**Reading Assignment 7 – Chapter 5 Questions**

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Instructions:

* Read pages 169-187 of your text.
* Type answers to the questions below (don’t remove questions).
* Submit on Blazeview.

1. Describe in your own words how the singleton pattern can be implemented in Java (without multiple threads). I don’t want code, I want you to write as if you were explaining to a peer how to implement singleton.
2. On page 177 (“Singleton Pattern defined”), what does this mean, “...the Singleton is created in a lazy manner...?” What are the practical implications?
3. Explain why the approach to singleton presented so far, can fail with multiple threads.
4. Why is the multiple threads problem a somewhat limited problem?
5. Describe the approach to fix the multithreading problem on page 180 (“Dealing with multithreading”). What is the disadvantage of this?
6. Compare and contrast *volatile* and *synchronized.*
7. We have a new design principle in the first paragraph on page 185 (The Q&A section). What is it?
8. We say that a cohesive class has a single responsibility. Argue that the Singleton has two.