

Some Simple Observations

- Inherits from HttpServlet
- There's no main() method
 who "runs" HelloWorld?
- - HttpServletRequest
 - HttpServletResponse → sent back to the client browser

Compilation – The Hard Way

- javac HelloWorld.java
 - Where is the servlet library?
 - How to include it in compilation?
- Copy HelloWorld.class to the right directory

Compilation – The Slightly Smarter Way

- Set environment variable.bashrc
- Use -d option of javac

Generate HTML

- Set content type to "text/html"
- Output a HTML page using println()
 - Image: Atml >
 - <head>, <title>
- <body>
- Validate
 - validator.w3c.org
 - Sometimes useful for debugging

Package

- The advantages of using packages
- The necessity of using packages
 - A Class without a package qualifier cannot be used in a class that belongs to a package (enforced in JDK 1.4)
 - All servlets generated from JSPs are in packages

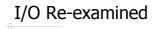
Package Example

- $\ensuremath{\circledast}\xspace$ Package and directory structure
- cs320.stu31.HelloWorld
- package statement
- URL to access a packaged servlet

Servlet Life Cycle

- \$Loaded for the first time init()
- Per request service()

 dispatch to doXxx()
- - When requested by the manager user
 - When the context is *reloadable* and a new version of the servlet is found



Java application

• File

- Input
 Console, GUI
- Input ??Output ??

Servlet

- CLP, Resource
 Output
 Console, GUI
 - Console, G
 File

File I/O Example

- Read nba.txt
- Display the teams and scores in a HTML table

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More About Files

Paths

- Absolute path
- Relative path
- File path on the CS server??
- Permissions
 - Who owns the file?
 - Who can read/write the file?

Servlet Debugging Tips

Debugging servlets could be rather hard

Section 3.8

- Use print statements
- Invest some time in a good IDE
- Netbeans <u>http://www.netbeans.org/</u>
 Eclipse (WTP) <u>http://www.eclipse.org/</u>
- Follow good programming practice
- Check out HTML source
- Restart server