CS472 Web Programming
Fina Exam Review

Lesson 10: 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 container handle an HTTP request
8. Lifecyle of a servlet

Lesson 11: Managing State

1. More on Servlet lifecycle
2. Difference between ServletConfig vs ServletContext
3. forward vs Redirect
4. how to get request parameter?
5. Scope: request, session, application/context
6. attribute vs parameter
7. session: how to get session, how to get rid of session
8. cookie: how to send a cookie, read cookie, characteristics of cookie
9. 6 ways to maintain state demo

Lesson12: 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. JSP Lifecycle
5. What does the container do with your JSP?
6. Implicit objects(request, response, out, session, application, config, pageContext, page, exception)
7. EL (expression language): how is it evaluated, "null friendly"
8. JSP Model 1 vs Model 2 (MVC)

Lesson 13: 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. 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
6. filter

Lesson14: Ajax & JSON

1. Synchronous web communication vs asynchronous web communication
2. Typical ajax request
3. Different syntax for making jQuery ajax request ($.ajax(), $.get(). $.post(), chaining, object literal)
4. always(), .ajaxStart(), .ajaxStop() – global ajax events
5. JSON – basic syntax of JSON
6. JSON.parse(String), JSON.stringify(Object)
7. JSON expression - how to retrieve JSON data
8. AJAJ

Exam Policy
1. There will be no cheat sheet allowed for this exam. You must be able to memorize all the code by now.
2. There is no tolerance policy for exams. Despite the fact that our quizzes are solved in a friendly atmosphere, exams are not. **You will be asked to leave the exam room immediately without a warning** once you do the following things:
    a. You are caught cheating or trying to cheat.
    b. Answers should be written with a Pen or Pencil, but if you want to use a pencil please bring your own eraser and sharpener. You're not allowed to borrow from other students or proctor during exam.
    c. All mobile phones should be turned off and submitted along with your luggage at the beginning of the exam.
    d. Please get ready and use the washroom before the exam as **no one** will be allowed to leave the exam room before turning in their papers. (no restroom, no water)
    e. You're not allowed to ask/get extra papers. All your notes must be written on the exam paper provided. Use the back side if you need to draft.