

Hacettepe University Computer Science and Engineering Department

Name and Surname : Çağdaş Berkan Toptaş

Identity Number : 21328505

Course : BBM104 Introduction to

Programming Laboratory II

Experiment : Programming Assignment III

Subject : Polymorphism and Abstract Classes

Due Date : 20.04.2016

Advisors : Assist. Prof. Dr. Burcu CAN,

R. A. Necva BÖLÜCÜ

E-mail : <u>b21328505@cs.hacettepe.edu.tr</u>

2. Software Using Documentation

2.1. Software Usage

Program starts "Main.java" class. The input file is given as an argument. command.txt file is the our argument file.(args[0]=command.txt)

Program reads other files at "Monopoly.java" class.(property.json and list.json)

2.2. Error Messages

Program doesn't have any error messages. Because advisors said that not give wrong input.

3. Software Design Notes

3.1. Desctiption of the program

3.1.1. Problem

In this experiment, I am expected to implement monopoly with the given rule. Main focus point of this experiment is to get me familiar with polymorphism and abstract classes.

3.1.2. Solution

I solved the problem when I read the given article at Appendix A.

I created Action.java class and Property.java class and typed them abstract.

3.2. System Chart

input : command.txt

Programs: Main.java

Monopoly.java

GameData.java

Square.java

Property.java

Land.java

RailRoad.java

Company.java

Action.java

Chance.java

CommunityChest.java

Go.java

Jail.java

FreeParking.java

GotoJail.java

Tax.java

Output : Output.txt

3.3. Algorithm

- 1. Program takes 1 argument (args[0]=command.txt)
- 2. Call runProgram function with argument.
 - 2.1. By calling runProgram function property.json, list.json and command.txt files will read and parse.
 - 2.2. Also by calling runProgram function show() functions will executed.
 - 2.2.1. show() function will create output.txt.

REFERENCES

https://en.wikipedia.org/wiki/Javadoc

https://en.wikipedia.org/wiki/JSON

http://tutorials.jenkov.com/java/abstract-classes.html

http://www.mkyong.com/java/json-simple-example-read-and-write-

json/

http://stackoverflow.com/