th>
<th>Web page stored on Unix server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click on link to Applet</td>
<td>Byte code is downloaded</td>
</tr>
<tr>
<td>Windows user running Internet Explorer</td>
<td>Virtual machine translates byte code to native Windows code and the Applet is run</td>
</tr>
</tbody>
</table>
After This Section You Should Now Know

• How Java was developed and the impact of it's roots on the language
• Major players and events in the development of Java