OOP Final Project

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How you divide the responsibilities of the team members

Since it usually takes very long time to merge each code together, we try to let one person complete one java class. For example, there is a panel class called FieldPanel used to display the map and a panel class called BagPanel used to display items. When merging, what we only need to do is fetch each ones code under main hierarchy.

For better cooperation, first we make sure the top hierarchy MainFrame and add some prototype of parent classes into it such as FieldPanel, BattlePanel, BagPanel, DialogPanel. Then each member works on separated class as much as not to touch the MainFrame. Existing prototypes (some of them are abstract class) classes are used in each panel. 陳俊瑋 works on BagPanel, 柯育銘 works on DialogPanel and MainFrame and 杜承錦 works on BattlePanel and FieldPanel. We try to comment on the following version that makes it easier to merge our codes together.

The relations between the classes that you design

At the entry point we have class MainFrame which contains important subclass

REvent and some kind of Panels.

REvent extends thread. It runs all the time to check current condition, if an event is satisfied to occur or not.

RSound class is used wherever we need music. It is also very simple to use, since it is a thread and all we have to do for playing music is run this thread.

DialogPanel works very simple. When an event occurs, it shows a dialog image sequentially.

BagPanel contains MenuPanel, SelectLabel, StatusPanel, BotPanel, ItemPanel, EquipPanel and MapPanel. BagPanel

BattlePanel controls and shows the entire flow of battle just like other RPG games, especially poke’mon. It shows status and image of both side and waiting for player’s command to control he’s own monster (we call monster RBot).

FieldPanel display the whole map and characters on the map. Each map image file have an additional file describes what is on the map and obstacle points. It shows the map image scaled in proper size and then adds each characters panel into the map.

Each character extends class RPlayer. We have one MasterPlayer (main character) and few non-player characters. Characters contain private panel for walking on the map and other information like images, location point, RBots, RItems … etc. Every bots extend RBot and every items extend RItem. For instance, if we want to make a new item that helps bot to recover health, we make a class name HPItem which extends RItem.

The advantages of your design

1. All panel subclasses are flexible that we can add new components in whatever we want. For example, one page shows 8 items and once we add new item it is added in this panel, we can move down to see it does appear.
2. StatPanel shows Health and Power. It updates unceasingly so that the bar we see is synchronized.
3. StatusPanel displays the information of main player. It updates continuously so that we can see the real game time in the panel.
4. RBot has lots of features that there can be numerous kinds of RBots.
5. RSkill works almost the same way as POOSkill. We pass two arguments source RBot and destination RBot into function public void act().
6. RSound makes it easy to change the background music, since it is only a thread controlling.

7. RPlayer, RBot, RSkill, RItem contains the basic variables that will be used and it is very easy to make a new child class of each.
8. 70% of Panel has flexible width and height corresponding to screen size.
9. Every map image has an additional file contains information of NPC location and obstacle point information.
10. RPlayer implements walking motion that it is not simply move the image component using setLocation(). It really walks.

The disadvantages of your design

1. Unknown GUI problems.
2. Burn lots of life time to merge MainFrame.
3. It is easy to make hundreds or thousands of child class, but it is hard to make sure one parent class working without any problem.

