HACETTEPE UNIVERSITY

Computer Science

A REPORT

ON

Programming Assignment 3 Zorde vs Calliance Board Game

SUBMITTED BY

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Chapter 1

PROBLEM DEFINITION

In this assignment, we are supposed to develop a simple board game. Main purpose is executing the steps according to incoming commands from command text file. But firstly, we initialize board with given lengths and create objects of creatures which are calliance and zorde from initials text file. After the steps are over, calliances or zordes team wins. Meanwhile the code prints the output on given name output file.

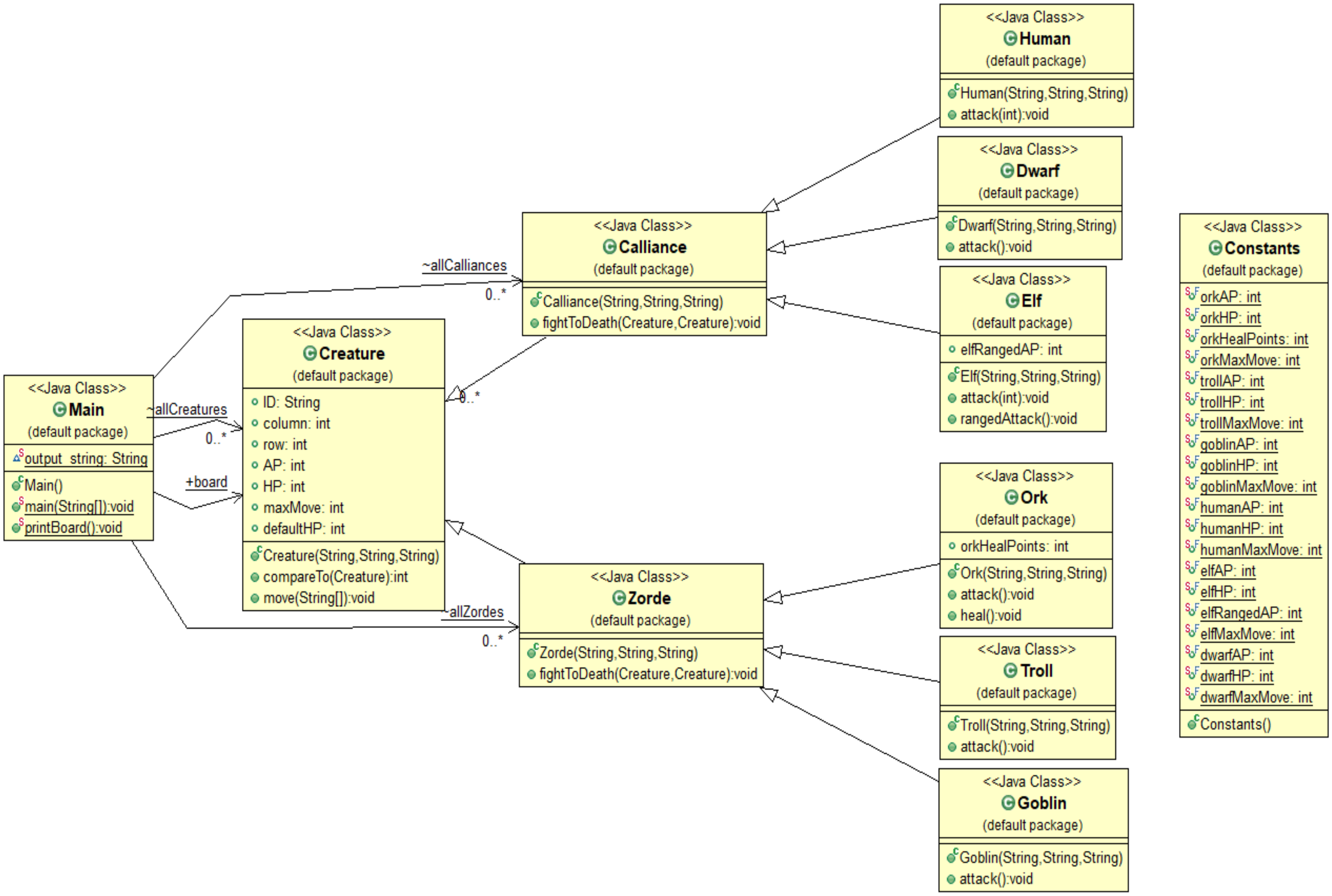
Chapter 2

MY APPROACH

I think the most important thing about this assignment is how can I take the advantage of polymorphism and how can I implement with that. By using the polymorphism in the classes, I tried to get rid of code redundancy as much as possible. And I took the benefits of using super classes, when performing child class's methods and using their attributes. Finally, my code takes every constant values as attributes from constants java file.

Chapter 3

UML CLASS DIAGRAM



Main() Class

All file operations and object initializations are done here. Command text lines are taken as line by line and the code executes move() functions for each of these lines.

Creature() Class

This is the superclass for all type of creatures and has common attributes of all child class. Move() function is here and also fightToDeath() function calls as Calliance and Zorde object type and attack() function calls as all type of creatures are here.

Calliance() Class extends Creature

This class has fightToDeath() function, in this declaration attacker creature type is Calliance and by the way defender creature type is Zorde.

Zorde() Class extends Creature

This class has fightToDeath() function too, in this declaration attacker creature type is Zorde and by the way defender creature type is Calliance.

Goblin() Class extends Zorde

In this class there are attributes and attack() function only.

Troll() Class extends Zorde

In this class there are attributes and attack() function only.

Ork() Class extends Zorde

In this class there are attributes and attack() function and also heal function that unique function to Ork's in here too.

Human() Class extends Calliance

In this class there are attributes and attack() function only.

Elf() Class extends Calliance

In this class there are attributes and attack() function and also this class has rangedAttack() function that unique to Elf's.

Dwarf() Class extends Calliance

In this class there are attributes and attack() function only.

Chapter 4

REFERENCES

- https://stackoverflow.com/
- https://www.geeksforgeeks.org/