COMP201- Object Oriented Programming

Fall 2016

HOMEWORK9

In this homework, you will write an application searching fruits and its colors.

Your application will read the names of the fruits and their colors from input.txt file. In the file, in each line a new fruit is defined. First the name of the fruit is given. After following a semi-colon (:) the colors of the fruit are listed by putting comma between colors. An example input file is following:

Apple:Red,Green,Yellow

Clementine:Orange,Red

Apricot: Orange,Yellow,Red

Grape:Purple,Green

Kiwi:Green,Brown

Watermelon:Red,Green

Fig:Purple,Green

Then, the user enters commands from the command line:

**fruit <fruit\_name>:** Your application will search the name of the fruit. If it finds a match with the given fruit name, it lists the colors of the fruit. Be aware that the user may enter the name of the fruit with capital or lower letters.

Also, the user may enter only some part of the fruit name. In this case, your application will suggest some names.

Ex: fruit apple

apple is found in the dictionary

Its colors are: [red, green, yellow]

fruit ap

ap is NOT found in the dictionary

Suggestions:

-apple

-apricot

-grape

**color <color\_name>:** Your application will search the fruit list and look for the names of fruits with the given color. Then it will list the found fruits’ name.

Ex: color red

Fruits with color red

-apple

-clementine

-apricot

-watermelon

exit: It terminates the application.

Here is an example execution of the application.

Your command:

color red

Fruits with color red

-apple

-clementine

-apricot

-watermelon

color yellow

Fruits with color yellow

-apple

-apricot

fruit perl

perl is NOT found in the dictionary

Suggestions:

fruit watermelon

watermelon is found in the dictionary

Its colors are: [red, green]

fruit apple

apple is found in the dictionary

Its colors are: [red, green, yellow]

fruit ap

ap is NOT found in the dictionary

Suggestions:

-apple

-apricot

-grape

exit

**Notes:**

* This homework targets to teach you the usage of String class.
* Class diagram of the homework is not given. You can design your own class(es).