How to play your RPG

人物移動和選單控制都是 w 上,a 左,s 下,d 右來控制。

Bag 裡面有 status, bot, item, equip(未能完成), map(未能完成) , save(未能完成) ,exit(未能完成)。

Status 能查看人物資料和遊戲時間。

Bot 能查看 bot 的素質和 hp/mp 以及圖片，按下 enter 能將 bot 放置成第一個 bot(也就是戰鬥第一支出來)。

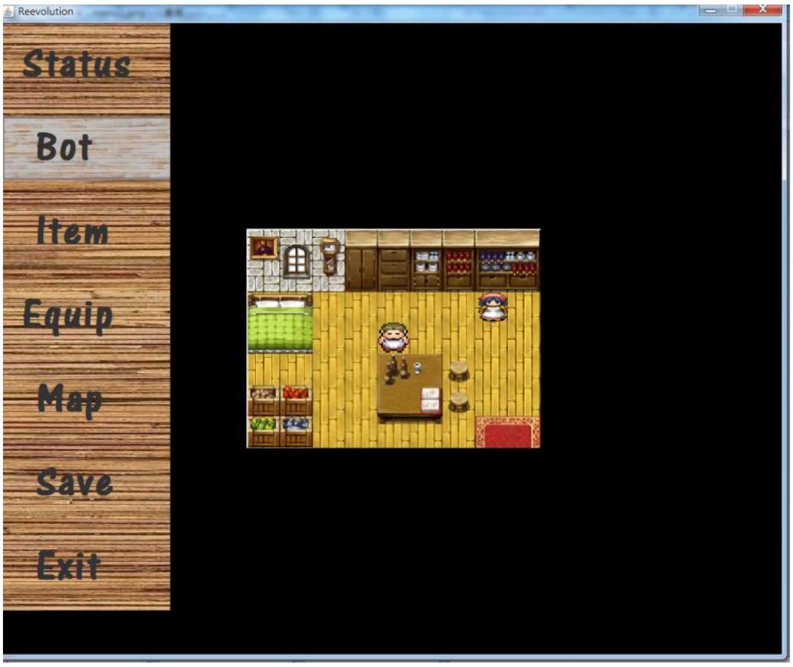
Item 能使用物品幫不同的 bot 補 HP 或 PP，左右控制 bot，上下控制 item，按下 item 即可對該選取 bot 使用。

地圖上有不同的 NPC 可以對話和對戰，走到特定區域也能觸發特殊事件。

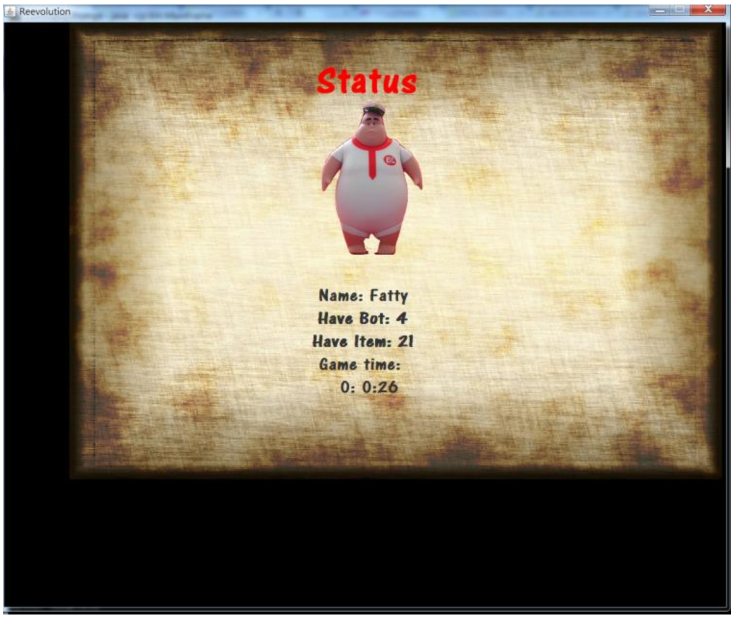
戰鬥畫面(可以按下 space 測試)，skill(未完成介面但是 skill 本身已經寫好)，item,bot, 逃跑都能正常使用。

抱歉助教有一個不情之請，由於 demo 的時候我們 merge code 正好出問題，因此當時原本是打算分開 demo，但由於一位同學是 mac 電腦不會操控螢幕控制，因此有一部份的功能(BagPanel)並沒有展示給助教看，而在 demo 過後我們也成功將兩份 code merge 成一份 code 並且(BagPanel)的部分操作正常，能否請助教能夠重新 rejudge 我們這組的分數，非常抱歉，因為當天已經連續 coding　24 小時沒有睡覺，精神很不好，demo 時也是忘東忘西，未能將我們所做完整呈現給助教，非常抱歉打擾助教的時間，但還是誠心希望助教能夠玩玩看我們的 BagPanel 功能，按下 b 以後有三個 Panel: Status, Bot, Item，bot 可以切換第一隻怪(左右控制 bot, enter 可以切換第一支), Item 可以對選的怪物使用物品(左右控制 bot, 上下控制 Item, enter 使用)，這裡的左右是 a,d, 上下是 w,s。感謝助教!

