Week 12 Research

Q) What does mocking a class allow you to do?

A) The definition of mocking is pretty close to how it used in testing, by imitating. Although we aren’t going to be making fun of anything in Java. Mocking a class allows testing to simulate objects for methods, so you can test them without testing the dependencies. All but the simplest methods require other methods, objects, utilities, outside databases, or other bits of code outside the method itself, and we don’t want to, or can’t test them. We also have to isolate the methods and functions to see where the problems are specifically.

By mocking, testers can narrow down into the method faster and with less outside noise for inspection. Another key use-case for mocking is when a dependency may not be finished yet, and you want to test the method you developed that is ready. Mocking the checking function or passed object can allow you to do that.

Q) Why would you want to avoid putting credentials in plaintext in your code?

A) Most of the reasons why this is a bad idea are true regardless of the question being related to code. Password re-use on various sites and applications is so common that any numbers about it are irrelevant. Unfortunately, database dumps, bad-actors, human error, and other things can let attackers get those readable credentials.

The coding aspect of this comes into play when, attackers can get your credentials from event logs, shared users, or again, just be looking at it. A large portion of crime and specifically theft is from opportunity, and maybe someone who would never attempt to take your data or passwords “the hard way,” just might be tempted to write down your password if it was just staring at them on their IDE or code viewer.

Finally, while a little nebulous, your data is yours! Even if you have trustworthy co-users, friends, and fellow workers, it’s none of their business!

<https://dzone.com/articles/the-concept-mocking>

<https://blog.jayway.com/2007/05/09/mocking-classes/>

<https://www.springboottutorial.com/programming-basics-introduction-to-mocking-in-unit-tests>

<https://towardsdatascience.com/mocking-a-method-in-the-same-test-class-using-mockito-b8f997916109>

<https://security.stackexchange.com/questions/120540/why-shouldnt-i-store-passwords-in-plaintext>

<https://www.sapien.com/blog/2022/01/24/still-using-credentials-in-your-code/>

<https://www.passcamp.com/blog/dangers-of-storing-and-sharing-passwords-in-plaintext/>