

Servlet Questions (Long)

What does HTML stand for and what is it?

Show the basic format of an HTML document.

What is the syntax of HTML (XML) comments?

Explain the HTML elements: *h1*, *p*, *br*, *hr*, *ol*, *ul*, *li*, *table*, *tr*, *th*, *td*, *pre*, and *a*.

What abbreviation can be used for an HTML element with no content?

Where do we install web pages in our CS home directory?

Which document is fetched in response to the web request with link `http://java.sun.com/`?

What does *css* stand for and how is it used?

Explain the use of the *style* HTML element.

Explain the use of the *span* HTML element.

The hypertext transport protocol defines the rules for communication between a client and a server. On which side of the connection is the browser, usually.

Which port does HTTP normally use?

Suppose that a client wants a file *example.html* residing at *slonnegr/tomcat5* on the server *webdev.cs.uiowa.edu*. Write command lines using *telnet* that will fetch this file.

Explain the difference between static web pages and dynamic web pages.

Write the signature (the header) of the *doGet* method.

Explain the purpose of the methods *init* and *destroy*.

How do we indicate the kind of content the document sends back to the client from a servlet?

What exception do servlet methods commonly throw?

Explain the methods *setContentType* and *getWriter*.

Where do servlets go on *webdev*?

What purpose does the *web.xml* file serve?

Show how a servlet is specified in the *web.xml* file.

We access a servlet by entering a URL into a browser. What part of the URL is specified in *web.xml*? Where and how?

Explain the difference between GET and POST.

What is the purpose of URL encoding?

Which attributes are usually included in a *form* element?

Describe the input elements that can be used in an HTML form.

Show an example of an opening tag for an HTML *form* element that specifies the action and method attributes. Explain the purpose of each.

Write a code fragment that extracts all parameters (name and value) from the `HttpServletRequest` object *request*. Just assign them to the variables *name* and *value* over and over.

What happens when a servlet throws an exception?

How does HTTP communicate the outcome of an unsuccessful request?

Show the signature of *sendRedirect* and explain its purpose. What kind of objects uses this method?

Show the signature of *sendError* and explain its purpose. What kind of objects uses this method?

What is the identifier `SC_NOT_FOUND`? Where is it found? What is its value?

How can one servlet invoke another servlet?

What does it mean to say "HTTP is a stateless protocol"?

Explain the concepts *state management* and *session management*.

Describe how to create a `Cookie` object, say one that binds the value *slonnegr* to the name *userID*.

How do we set the age of a cookie and what does that mean? What is the default value and what does that mean?

How do we find the value of the *userID* cookie in an `HttpServletRequest` object? Show the code.

Create a `Cookie` object that will last one year.

How do we destroy a cookie?

How can we create a session object and what type is it?

How can we associate information with the session object?

How long does a session object last?

How does the servlet container keep track of session objects, since HTTP is stateless?

Explain URL rewriting?

What steps must be taken so that URL rewriting will work?

Describe the lifecycle of a servlet session.

Where in a servlet will we create a database connection, normally?

Explain the differences between instance variables and local variables.

What problems can be caused by using instance variables in a servlet?

Name three places where information can be stored in a way that is persistent during a virtual session.

How can we specify database parameters in *web.xml*? (not covered)

What is a property file and how is it used?