- *Thanks to all group members for hardworking and special thanks to CNP for art designs*

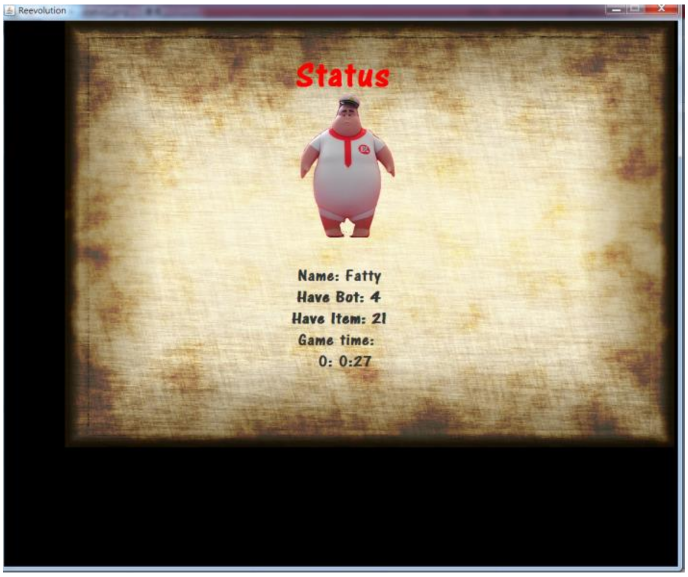


按下 B 之後的列表可以用 ws 選擇(上下)



Name: Fatty
Have Bot: 4
Have Item: 21
Game time:
0: 0:26

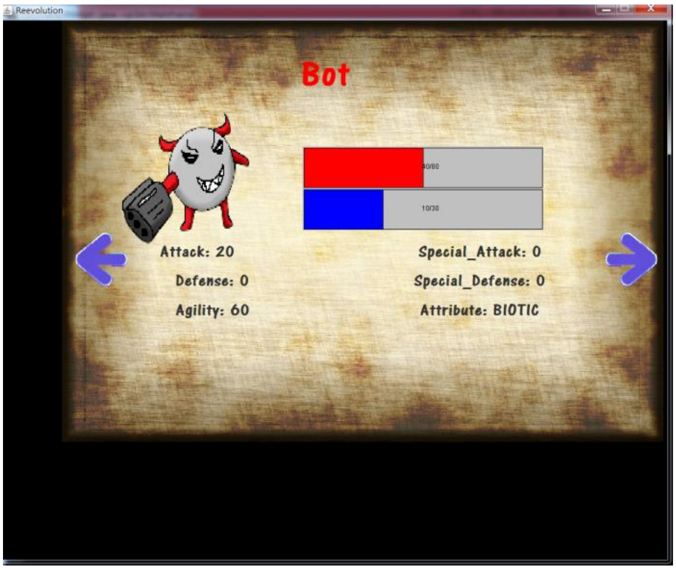
Status 的介面



Status

Name: Fatty
Have Bot: 4
Have Item: 21
Game time:
0: 0:27

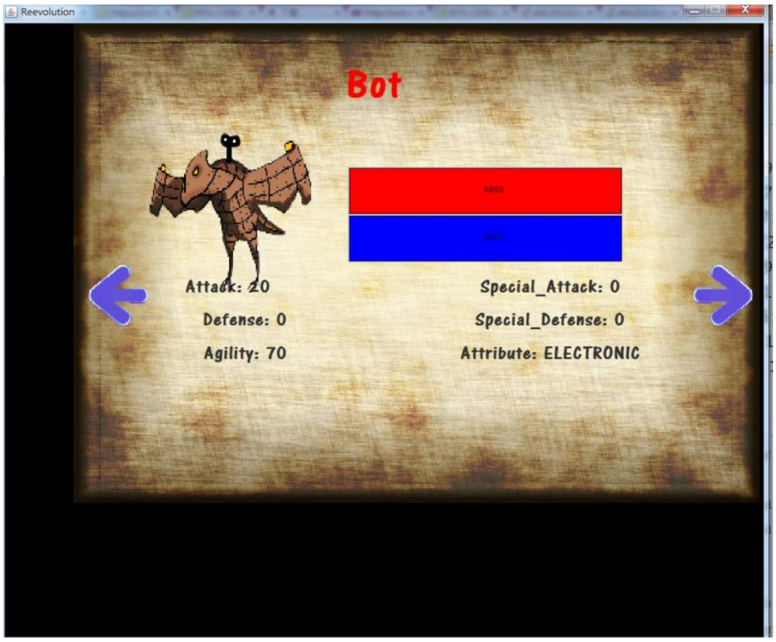
累積時間秒數會動



Bot

Attack: 20
Defense: 0
Agility: 60
Special_Attack: 0
Special_Defense: 0
Attribute: BIOTIC

