CS435  
Software Engineering  

Homework 3  

Due: 04/03/2014 midnight  

Each question is worth 10 pts. 

1. Do you design software when you "write" a program? What makes software design different from coding? 

2. Suggest a design pattern that you encounter in a category of everyday things (e.g., consumer electronics, automobiles, appliances). Briefly describe the pattern. 

3. The terms architectural style, architectural pattern, and framework (not discussed in this book) are often encountered in discussions of software architecture. Do some research and describe how each of these terms differs from its counterparts. 

4. Discuss the three "parts" of a design pattern and provide a concrete example of each from some field other than software. 

5. What is "good enough" software? Name a specific company and specific products that you believe were developed using the good enough philosophy. 

6. Considering each of the four aspects of the cost of quality, which do you think is the most expensive and why? 

7. Do a web search and find three other examples of "risks" to the public that can be directly traced to poor software quality. Consider beginning your search at [http://catless.ncl.ac.uk/risks](http://catless.ncl.ac.uk/risks) 

8. Explain the difference between an error and a defect. 

9. Why can’t we just wait until testing to find and correct all software errors? 

10. Can a program be correct and still not be reliable? Explain. 

Submission: Please, submit your homework in pdf! Login to any Linux workstation in the CS department. Use cs435submit command to submit your files. The
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    cs435submit [files]

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Example:

    cs435submit hw3.zip

To see what you have submitted:

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