My Project

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Chapter 1

Contributor Covenant Code of Conduct

Our Pledge

In the interest of fostering an open and welcoming environment, we as contributors and maintainers pledge to making participation in our project and our community a harassment-free experience for everyone, regardless of age, body size, disability, ethnicity, sex characteristics, gender identity and expression, level of experience, education, socio-economic status, nationality, personal appearance, race, religion, or sexual identity and orientation.

Our Standards

Examples of behavior that contributes to creating a positive environment include:

- Using welcoming and inclusive language
- Being respectful of differing viewpoints and experiences
- Gracefully accepting constructive criticism
- Focusing on what is best for the community
- Showing empathy towards other community members

Examples of unacceptable behavior by participants include:

- The use of sexualized language or imagery and unwelcome sexual attention or advances
- Trolling, insulting/derogatory comments, and personal or political attacks
- Public or private harassment
- Publishing others' private information, such as a physical or electronic address, without explicit permission
- Other conduct which could reasonably be considered inappropriate in a professional setting

Our Responsibilities

Project maintainers are responsible for clarifying the standards of acceptable behavior and are expected to take appropriate and fair corrective action in response to any instances of unacceptable behavior.

Project maintainers have the right and responsibility to remove, edit, or reject comments, commits, code, wiki edits, issues, and other contributions that are not aligned to this Code of Conduct, or to ban temporarily or permanently any contributor for other behaviors that they deem inappropriate, threatening, offensive, or harmful.

Scope

This Code of Conduct applies both within project spaces and in public spaces when an individual is representing the project or its community. Examples of representing a project or community include using an official project e-mail address, posting via an official social media account, or acting as an appointed representative at an online or offline event. Representation of a project may be further defined and clarified by project maintainers.

Enforcement

Instances of abusive, harassing, or otherwise unacceptable behavior may be reported by contacting the project team at martinomarelakota@yahoo.it. All complaints will be reviewed and investigated and will result in a response that is deemed necessary and appropriate to the circumstances. The project team is obligated to maintain confidentiality with regard to the reporter of an incident. Further details of specific enforcement policies may be posted separately.

Project maintainers who do not follow or enforce the Code of Conduct in good faith may face temporary or permanent repercussions as determined by other members of the project's leadership.

Attribution

This Code of Conduct is adapted from the Contributor Covenant, version 1.4, available at https://www.contributor-covenant.org/version/1/4/code-of-conduct.html

For answers to common questions about this code of conduct, see https://www.contributor-covenant.org/faq

Chapter 2

Meal plan optimizer

The aim of this project is to develop a meal plan optimizer using integer programming.

Packages

```
python 3.8.5

jupyter 1.0.0
pandas 1.1.5
pulp 2.4
```

Chapter 3

Namespace Index

3.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

Chapter 4

Class Index

4.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 5

Namespace Documentation

5.1 meal_plan_optimizer Namespace Reference

Classes

- class dish

Functions

- def branch_and_bound (prob)
- def unlimited_dish (string, unlimited_dishes)

5.1.1 Detailed Description

```
@package meal_plan_optimizer

Meal plan optimizer project package.
```

5.1.2 Function Documentation

5.1.2.1 branch_and_bound()

```
def meal_plan_optimizer.branch_and_bound (
              prob )

Performs the branch and bound algorithm on a pulp problem.

Parameters
----------
prob : pulp.pulp.LpProblem
    Real value optimization problem to solve using integer programming.

Returns
-------
best : pulp.pulp.LpProblem
    Integer value.
```

5.1.2.2 unlimited_dish()

```
def meal_plan_optimizer.unlimited_dish (
              string,
              unlimited_dishes )
```

```
Checks if a dish is part of the unlimited dishes list.

Parameters
----------
string : str
    Dish to check.
unlimited_dishes : list
    List of unlimited dishes.

Returns
-------
bool
    True if dish is part of the unlimited dishes list, False otherwise.
```

Chapter 6

Class Documentation

6.1 meal_plan_optimizer.dish Class Reference

Public Member Functions

- def __init__ (self, name, nutrient_limits)

Public Attributes

- **name**
- **nutrients**

Static Public Attributes

- string **name** = ""
- int **cost** = 0
- dictionary **nutrients** = {}

6.1.1 Detailed Description

```
Class containing dish attributes.

Attributes
----------
name : str
    Name of the dish.
cost : float
    Cost of the dish.
nutrients : dict
    Nutrients of the dish

Methods
-------
__init__(self, name, nutrient_limits)
    Initializes a dish.
```

6.1.2 Constructor & Destructor Documentation

6.1.2.1 __init__()

```
def meal_plan_optimizer.dish.__init__ (
              self,
              name,
              nutrient_limits )


Initializes a dish.

Parameters
----------
self : dish
    Dish to initialize.
name : str
    Dish name.
nutrient_limits : dict
    Nutrient limits dictionary.
```

The documentation for this class was generated from the following file:

- meal_plan_optimizer.py

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