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CS-320

Southern New Hampshire University

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Project Two

1. Summary
   1. Describe your unit testing approach for each of the three features.
      1. To what extent was your approach aligned to the software requirements? Support your claims with specific evidence.

When I was working on the unit tests for all functionalities for the contact service class I wrote the following functionalities, including, adding, deleting and also updating contacts. Along with testing all requirements related to the contact class and contact service.While working on contact service, each unit test corresponds to a specific “x” requirement. Throughout this course and my previous coding courses, always practicing the industry's best practices, you can kind of use them as an outline on how to work, how to code correctly and overall the same no matter what you are working on.

* + 1. Defend the overall quality of your JUnit tests. In other words, how do you know your JUnit tests were effective based on the coverage percentage?

I think in terms of the quality of my JUnit tests, they got me by for the assignments. I still believe that they could be better and I could progress more. I feel like the only way that I could get better is just practicing more in future classes if applicable.

* 1. Describe your experience writing the JUnit tests.
     1. How did you ensure that your code was technically sound? Cite specific lines of code from your tests to illustrate.

I was able to make sure that my code was technically sound because of using the industry's best practices leaving in line comments to help improve the code's readability. Along with doing static testing to better get a grasp of my code quality.

* + 1. How did you ensure that your code was efficient? Cite specific lines of code from your tests to illustrate.

As I stated above, making sure to use the industry's best practices with inline comments and condensing the codes as much as I can but also maintaining the code basic required functionality.

1. Reflection
   1. Testing Techniques
      1. What were the software testing techniques that you employed in this project? Describe their characteristics using specific details.

As I stated above I performed static testing, while doing these tests, I spent a lot of time going line by line double reading triple reading and making sure there are not only no errors that I can see and no errors personally in the code and that the software I was using was not displaying any errors. After doing that, I went to do junit testing. This validated that the output is what was intended.

* + 1. What are the other software testing techniques that you did not use for this project? Describe their characteristics using specific details.

One of the main tests I did not run was a security test. This assignment being the nature that it is, a class project and for school we do not get many chances to apply security and or test for security for the programs that we code or create. A test that I could have run would be what I have used in a previous class would be a maven dependency report. Which is a great tool and very easy to use, unless you were like me and had errors and could not figure them out for hours.

* + 1. For each of the techniques you discussed, explain the practical uses and implications for different software development projects and situations.

You can use any of the methods or implications that I have stated above in any area of code development. A lot of it is just basic industry best practices. Which is why I guess they are there because they can be applied to any sort of development.

* 1. Mindset
     1. Assess the mindset that you adopted working on this project. In acting as a software tester, to what extent did you employ caution? Why was it important to appreciate the complexity and interrelationships of the code you were testing? Provide specific examples to illustrate your claims.

Acting in the role of a software tester, adopting a cautious and carefulness while working on these assignments was very important. When it comes to doing anything, your mindset is very important. During the recent assignments, if I had not taken it seriously and carefully, in the real world it could have led to very serious consequences, and at that point you need to take responsibility for them. The static testing junit testing was very important for these assignments to make sure that everything is functioning correctly without errors. Which can be applied to anything in development and sometimes your everyday life.

* + 1. Assess the ways you tried to limit bias in your review of the code. On the software developer side, can you imagine that bias would be a concern if you were responsible for testing your own code? Provide specific examples to illustrate your claims.

I think when reviewing someone else's code compared to your own, you are much more critical to the other person's code because you want them to get your honest opinion on any findings that you have. When compared to reviewing your own code, in my personal opinion you think that you did it correctly and to the best of your ability so either stepping away or getting a 3rd party's opinion is a good way to make sure that the code that you write is good and up to par to the requirements.

* + 1. Finally, evaluate the importance of being disciplined in your commitment to quality as a software engineering professional. Why is it important not to cut corners when it comes to writing or testing code? How do you plan to avoid technical debt as a practitioner in the field? Provide specific examples to illustrate your claims.

No matter what profession you are in it is important to be disciplined in whatever practice you are in. You do not want to get complacent and get lazy because depending on your practice it could result in either people getting hurt or your company getting hurt. Cutting corners in any aspect of life does not get you anywhere, you do not learn and you do not progress in life. I believe that if you follow all the basic rules and your basic best practices, you will be able to progress and improve.