

INFM 603 Practice Final Exam  
May 5, 2012

You must complete this exam in one sitting in no more than 3 hours. You can do other things during those three hours if you wish, but you must send the exam by email within 3 hours of starting it. Write down the time when you start and when you finish.

You may use any resources that existed before this exam was disseminated. You may not communicate with any person about the real exam (but of course for this practice exam you can talk to anyone you like).

1. Answer one of the following questions by creating a Web page that includes:
  - a. a JavaScript program that reads the day and month from user input (in any format and using any input mechanism that you prefer) and then prints on the screen the number of days remaining in the year after the current date. Assume that it is not a leap year. Your program must use an array in which the number of days is stored for each month.
  - b. A modified the JavaScript program at <http://www.umiacs.umd.edu/~oard/teaching/603/spring12/slides/5/selector.htm> that works as it does now for people 64 and under, but that directs people over 65 to <http://www.wiredseniors.com/seniorssearch/> if they choose a Web Directory or to <http://books.google.com/> if they choose a Web Search Engine.
2. Provide short (a few sentences; no more than half a page) answers two of the following questions:
  - a. Explain why PHP is better for some programming tasks while JavaScript is better for others. Be specific.
  - b. Explain why database normalization often results in a requirement to use the join operator. Give a specific example.
  - c. Provide one clear example of a case in which the waterfall model of software development would be more appropriate than so-called "agile methods," a second example of a case in which an agile method would clearly be a better choice than the waterfall model, and then concisely state what difference(s) between your two examples result in a different choice.

Send this practice exam to yourself for grading ☺