

Epydoc

API Documentation

April 10, 2017

Contents

Contents	1
1 Package q3	2
1.1 Modules	2
1.2 Variables	2
2 Module q3.Couple	3
2.1 Variables	3
2.2 Class Couple	3
2.2.1 Methods	3
3 Module q3.app	4
3.1 Functions	4
4 Module q3.boy	5
4.1 Variables	5
4.2 Class Boy	5
4.2.1 Methods	5
4.3 Class GeekBoy	5
4.3.1 Methods	5
4.4 Class MiserBoy	6
4.4.1 Methods	6
4.5 Class GenerousBoy	6
4.5.1 Methods	6
5 Module q3.gift	7
5.1 Variables	7
5.2 Class Gift	7
5.2.1 Methods	7
5.3 Class EssentialGift	7
5.3.1 Methods	7
5.4 Class LuxuryGift	7
5.4.1 Methods	8
5.5 Class UtilityGift	8
5.5.1 Methods	8
6 Module q3.girl	9
6.1 Variables	9

6.2	Class Girl	9
6.2.1	Methods	9
6.3	Class ChoosyGirl	9
6.3.1	Methods	10
6.4	Class NormalGirl	10
6.4.1	Methods	10
6.5	Class DesperateGirl	11
6.5.1	Methods	11
7	Module q3.helper	12
7.1	Functions	12
7.2	Variables	12
8	Script script-log.txt	13

1 Package q3

1.1 Modules

- **Couple** (*Section 2, p. 3*)
- **app** (*Section 3, p. 4*)
- **boy** (*Section 4, p. 5*)
- **gift** (*Section 5, p. 7*)
- **girl** (*Section 6, p. 9*)
- **helper** (*Section 7, p. 12*)

1.2 Variables

Name	Description
<code>--package--</code>	Value: None

2 Module q3.Couple

2.1 Variables

Name	Description
<code>--package--</code>	Value: 'q3'

2.2 Class Couple

2.2.1 Methods

`--init--`(*self*, *boy*, *girl*, *gift_list*, *happiness*=0)

:param boy: boy object :param girl: girl object :param gift_list: list of gift object :param happiness: happiness of couple

`--str--`(*self*)

`allocate_gifts`(*self*, *gift_list*)

Allocates gift from given gift list :param gift_list: list of gift objects :return:

`set_happiness`(*self*)

Calculates boy's and girl's happiness individually and adds it. :return:

`get_compatibility`(*self*)

Calculates compatibility of the couple :return:

3 Module q3.app

3.1 Functions

<code>main()</code>

4 Module q3.boy

4.1 Variables

Name	Description
<code>--package--</code>	Value: None

4.2 Class Boy

Known Subclasses: q3.boy.GeekBoy, q3.boy.GenerousBoy, q3.boy.MiserBoy

Class for boy

4.2.1 Methods

```
--init__(self, name, attractiveness, min_attraction, intelligence, budget, single=1,
happiness=0)
```

```
--str__(self)
```

```
change_commitment(self)
```

4.3 Class GeekBoy



4.3.1 Methods

```
--init__(self, name, attractiveness, min_attraction, intelligence, budget, single=1,
happiness=0)
```

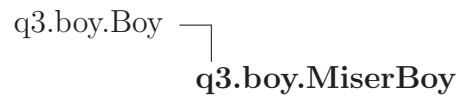
Overrides: q3.boy.Boy.--init--

```
get_happiness(self, girlfriend)
```

Inherited from q3.boy.Boy(Section 4.2)

```
--str__(), change_commitment()
```

4.4 Class MiserBoy



4.4.1 Methods

```
__init__(self, name, attractiveness, min_attraction, intelligence, budget,
single=1, happiness=0)
Overrides: q3.boy.Boy.__init__
```

```
get_happiness(self, girlfriend)
```

Inherited from q3.boy.Boy(Section 4.2)

```
__str__(), change_commitment()
```

4.5 Class GenerousBoy



4.5.1 Methods

```
__init__(self, name, attractiveness, min_attraction, intelligence, budget,
single=1, happiness=0)
Overrides: q3.boy.Boy.__init__
```

```
get_happiness(self, girlfriend)
```

Inherited from q3.boy.Boy(Section 4.2)

```
__str__(), change_commitment()
```

5 Module q3.gift

5.1 Variables

Name	Description
<code>--package--</code>	Value: None

5.2 Class Gift

Known Subclasses: q3.gift.EssentialGift, q3.gift.LuxuryGift, q3.gift.UtilityGift

5.2.1 Methods

<code>--init--</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i>) :param name: name of gift :param price: price of gift :param value: value of the gift

5.3 Class EssentialGift



5.3.1 Methods

<code>--init--</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i>) :param name: name of gift :param price: price of gift :param value: value of the gift Overrides: q3.gift.Gift. <code>--init--</code> extit(inherited documentation)
--

5.4 Class LuxuryGift



5.4.1 Methods

<code>__init__</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i> , <i>difficulty</i> , <i>rating</i>) <hr/> :param name: name of gift :param price: price of gift :param value: value of gift :param difficulty: difficulty in obtaining the gift :param rating: rating of the gift Overrides: <code>q3.gift.Gift.__init__</code>
--

