

Final Exam Topics

CSCI 903, Script Programming for the Web, Spring 2013

- HTTP Protocol
 - Request and Response messages
 - Message Header
 - The *Location* header for redirects
 - Session management: client-server communication
 - The PHP *session_start()* function
 - Use of the *header()* function
 - Message Body
 - Send *request string* (see below) when using POST method
 - Send HTML document in reply message
- PHP Syntax
 - Function definition
 - Function reference
 - *foreach* loops
 - Indexed and hashed arrays
- String Operations
 - String interpolation
 - Single vs. double quotes
 - Use of curly braces
 - String concatenation
 - Heredoc syntax
- Debugging techniques
 - Use of the *ini_set()* function with the “error_log” parameter
 - Use of the *error_log()* function
 - Compare *echo* statement and the *var_dump()* function
- Your course web site’s directory structure
 - Principle of automatically adjusting to added projects
- File operations
 - *opendir()*
 - *readdir()*
 - *is_dir()*
 - *filemtime()*
- Markdown
 - Markdown syntax
 - What the *Markdown()* function does.
- Form Processing
 - Syntax of request string
 - Start with question mark
 - name=value pairs
 - Pairs separated by ampersands

- Request string may be sent in the URL (GET) or request message body (POST)
- The *method* and *action* attributes
- Use of *tabindex*, *id*, *name*, and *value* attributes
- The *fieldset*, *legend*, and *label elements*
- Sanitizing user input
 - *htmlspecialchars()*, including the double-encode parameter
 - SQL injection vulnerabilities and how to avoid them
- Encryption using the *crypt()* function
- Database
 - CRUD statements for managing *users* table
 - Algorithms for setting, checking, and updating encrypted passwords
- JavaScript Concepts
 - Client side
 - Object based
 - JavaScript Object Notation (JSON) vs. XML
 - (Will not be on exam)
 - The DOM and the CSSOM
 - Event driven
 - *ready* event
 - *mouse* events
 - *keyboard* events
 - Progressive enhancement
 - jQuery function types
 - Getters
 - Setters
 - Handlers
 - Doers