НИУ ИТМО

Факультет программной инженерии и компьютерной техники

Отчет по Лабораторной работе №2    
по курсу “Программирование”  
Вариант № 103324

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# Текст задания

Write your own pokemon classes based on Pokemon class for all given pokemons. Each pokemon kind should hae one or two types and standard base stats: HP, attack, defense,  
special attack, special defense and speed.

Pokemon classes should be inherited according to pokemon evolution chains.

Write your own Move classes based on PhysicalMove, SpecialMove and StatusMove classes for all give moves. Each move should have standard type, power and accuracy and implement standard move effects. Assign moves to pokemons according to given task. Pokemon level should be set to minimal one required to learn all given moves.  
  
Use the simulation class Battle to create two pokemon teams (each pokemon should have a name) and start the battle.  
  
Base classes, battle simulator and utility classes are packed in [jar archive](https://helios.cs.ifmo.ru/documents/10180/660917/Pokemon.jar/a7ce60af-6ee6-47d0-a95e-e5ed9a697bd2). Documentation in javadoc format is in the [zip file](https://helios.cs.ifmo.ru/documents/10180/660917/doc.zip/244252e6-e4dd-4b52-8de1-b497d4402c7a).  
  
All information about pokemon and move stats, evolution chains and so on you can find on <http://pokemondb.net>,<http://veekun.com/dex/pokemon>

**Comments**

Task goal: Learn basic OOP principles using simple example and use them in your program.

TO DO:

1. Read [documentation](https://se.ifmo.ru/~tony/doc/), pay special attention to Pokemon and Move classes. Later on working on lab continue to read documentation several times.
2. Download Pokemon.jar. You need to use it to compile and run your program. Don't unpack it. You should learn how to use third-party jar-files together with your program.
3. Write minimal working program and run it.

Battle b = new Battle();

Pokemon p1 = new Pokemon("Alien", 1);

Pokemon p2 = new Pokemon("Predator", 1);

b.addAlly(p1);

b.addFoe(p2);

b.go();

1. Create one of pokémon class according to your individual task. The class should inherit from base Pokemon class. You should set pokémon types and base stats in the constructor. Add your new pokémon to the team and start the battle.
2. Create one of move class

# Покемоны

Graphical user interface

Description automatically generatedA picture containing logo

Description automatically generated

# Диаграмма классов

Graphical user interface, application, Teams

Description automatically generated

# Исходный код

Ссылка на Git-репозиторий: https://github.com/nastyabeggin/lab2\_itmo

# Результат работы программы

## Main.java

import ru.ifmo.se.pokemon.\*;  
import pokemons.\*;  
  
  
public class Main {  
 public static void main(String[] args) {  
 Battle b = new Battle();  
 Pokemon p2 = new Tangela("Vanya", 18);  
 Pokemon p3 = new Gloom("Dima", 18);  
 Pokemon p1 = new Heatmor("Darya", 18);  
 Pokemon p4 = new Vileplume("Nastya", 18);  
 b.addAlly(p1);  
 b.addAlly(p4);  
 b.addFoe(p2);  
 b.addFoe(p3);  
 b.go();  
 }  
}

Heatmor Darya from the team Greren enters the battle!

Tangela Vanya from the team White enters the battle!

Heatmor Darya takes down.

Tangela Vanya loses 7 hit points.

Heatmor Darya loses 23 hit points.

Tangela Vanya uses Fly.

Heatmor Darya loses 10 hit points.

Heatmor Darya uses Pursuit.

Tangela Vanya loses 7 hit points.

Tangela Vanya uses Metronome and chooses randomlyFly.

Heatmor Darya takes down.

Tangela Vanya loses 12 hit points.

Heatmor Darya loses 23 hit points.

Tangela Vanya uses Frustration.

Heatmor Darya loses 11 hit points.

Heatmor Darya faints.

Vileplume Nastya from the team Greren enters the battle!

Tangela Vanya uses Frustration.

Vileplume Nastya loses 8 hit points.

Vileplume Nastya throws Rock.

Tangela Vanya loses 7 hit points.

Tangela Vanya uses Metronome and chooses randomlyRockThrow.

Vileplume Nastya uses Hidden Power.

Tangela Vanya loses 11 hit points.

Tangela Vanya uses Fly.

Vileplume Nastya loses 15 hit points.

Vileplume Nastya throws Teeter Dance.

Tangela Vanya uses Fly.

Vileplume Nastya loses 12 hit points.

Vileplume Nastya throws Teeter Dance.

Tangela Vanya uses Metronome and chooses randomlyFrustration.

Vileplume Nastya throws Rock.

Tangela Vanya loses 5 hit points.

Tangela Vanya uses Fly.

Vileplume Nastya loses 12 hit points.

Vileplume Nastya uses Headbutt.

Tangela Vanya loses 8 hit points.

Tangela Vanya faints.

Gloom Dima from the team White enters the battle!

Vileplume Nastya throws Rock.

Gloom Dima loses 10 hit points.

Gloom Dima throws Teeter Dance.

Vileplume Nastya throws Teeter Dance.

Gloom Dima throws Rock.

Vileplume Nastya loses 7 hit points.

Vileplume Nastya throws Rock.

Gloom Dima loses 8 hit points.

Gloom Dima hits himself in confusion.

Gloom Dima loses 5 hit points.

Vileplume Nastya throws Teeter Dance.

Gloom Dima throws Teeter Dance.

Vileplume Nastya uses Hidden Power.

Gloom Dima loses 7 hit points.

Gloom Dima hits himself in confusion.

Gloom Dima loses 7 hit points.

Vileplume Nastya uses Hidden Power.

Gloom Dima loses 12 hit points.

Gloom Dima hits himself in confusion.

Gloom Dima loses 5 hit points.

Gloom Dima faints.

Team White loses its last Pokemon.

The team Greren wins the battle!

# Выводы по работе

Я изучила базовые принципы ООП Java, научилась работать с классами, методами, сторонними библиотеками, методами доступа.