5.5 Class *UtilityGift*



5.5.1 Methods

<code>__init__</code> (<i>self</i> , <i>name</i> , <i>price</i> , <i>value</i> , <i>utility_value</i> , <i>utility_class</i>) <hr/> :param name: name of gift :param price: price of gift :param value: value of gift :param utility_value: utility value of gift :param utility_class: utility class of gift Overrides: <code>q3.gift.Gift.__init__</code>
--

6 Module q3.girl

6.1 Variables

Name	Description
<code>--package--</code>	Value: 'q3'

6.2 Class Girl

Known Subclasses: q3.girl.ChoosyGirl, q3.girl.DesperateGirl, q3.girl.NormalGirl

Class for girl

6.2.1 Methods

```
--init--(self, name, attractiveness, intelligence, budget, single=1, happiness=0)
```

:param name: Name of the girl :param attractiveness: attractiveness of the girl :param intelligence: intelligence of the girl :param budget: maintenance budget if the girl :param category: Category of the girl, wither choosy, normal or desperate :param single: single status, either 0 or 1 :param happiness: happiness of girl

```
--str--(self)
```

```
change_commitment(self, val=0)
```

change commitment status to given value :param val: :return:

6.3 Class ChoosyGirl

```

q3.girl.Girl └─
                q3.girl.ChoosyGirl
  
```

6.3.1 Methods

```
__init__(self, name, attractiveness, intelligence, budget, single=1, happiness=0)

:param name: Name of the girl :param attractiveness: attractiveness of the
girl :param intelligence: intelligence of the girl :param budget: maintenance
budget if the girl :param category: Category of the girl, wither choosy, normal
or desperate :param single: single status, either 0 or 1 :param happiness:
happiness of girl
Overrides: q3.girl.Girl.__init__ extit(inherited documentation)
```

```
get_happiness(self)
```

Inherited from q3.girl.Girl(Section 6.2)

```
__str__(), change_commitment()
```

6.4 Class NormalGirl



6.4.1 Methods

```
__init__(self, name, attractiveness, intelligence, budget, single=1, happiness=0)

:param name: Name of the girl :param attractiveness: attractiveness of the
girl :param intelligence: intelligence of the girl :param budget: maintenance
budget if the girl :param category: Category of the girl, wither choosy, normal
or desperate :param single: single status, either 0 or 1 :param happiness:
happiness of girl
Overrides: q3.girl.Girl.__init__ extit(inherited documentation)
```

```
get_happiness(self)
```

Inherited from q3.girl.Girl(Section 6.2)

```
__str__(), change_commitment()
```

6.5 Class *DesperateGirl*



6.5.1 Methods

<p><code>__init__</code>(<i>self</i>, <i>name</i>, <i>attractiveness</i>, <i>intelligence</i>, <i>budget</i>, <i>single</i>=1, <i>happiness</i>=0)</p> <p>:param <i>name</i>: Name of the girl :param <i>attractiveness</i>: attractiveness of the girl :param <i>intelligence</i>: intelligence of the girl :param <i>budget</i>: maintenance budget if the girl :param <i>category</i>: Category of the girl, wither choosy, normal or desperate :param <i>single</i>: single status, either 0 or 1 :param <i>happiness</i>: happiness of girl</p> <p>Overrides: <code>q3.girl.Girl.__init__</code> extit(inherited documentation)</p>

<p><code>get_happiness</code>(<i>self</i>)</p>

Inherited from `q3.girl.Girl`(Section 6.2)

`__str__`(), `change_commitment`()

7 Module q3.helper

7.1 Functions

form_couple(*boy, girl*)

Takes a boy and girl and forms it couple :param boy: boy object :param girl: girl object :return:

get_boy_list()

Autogenerates a random boy list :return:

get_girl_list()

autogenerates a random girl list :return:

get_gift_list(*filename*)

Extracts gift data from csv file :param filename: filename of the csv file :return: list of gift objects

7.2 Variables

Name	Description
__package__	Value: 'q3'

8 Script script-log.txt

Index

- q3 (*package*), 2
 - q3.app (*module*), 4
 - q3.app.main (*function*), 4
 - q3.boy (*module*), 5–6
 - q3.boy.Boy (*class*), 5
 - q3.boy.GeekBoy (*class*), 5
 - q3.boy.GenerousBoy (*class*), 6
 - q3.boy.MiserBoy (*class*), 5–6
 - q3.Couple (*module*), 3
 - q3.Couple.Couple (*class*), 3
 - q3.gift (*module*), 7–8
 - q3.gift.EssentialGift (*class*), 7
 - q3.gift.Gift (*class*), 7
 - q3.gift.LuxuryGift (*class*), 7–8
 - q3.gift.UtilityGift (*class*), 8
 - q3.girl (*module*), 9–11
 - q3.girl.ChoosyGirl (*class*), 9–10
 - q3.girl.DesperateGirl (*class*), 10–11
 - q3.girl.Girl (*class*), 9
 - q3.girl.NormalGirl (*class*), 10
 - q3.helper (*module*), 12
 - q3.helper.form_couple (*function*), 12
 - q3.helper.get_boy_list (*function*), 12
 - q3.helper.get_gift_list (*function*), 12
 - q3.helper.get_girl_list (*function*), 12
- script-log.txt (*script*), 13