CS472 Web Programming Final Exam Review

Lesson 1: Servlets

- 1. Steps of web dynamics
- 2. Features of HTTP
- 3. HTTP Request type: POST vs GET
- 4. Web server: what do web servers server? Limitations?
- 5. Servlet: what is servlet? Who manages ? how to create a servlet? How to configure servlet url(annotation, web.xml)?
- 6. What is web container? What kind of supports container provides?
- 7. Lifecyle of a servlet: load, init, service, destroy
- 8. Threading model: In what sense are servlets multi-threaded?
- 9. What are the implications of this for servlet instance variables?

Lesson 2: Managing State

- 1. Post vs get, bookmarking post requests
- 2. forward vs Redirect
- 3. how to get request parameter?
- 4. Scope: request, session, application/context
- 5. attribute vs parameter
- 6. session: how to get session, how to get rid of session
- 7. session lifetime
- 8. cookie: how to send a cookie, read cookie, characteristics of cookie
- 9. 6 ways to maintain state demo

Lesson 3: JSP

- 1. Main idea of JSP
- 2. Two types of data in JSP page
- 3. JSP elements: directive, declaration, scriptlet, expression, EL expression, action, comment(vs HTML comment)
- 4. Scope differences of JSP declarations versus scriptlets and expressions
- 5. JSP Lifecycle
- 6. What does the container do with your JSP?
- 7. Implicit objects(request, response, out, session, application, config, pageContext, page, exception)
- 8. EL (expression language): how is it evaluated, "null friendly"
- 9. How EL relates to JSP expressions and attributes
- 10. JSP Model 1 vs Model 2 (MVC)

Lesson 4: Custom tags

- 1. JavaBean: unique characteristics
- 2. JSP standard actions vs JSTL
- 3. <jsp:include /> vs <%@ include %>
- 4. JSTL core(**forEach**, if, set, out, choose)
- 5. How to use the var attribute of for Each
- 6. Custom tags
- a. Steps to write your own custom tags: tag handler class, tld, include in jsp page
- b. If has body content, if no body content
- c. How to handle attribute