

# PPL Assignment

## API Documentation

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# 1 Module Couple

## 1.1 Variables

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

## 1.2 Class Couple

### 1.2.1 Methods

<b><code>__init__</code></b> ( <i>self</i> , <i>boy</i> , <i>girl</i> , <i>gift_list</i> , <i>happiness</i> =0)
:param boy: boy object :param girl: girl object :param gift_list: list of gift object :param happiness: happiness of couple
<b><code>allocate_gifts</code></b> ( <i>self</i> , <i>gift_list</i> )
Allocates gift from given gift list :param gift_list: list of gift objects :return:
<b><code>set_happiness</code></b> ( <i>self</i> )
Calculates boy's and girl's happiness individually and adds it. :return:
<b><code>get_compatibility</code></b> ( <i>self</i> )
Calculates compatibility of the couple :return:

## 2 Module *app*

### 2.1 Functions

<code>main()</code>
---------------------

### 2.2 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> None

### 3 Module boy

#### 3.1 Variables

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

#### 3.2 Class Boy

Class for boy

##### 3.2.1 Methods

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

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

```
change_commitment(self)
```

## 4 Module gift

### 4.1 Variables

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

### 4.2 Class *EssentialGift*

#### 4.2.1 Methods

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

### 4.3 Class *LuxuryGift*

#### 4.3.1 Methods

<code>--init--(self, name, price, value, difficulty, rating)</code>
: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

### 4.4 Class *UtilityGift*

#### 4.4.1 Methods

<code>--init--(self, name, price, value, utility_value, utility_class)</code>
: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

## 5 Module girl

### 5.1 Variables

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

### 5.2 Class Girl

Class for girl

#### 5.2.1 Methods

```
--init--(self, name, attractiveness, intelligence, budget, category, 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 Module helper

### 6.1 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

### 6.2 Variables

Name	Description
__package__	<b>Value:</b> None

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