Bot 的介面



Bot

Attack: 20

Defense: 0

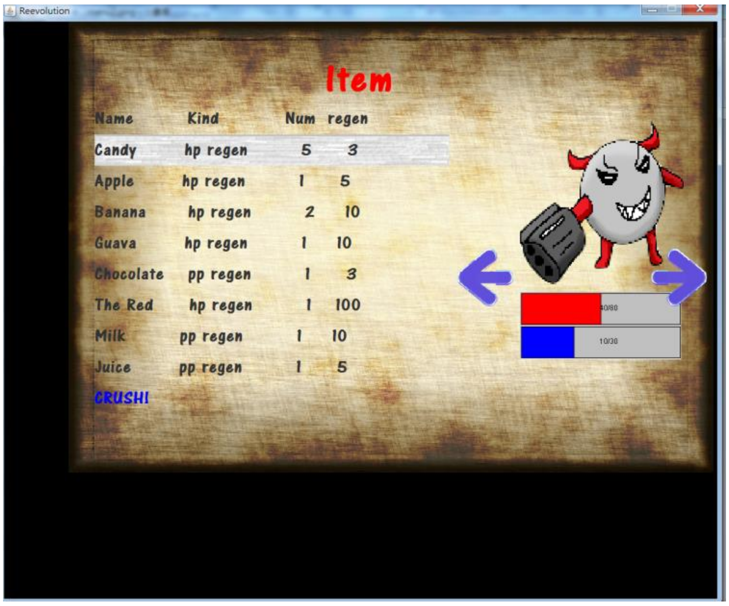
Agility: 70

Special_Attack: 0

Special_Defense: 0

Attribute: ELECTRONIC

Bot 可以用 a,d 切換(左和下)

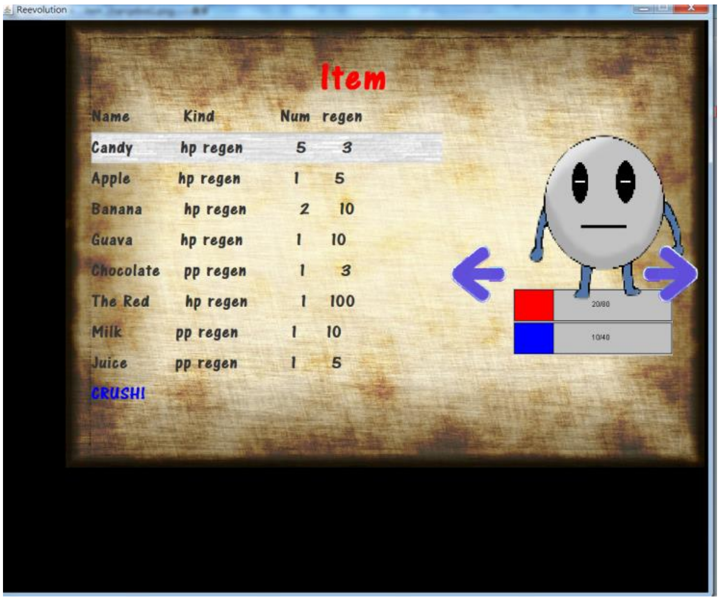


Item

Name	Kind	Num	regen
Candy	hp regen	5	3
Apple	hp regen	1	5
Banana	hp regen	2	10
Guava	hp regen	1	10
Chocolate	pp regen	1	3
The Red	hp regen	1	100
Milk	pp regen	1	10
Juice	pp regen	1	5

CRUSH!

