

EE 461L - Midterm Review

This review sheet is not intended to be comprehensive. Anything we've covered - in lecture, lab, homeworks, assigned papers - is fair game on the exam.

Topics to definitely review from lecture and lab: version control, web programming, build management, Python, mongoDB, Google App Engine, UML, software testing.

For some of the course material, such as UML, you will see different notations and definitions used, depending on the source. For the purposes of the exam, you should use the notation and definitions that are used in lecture and in the lecture slides.

You should expect questions of similar and greater difficulty as the quiz questions. If you had trouble with a quiz over a particular topic, I recommend that you review that topic carefully.

There are some example questions below, and you should post an example question (and its solution) on piazza before the day of the exam. Use these to practice, but do not consider them to be exhaustive or to indicate the style or type of question you will see on the exam.

Practice Questions:

1. What are the disadvantages and advantages of using HTTP GET over HTTP POST? How are the variables passed through in HTTP GET? Give an example of the constructed URL.
2. List the associational relationships you could see in a class diagram, and give a brief description of each. Give an example showing how each is represented in UML.
3. Where should I put a new '.jsp' file in order for it to be publicly accessible by url when my app is deployed?
 - a. src/main/java
 - b. src/main/appengine
 - c. src/main/webapp
 - d. src/main/webapp/WEB-INF
4. In Git, how do I check what the different remote URLs that I am using in the terminal?
5. In a sequence diagram, what is the dotted line that extends downward from an actor?
6. You created a feature branch and it works wonderfully. It is ready for the master branch. Name two methods that allow you to incorporate work from one Git branch into another. How are these two methods different?
10. Briefly describe Don Norman's critique of the Google front page.
12. What effect does clicking the link produced by the following have?
 something...

13. Write a line of JavaScript that gets the element with id greeting and changes the content of that element to hello.

14. Write the necessary JSP code to display the guestBook name in an h1 element on the page.

```
<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<%@ page import="java.util.List" %>
<%@ taglib prefix="fn" uri="http://java.sun.com/jsp/jstl/functions" %>

<html>
  <body>
    <%
      String guestbookName = request.getParameter("guestbookName");
      // add your code
    %>
    <h1></h1>
  </body>
</html>
```

16. Describe the "difference" between the `git diff` and `git diff --cached` commands.

17. Re-work all the HTML, CSS and JS examples and exercises listed on the class schedule page.

18. Rework all the Python examples we did in class. Review your work with Python and MongoDB in lab.