Internship Projects
Final Exam Study Guide

General Concepts

Describe the connection between two computers using HTTP and how sockets are used to route requests and responses.

Explain the difference between client side and server side scripting. When is it best to use client side, server side, or both?

In HTTP, what is the difference between GET and POST form submission? Where is the data stored during transmission from client to server?

Requirements and Design

Diagram the development process.

Describe the interchange between customers and developers during the requirements phase.

Understand the purpose of a question list and a confirmation letter.

Explain the concept of a web page layout and a site map.

Requirements and design answer different questions. Discuss what those questions are.

Cascading Style Sheets

Explain the purpose of CSS.

Describe the difference between in-line and linked style sheets, and when a developer should use one form or the other.

Understand what is a CSS class with the dot operator (e.g. P.menu) and a psuedo class with the colon operator (e.g. A:hover).

Scripting Languages

For both JavaScript and PHP, be able to explain the following:

- Starting and stopping script processing and processing order.

- Deferred and immediate execution.

- Loose typing and type juggling.

- Expression and statement syntax.

- Variable declaration.

- Arrays and functions.

- Global and static variables.

JavaScript Specific Questions

Review the following examples and understand the JavaScript code fully:

http://10.10.0.15/~web2008/js/calc.htm

http://10.10.0.15/~web2008/js/theButton.htm

Understand the following events and functions:

- alert()

- confirm()

- onClick

- onLoad

- prompt()

- substring()

Write code to retrieve the contents of the following items:

- Form fields.

- Location bar.

PHP Specific Questions

Review and understand the following document and its examples:

http://10.10.0.15/~web2008/php/phpNotes.htm

Write PHP code to process a web form.

Write PHP code to connect with and query a MySql database.

Write PHP code to transfer data between pages using the $_SESSION variable.

Why does session_start() need to be executed before any HTML output is written?

What is a web cookie? What does a cookie contain?

Where are cookies referenced in the HTTP GET request?

Relational Databases and SQL

Memorize the CREATE TABLE, SELECT, INSERT, UPDATE, and DELETE statements.

Describe the differences between and purposes of a primary key, super key, and column index.

Explain what a relation is.