Documentation

API Documentation

April 9, 2017

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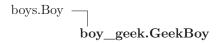
Class GeekBoy Module boy_geek

1 Module boy_geek

1.1 Variables

Name	Description
package	Value: None

1.2 Class GeekBoy



boy class for geek boys

1.2.1 Methods

init(self, name, atr, gfbudget, intelli, min_atr_req, typ	2)
constructor	
Overrides: boys.Boyinit	

Inherited from boys.Boy(Section 4.2)

${\bf 2}\quad {\bf Module\ boy_generous}$

2.1 Variables

Name	Description
package	Value: None

2.2 Class GenerousBoy

boys.Boy — boy_generous.GenerousBoy

boy class for generous boys

2.2.1 Methods

init(self, name, atr, gfbudget, intelli, min_atr_req, type)	
constructor	
Overrides: boys.Boyinit	

Inherited from boys.Boy(Section 4.2)

Class MiserBoy Module boy_miser

3 Module boy_miser

3.1 Variables

Name	Description
package	Value: None

3.2 Class MiserBoy

boys.Boy — boy_miser.MiserBoy

boy class for miser boys

3.2.1 Methods

init(self, name, atr, gfbudget, intelli, min_atr_req, type)	
constructor	
Overrides: boys.Boyinit	

Inherited from boys.Boy(Section 4.2)

Class Boy Module boys

4 Module boys

4.1 Variables

Name	Description
package	Value: None

4.2 Class Boy

Known Subclasses: boy_geek.GeekBoy, boy_generous.GenerousBoy, boy_miser.MiserBoy boy class for all boys

4.2.1 Methods

init(self, name,	atr, gfbudget, intelli, min_atr_req, type)
constructor	

is_elligible(self, mbudget, atr)
checks the elligibility of a given Girl, for the current instance of Boy class

Class Couple Module couple

5 Module couple

5.1 Variables

Name	Description
package	Value: None

5.2 Class Couple

couple class for all couples

init(self, boy, girl)
constructor

$set_happiness(self)$
set the happiness of a couple

$\underline{\mathbf{set}}\underline{\mathbf{compatibility}}(self)$	
set the compatibility of a couple	

6 Module gift_essential

6.1 Variables

Name	Description
package	Value: None

6.2 Class EssentialGift

gift class for essential gifts

init(self, name, price, value, type)
constructor
Overrides: gifts.Giftinit

7 Module gift_luxury

7.1 Variables

Name	Description
package	Value: None

7.2 Class LuxuryGift

gift class for luxury gifts

init(self, name, price, value, type, lxry_rtng, difficulty)
constructor
Overrides: gifts.Giftinit

Class UtilityGift Module gift_utility

8 Module gift_utility

8.1 Variables

Name	Description
package	Value: None

8.2 Class UtilityGift

gift class for utility gifts

init(self, name, price, value, type, utlty_value, utlty_class)
constructor
Overrides: gifts.Giftinit

Class Gifting Module gifting

9 Module gifting

9.1 Variables

Name	Description
package	Value: None

9.2 Class Gifting

gifting mechanism

9.2.1 Methods

gifting(self, C, GFT, choice)
gifting methods

hp_miser(self, GFT, c, choice)

provides gifting logic for Miser type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

hp_generous(self, GFT, c, choice)

provides gifting logic for Generous type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

$hp_geek(self, GFT, c, choice)$

provides gifting logic for Geek type Boys and sets the Happiness of the committed Boy and Girl and the whole couple, also sets the Compatibility of the couple

gifting_choice(self, GFT, c, v1, v2, choice, btype)

do gifting according to choice

Class Gift Module gifts

10 Module gifts

10.1 Variables

Name	Description
package	Value: None

10.2 Class Gift

init(self, name, price, value, type)
constructor

11 Module girl_choosy

11.1 Variables

Name	Description
package	Value: None

11.2 Class ChoosyGirl

girl class for choosy girls

11.2.1 Methods

init(self, name, atr, mbudget, intelli, type)
constructor
Overrides: girls.Girlinit

$Inherited\ from\ girls. Girl (Section\ 14.2)$

12 Module girl_desperate

12.1 Variables

Name	Description
package	Value: None

12.2 Class DesperateGirl

girl class for desperate girls

12.2.1 Methods

init(self, name, atr, mbudget, intelli, type)
constructor
Overrides: girls.Girlinit

Inherited from girls. Girl (Section 14.2)

13 Module girl_normal

13.1 Variables

Name	Description
package	Value: None

13.2 Class NormalGirl

girls.Girl — girl_normal.NormalGirl

girl class for normal girls

13.2.1 Methods

init(self, name, atr, mbudget, intelli, type)
constructor
Overrides: girls.Girlinit

$Inherited\ from\ girls. Girl (Section\ 14.2)$

Class Girl Module girls

14 Module girls

14.1 Variables

Name	Description
package	Value: None

14.2 Class Girl

 $\label{lem:choosy:cho$

init(self, name, atr, mbudget, intelli, type)
constructor

is_elligible(self, gfbudget)
checks the elligibility of a given Boy, for the current instance of Girl class

Variables Module q8_driver

15 Module q8_driver

15.1 Functions

allocate()

reads and stores the input from the boys.csv and girls.csv files and then makes the valid couples

$calculate_happiness(C)$

reads and stores the inputs from the gifts.csv file and provide gift exchanges between the couples

$\mathbf{print}_{\mathbf{gifts}}(C)$

prints all the Gifts gifted by Boyfriend to his Girlfriend for all the Couples

$\mathbf{print}_{\mathbf{hc}}(C, k)$

prints the k most Happy Couples and k most Compatible Couples

15.2 Variables

Name	Description
package	Value: None

Variables Module utility

16 Module utility

16.1 Functions

utility()	
creates the input csv files	

$\mathbf{create}(\mathit{file},\mathit{list})$	
writes to csv files	

16.2 Variables

Name	Description
package	Value: None

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