Item 介面　　下方藍色為 Item 敘述,　昨方紅色為該 bot 之 HP 藍色為 PP

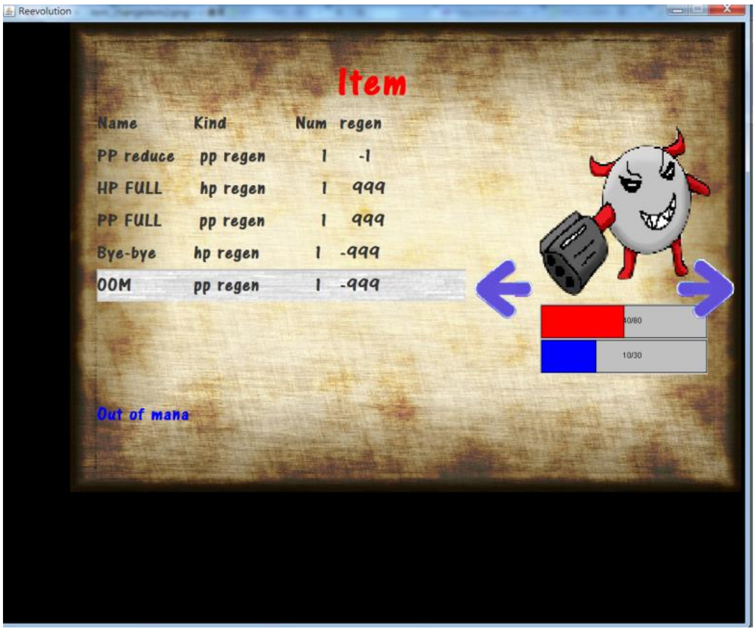


Item

Name	Kind	Num	regen
Candy	hp regen	5	3
Apple	hp regen	1	5
Banana	hp regen	2	10
Guava	hp regen	1	10
Chocolate	pp regen	1	3
The Red	hp regen	1	100
Milk	pp regen	1	10
Juice	pp regen	1	5

CRUSH!

A,d 左右一樣可以切換 bot 上下可以選擇 item(w,s)

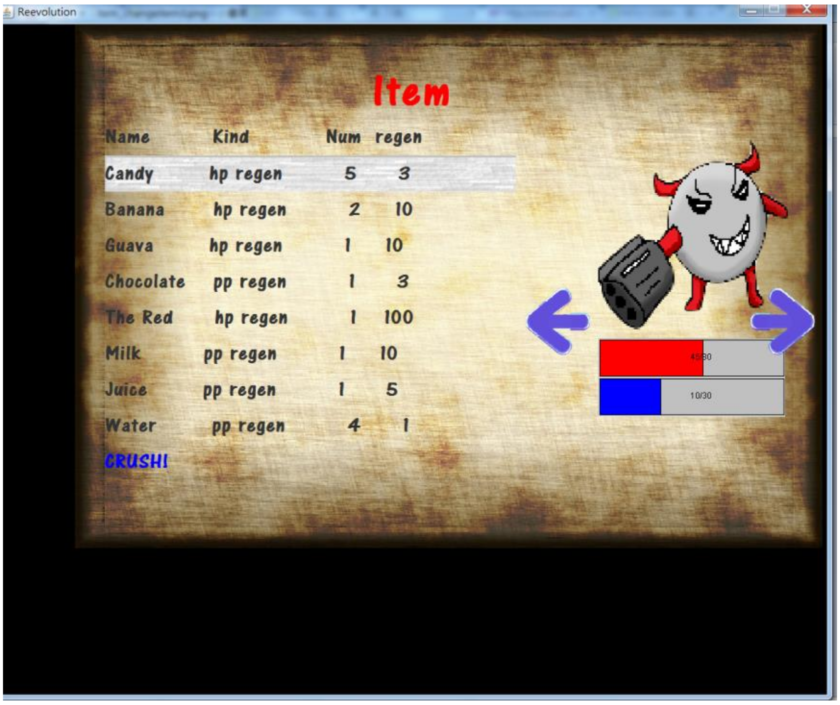


Item

Name	Kind	Num	regen
PP reduce	pp regen	1	-1
HP FULL	hp regen	1	999
PP FULL	pp regen	1	999
Bye-bye	hp regen	1	-999
OOM	pp regen	1	-999

