# Assignment PPL

# API Documentation

## April 10, 2017

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Class Boy Module boy

# 1 Module boy

## 1.1 Variables

Name	Description
package	Value: None

## 1.2 Class Boy

 ${\bf Known~Subclasses:}$ geek. Ge<br/>ek, generous. Generous, miser. Miser

constructor for class Boy  $\,$ 

### 1.2.1 Methods

init(self, name_id, attr, bgt, intlg, min_attr, t)						
constraint(self, main_bgt, attr)						
set_happiness(self, happiness)						
$\mathbf{set\_gf}(\mathit{self},\mathit{gf})$						
$mod\_bgt(self, bgt)$						

Name	Description
happiness	set girlfirend of boy
gf	modify boy budget if he can't afford gift in gift basket

Class choosy Module choosy

## 2 Module choosy

### 2.1 Variables

Name	Description
package	Value: None

## 2.2 Class choosy

#### 2.2.1 Methods

## Inherited from girl.Girl(Section 9.2)

Name	Description					
Inherited from girl. Girl (Section 9.2)						
bf	·					

Class Couple Module couple

# 3 Module couple

## 3.1 Variables

Name	Description
package	Value: None

## 3.2 Class Couple

constructor for class Couple having object of boy and girl as attribute to make couple

#### 3.2.1 Methods

$\boxed{ \underline{\hspace{1cm}} init\underline{\hspace{1cm}} (self,\ b,\ g)}$	
$oxed{set\_happiness}(self)$	
$oxed{set\_compatibility}(self)$	

Name	Description
g	define and set level of happiness among couples
c_hap	define and set compatibility ampng couples

Class desperate Module desperate

## 4 Module desperate

### 4.1 Variables

Name	Description
package	Value: None

# 4.2 Class desperate

#### 4.2.1 Methods

init(self, name_id, attr, main_bgt, intlg, t)	
Overrides: girl.Girlinit	

## Inherited from girl.Girl(Section 9.2)

constraint(), set\_bf(), set\_happiness()

Name	Description
Inherited from girl. Girl (Section 9.2)	
bf	

Class Essential Module essential

## 5 Module essential

## 5.1 Variables

Name	Description
package	Value: None

## 5.2 Class Essential

### 5.2.1 Methods

init(self, name_id, price, val, type_)
constructor
Overrides: gift.Giftinit

Class Geek Module geek

# 6 Module geek

### 6.1 Variables

Name	Description
package	Value: None

## 6.2 Class Geek

constructor

#### 6.2.1 Methods

init(self, name_id, atr, bgt, intlg, min_attr, t)
Overrides: boy.Boyinit

## Inherited from boy.Boy(Section 1.2)

Name	Description
Inherited from boy. Boy (Section 1.2)	
gf, happiness	

Class Generous Module generous

## 7 Module generous

### 7.1 Variables

Name	Description
package	Value: None

## 7.2 Class Generous

constructor

#### 7.2.1 Methods

init(self, name_id, atr, bgt, intlg, min_attr, t)	
Overrides: boy.Boyinit	

## Inherited from boy.Boy(Section 1.2)

Name	Description
Inherited from boy. Boy (Section 1.2)	
gf, happiness	

Class Gift Module gift

# 8 Module gift

## 8.1 Variables

Name	Description
package	Value: None

## 8.2 Class Gift

Known Subclasses: essential. Essential, luxury. Luxury, utility. Utility

Constructor for class gift

### 8.2.1 Methods

)
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Class Girl Module girl

# 9 Module girl

## 9.1 Variables

Name	Description
package	Value: None

## 9.2 Class Girl

**Known Subclasses:** choosy.choosy, desperate.desperate, normal.normal constructor for class girl

#### 9.2.1 Methods

init(self, name_id, attr, main_bgt, intlg, t)
constraint(self, bgt)
$\mathbf{set\_bf}(\mathit{self},\mathit{bf})$
set_happiness(self, happiness)

Name	Description
bf	set happiness

Variables Module log

# 10 Module log

## 10.1 Functions

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
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## 10.2 Variables

Name	Description
package	Value: None

Class Luxury Module luxury

# 11 Module luxury

## 11.1 Variables

Name	Description
package	Value: None

# 11.2 Class Luxury

### 11.2.1 Methods

init(self, name_id, price, val, type_, rating, eco)
constructor
Overrides: gift.Giftinit

Variables Module main

## 12 Module main

#### 12.1 Functions

```
hap\_cpl(L, k, B, G)
A = sorted(L, key=lambda x: x.compat_status, reverse=True)
                  print ('
Compatible couples:')
                  for i in range(k):
                            print (A[i].b.name_id + ' <-> ' + A[i].g.name_id)
                            sort list H in descending order according to compatibility
\mathbf{newcpl}(L, k, B, G, A)
allocates new boys to the girls who broke up
calc\_hap(L, B, G)
generous(GT, i)
miser(GT, i)
geek(GT, i)
\mathbf{details}(L)
\mathbf{display}(G)
\mathbf{make}_{\mathbf{cpl}}(C, B, G)
mk\_cpl()
```

#### 12.2 Variables

$\mathbf{Name}$	Description
package	Value: None

Class Miser Module miser

## 13 Module miser

### 13.1 Variables

Name	Description
package	Value: None

## 13.2 Class Miser

boy.Boy — miser.Miser

#### 13.2.1 Methods

init(self, name_id, atr, bgt, intlg, min_attr, t)	
Overrides: boy.Boyinit	

## Inherited from boy.Boy(Section 1.2)

 $constraint(),\,mod\_bgt(),\,set\_gf(),\,set\_happiness()$ 

Name	Description
Inherited from boy. Boy (Section 1.2)	
gf, happiness	

Class normal Module normal

## 14 Module normal

### 14.1 Variables

Name	Description
package	Value: None

## 14.2 Class normal

#### 14.2.1 Methods

init(self, name_id, attr, main_bgt, intlg, t)	
constructor	
Overrides: girl.Girlinit	

# Inherited from girl.Girl(Section 9.2)

Name	Description
Inherited from girl. Girl (Section 9.2)	
bf	

Variables Module q6\_utility

# 15 Module q6\_utility

## 15.1 Functions

utility()	
boy type	

 $\mathbf{make\_csv}(\mathit{name}, \mathit{list\_})$ 

## 15.2 Variables

Name	Description
package	Value: None

 $16 \quad Script \; script-boys\_csv$ 

 $17 \quad Script \; script\text{-}classes\_No\_Name\_dot$ 

 $18 \quad Script \; script\text{-}gift\_csv$ 

 $19 \quad Script \; script \text{-} girls \_csv$ 

 $20 \quad Script \; script-packages\_No\_Name\_dot$ 

Class Utility Module utility

# 21 Module utility

## 21.1 Variables

Name	Description
package	Value: None

# 21.2 Class Utility

### 21.2.1 Methods

init(self, name_id, price, val, type_, uval, uclass)
constructor
Overrides: gift.Giftinit

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