



- ASP is proprietary to Microsoft and only works on certain servers
- **JSP** is an open standard for use with many servers
 - Built on Java
 - **PHP** is open source freeware
- All allow you to insert code, objects, and do text substitutions in webpages



- Not as simple to use as JSP, but easier to install
 - We don't have JSP at Dal FCS
 - Run on the server (like SSI or CGI)
 - Threaded (unlike SSI or CGI)
 - Run inside the single JVM owned by http

But what about mod perl?

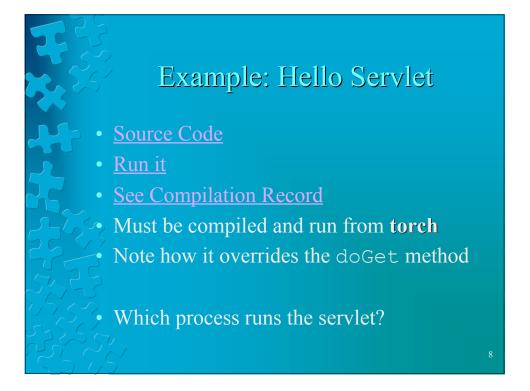
- mod_perl is server-side and light weight (like a thread)
- Java has some network support that is more sometimes more convenient than using perl
 - Particularly for session tracking

Session Tracking With Servlets

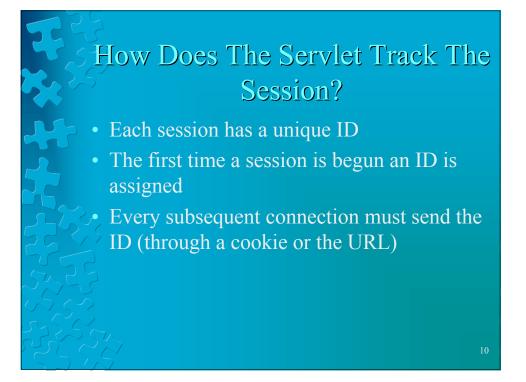
Programs written in java produce output which is sent to the client like any CGI program

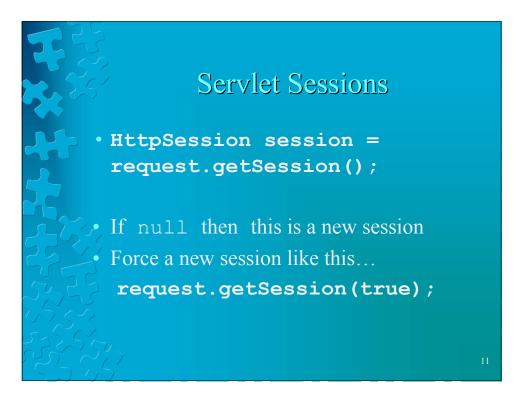






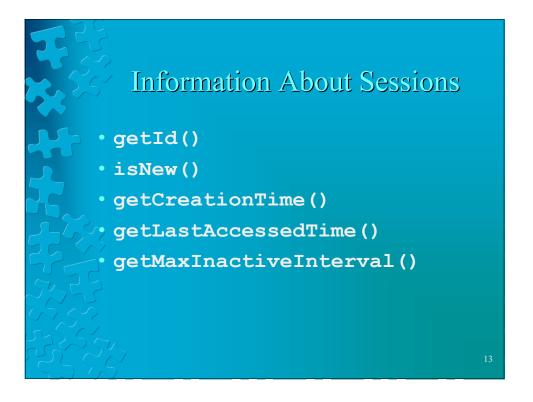


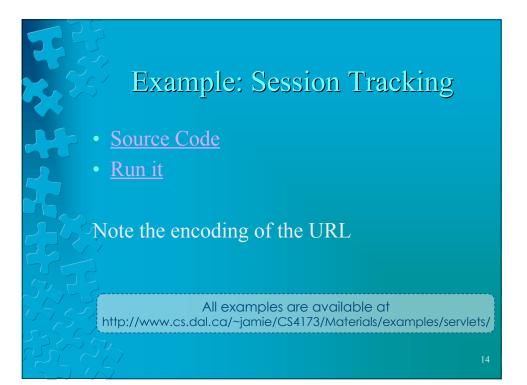






- **setAttribute**(String name, Object value)
- getAttribute(String name)
- removeAttribute(String name)
- getAttributeNames()





Questions?

- Which process executes the servlets?
- How are they like CGI programs?
- How are they different from CGI programs?
- What advantages do they have over other technologies we've seen so far?

References

- Programming The World Wide Web By Robert W. Sebesta ©2002 by Addison-Wesley
 - *Core Web Programming* (2e) by Marty Hall and Larry Brown ©2001 by Sun Microsystems, Inc.