Out of mana

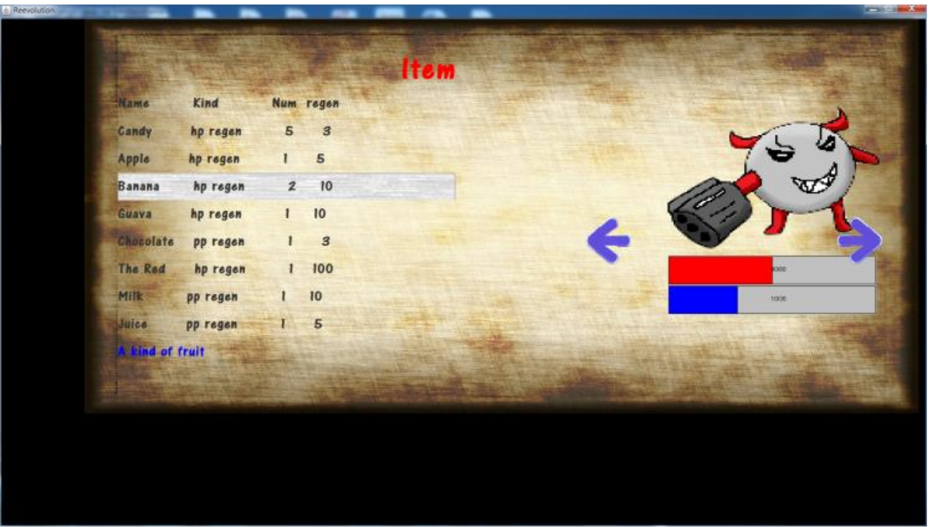
往上切會到最後一個



Item

Name	Kind	Num	regen
Candy	hp regen	5	3
Banana	hp regen	2	10
Guava	hp regen	1	10
Chocolate	pp regen	1	3
The Red	hp regen	1	100
Milk	pp regen	1	10
Juice	pp regen	1	5
Water	pp regen	4	1

CRUSH!



Item

Name	Kind	Num	regen
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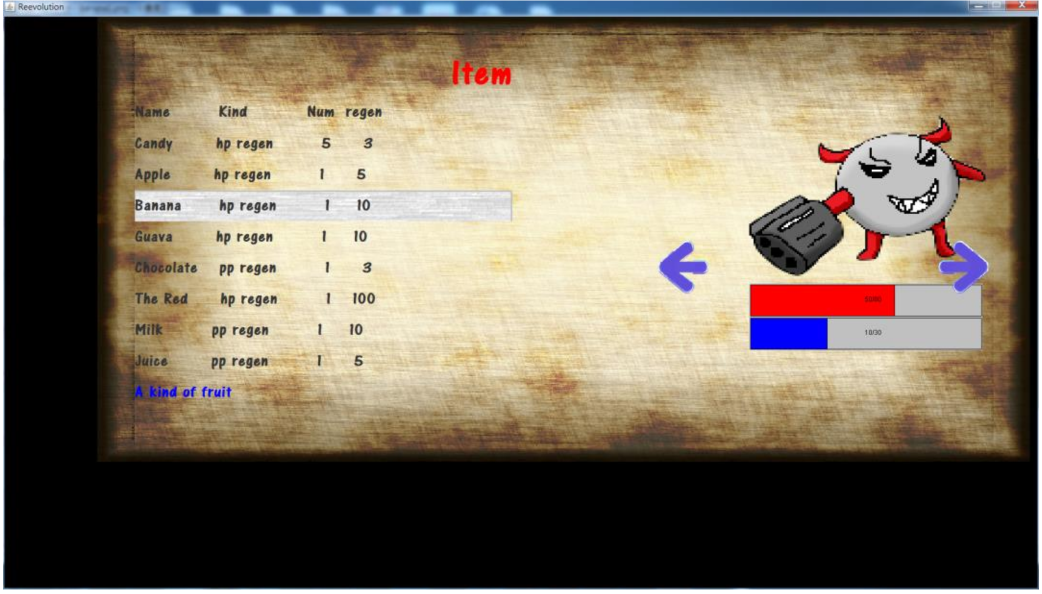
Apple	hp regen	1	5
Banana	hp regen	2	10
Guava	hp regen	1	10
Chocolate	pp regen	1	3
The Red	hp regen	1	100
Milk	pp regen	1	10
Juice	pp regen	1	5

A kind of fruit

使用後，因為蘋果沒了，所以會回到最第一個物品

使用 banana 後右邊 bot 之紅色的 HP 也確實增加了



Item

Name	Kind	Num	regen
Candy	hp regen	5	3
Apple	hp regen	1	5
Banana	hp regen	1	10
Guava	hp regen	1	10
Chocolate	pp regen	1	3
The Red	hp regen	1	100
Milk	pp regen	1	10
Juice	pp regen	1	5

A kind of fruit