CS 445

Memo

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| To: | Professor Bistriceanu |
| From: | Amer Alsabbagh |
| cc: | TA |
| Date: | 9/12/2017 |
| Re: | HW1 |

This assignment wasn’t particularly difficult. It was very straight forward as it was just a refresher on basic java concept such as inheritance, interfaces, abstract classes etc... The only tricky part I would say that in the API it didn’t mention having a field to keep track of the last “thing” a creature ate so I just had to add that. Also, I was a little confused and mixed up between the Junit testing and our file testCreature. They just seemed to have a lot of overlap. Since, it was required from us I put them in spate files but if I had the choice, I would break testCreature into a set of Junit tests. Otherwise, I had no issues at all.

I have completed the assignment so it is a full submission. There is a table below showing code coverage for all my classes and all Junit tests

Class Class % method % line%

|  |  |  |  |
| --- | --- | --- | --- |
| Ant | 100% (1/1) | 100% (2/2) | 100% (5/5) |
| Bat | 100% (1/1) | 100% (4/4) | 100% (11/11) |
| Creature | 100% (1/1) | 100% (3/3) | 100% (10/10) |
| EatTest | 100% (1/1) | 100% (1/1) | 100% (47/47) |
| Fly | 100% (1/1) | 100% (4/4) | 100% (10/10) |
| TestCreature | 100% (1/1) | 100% (1/1) | 96% (32/33) |
| Thing | 100% (1/1) | 100% (3/3) | 100% (8/8) |
| All classes | 100% (8/8) | 100% (20/20) | 99% (127/128) |

The Junit testing could have been better if the API different. My issue is, I can’t test the move function because it if of type void and I can’t compare the text it prints to anything. If, however the method was of type String for example we could have had the following code.

Ant ant = **new** Ant("Aunt");

*assertEquals*("Aunt Ant is crawling around.", ant.Move());

But such implementation wasn’t feasible so I didn’t implement a test for move as that would imply modifying the API and adding more functions to classes such as getMoveText() to all ant, tiger, and bat classes.  
  
Consider how this assignment was implemented I would say the Cyclomatic Complexity would be 4.