

WEBD 236

Web Information Systems Programming

Final Exam Review
Copyright © 2012 Todd Whittaker



What will the midterm look like?

- General characteristics
 - Short answer questions worth about 50 points total
 - Essay questions worth about 30 points total
 - Problems/programming questions worth about 70 points total



What will the midterm look like?

- You may bring in one 8.5 x 11 sheet of notes, front and back, with anything on it you desire.
- You will have 2 hours (120 minutes) to complete 150 points worth of questions
 - That’s approximately 1.25 points per minute
 - Alternately, that’s a 10-point problem in 8 minutes.

How should I study?

- Examine the outcomes for the course and for each week *since the midterm* in the course. Ask yourself, “can I do these things?”
- Is there anything you can eliminate?
 - Yes. Nothing *specific* to Cake framework (but there could be questions about frameworks in general).

How should I study?

- Examine the outcomes for the course and for each week *since the midterm* in the course. Ask yourself, “can I do these things?”
- Is there anything you need to review?
 - Yes. Nothing *specific* (there could be questions in general).

Not comprehensive means that I won't ask anything specific from earlier sections, but you can't forget everything either!

What outcomes?

- Course outcomes
 - Design, code, test, and debug programs using a server-based scripting language.
 - Persist objects in a relational database.
 - Compare and contrast Model 1 and Model 2 web-architectures.
 - Implement object-oriented model, view, and controller components.
 - Implement basic security techniques for web information systems.

What outcomes?

- Course outcomes
 - Design, code, test, and deploy a web application using a server-based scripting language.
 - Persist objects in a relational database.
 - Compare and contrast Model 1 and Model 2 web-architectures.
 - Implement object-oriented model, view, and controller components.
 - Implement basic security techniques for web information systems.

These are *always* fair game, regardless of before or after the midterm.

What outcomes?

- Week 8
 - Write regular expressions that test, capture, and replace data within strings
 - Explain the purpose and use of exception handling for error detection and correction
 - Use the keywords try, throw, and catch to implement exception handling
 - Use regular expressions and exception handling to validate data.

What outcomes?

- Week 9
 - Design databases from real-world problem statements
 - Normalize databases
 - Employ SQL to create database tables and indices
 - Employ PHP scripting to create and load tables with initial data

What outcomes?

- Week 10
 - Use PDO to interact with databases.
 - Employ SQL to query, update, and delete entities from databases.
 - Employ multi-table SQL joins to solve problems.

What outcomes?

- Week 11
 - Discuss reasons to avoid and alternatives to user-entered HTML markup in web-applications.
 - Explain how a browser uses a certificate to establish an encrypted connection to a server
 - Compare and contrast ACL and RBAC approaches to authorization.
 - Implement authentication/authorization.

What outcomes?

- Week 12
 - Explore the security implications of file uploads
 - Write code that receives, stores, processes, and transmits files uploaded via the web browser.

What outcomes?

- Week 13
 - Send e-mail from web applications.
 - Invoke web services from remote sites using cURL.
 - Examine JSON as a data-interchange format.

What outcomes?

- Week 14
 - List the advantages of using a web-framework for application development
 - List and explain the typical features of a web-framework
 - Examine some of the features of the Cake PHP framework.