

LIS4368 Exam1 Review Sheet:
Textbook: Chs. 1 – 8, and Discussion Board Postings
Test-taking: online (no books or notes), 1-hr., multi-choice

The following topics and concepts should be reviewed:

- compile-time vs runtime vs syntax errors
- MVC architecture: model, view, controller
- HTTP request vs. response (i.e., browser to server vs. server to browser)
- How to retrieve parameter values:
 - request.getParameter() vs request.getParameterValues()
- Servlets: What are they? Where do they run? From what class do they extend?
 - What does the doGet() method receive
- Sessions: What are they? When are they created? When do they end?
- Setting attributes in request and session objects
- JSP vs servlets: Which one handles the processing requirements?
- Web applications: What are they? How can data be stored (e.g., databases, etc.)?
- HTML:
 - Inline elements: How do they display?
 - form controls: e.g., radio buttons, text boxes, etc.
- Cookies: What are they? When are they created? When do they end? Typical uses? setPath()?
- Persistent Cookies: What are they? How to create?
- JavaServer Pages Standard Tag Library (JSTL): What is it? How can it be used?
 - Must code taglib directive for the core JSTL library.
- JSP Expression Language (EL): What is it? What does it provide? How does it work?
 - Scripting language which allows data access to Java components (JavaBeans) through JSP
 - paramValues implicit object
 - What are the scope types? Page vs request vs session vs application
 - Advantages? From where can get data (e.g. JavaBeans, etc.)
- JSTL vs EL
- HTML5 semantic elements: What are they (e.g., aside and footer elements)?
- Hidden Fields: advantages of using over *URL rewriting* to pass parameters from a browser to the server
- Classes: valid names
 - Which directory stores Java classes of a servlet/JSP application?
 - What are deployment descriptors, and how are they used (i.e., web.xml file)
- Variables: valid names, Declaring and initializing statements
- Assigning values to variables
- Java vs JSP comments: different syntax, and why needed
- Java data types: esp. double, float, int
- Model-View-Controller architecture (MVC):
 - What does each component do?
 - How does JSP vs servlets work in MVC?
 - Benefits
- Platform independence and the Java virtual machine
- What is Java Persistence API (JPA)?
- Data validation: client vs server (servlets vs JavaScript and jQuery)
- How are Cascading Style Sheets (CSS) applied (e.g., more specific to less specific)?
- JavaBeans (or beans): What are they?
- SQL statements: select, insert, update, delete