

## README

- Class Documentation
  - Description of the class:
    - My class is called “Bakery” and it has a set number of ingredients/supplies. As the user makes selections based on what is provided, it will subtract or add ingredients from the Bakery’s storage. The options provided include purchasing a baked good such as a cake or pie and each baked good has a different amount of ingredients in the list. One can also add more supplies or take supplies away from the storage. There is also the option to get a full report of the amounts of all the ingredients left in the storage.
  - Description of the class and data variables
    - (Class variable) name: This variable is the name of the user.
    - (Data variable) self.money: This variable counts how much money is earned per baked good made.
    - (Data variable) self.goods\_counter: This variable counts how many baked goods are made.
    - (Data variable) self.choices: This variable takes the choice of the user's input from the options menu and depending on that input, the next action is performed.
    - (Data variable) self.item: This variable takes the choice of the user’s input from the baked goods menu and depending on that input, the next action is performed.
    - (Data variables) self.subtract: This variable differs based on the user’s input, however, it subtracts the amount of ingredients needed for the baked good selected.
  - Description of the methods
    - def start(self)
      - This method introduces the bakery and provides the user with multiple options on what to do. Depending on the input, it navigates the user to another method.
    - def options(self)
      - This method returns the user back to the start of the program with the options.
    - def check\_ingredients(self)
      - This method checks the ingredients to see if there are enough supplies in order to make the baked goods or take the ingredients. It returns either a True or False along with a string telling the user if they are able to make the baked goods or if there isn’t enough supplies.

- `def set_milk(self, m)`
  - This method sets the amount of milk. This is stored into a variable.
- `def set_eggs(self, e)`
  - This method sets the amount of eggs. This is stored into a variable.
- `def set_butter(self, b)`
  - This method sets the amount of butter. This is stored into a variable.
- `def set_flour(self, fl)`
  - This method sets the amount of flour. This is stored into a variable.
- `def set_sugar(self, s)`
  - This method sets the amount of sugar. This is stored into a variable.
- `def set_frosting(self, f)`
  - This method sets the amount of frosting. This is stored into a variable.
- `def subtract_ingredients(self)`
  - This method subtracts the amount needed for each baked good by the amount in the storage. Since the order of the ingredients are always going to be the same, it subtracts based on the order of the list in another method.
- `def purchase(self)`
  - This method follows after the purchase option where the menu is provided and followed by the selected baked good option, it subtracts from the amount in storage by calling the previous method. This adds money to the `self.money` variable and counts the baked goods made in the `self.goods_counter` variable. Then, it returns the user back to the options.
- `def take(self)`
  - This method asks the user how much of each ingredient they would like to take from the storage. Then, it returns the user back to the options.
- `def refill(self)`
  - This method asks the user how much of each ingredient they would like to add from the storage. Then, it returns the user back to the options.
- `def supply(self)`
  - This method provides a report of how much of each ingredient is left in storage. Then it returns the user back to the options.

- Demo Program Documentation

- Description of program
  - This program is essentially a virtual bakery that allows the user to navigate through it through user inputs. First, the program asks for your name. Then, the program asks you to either purchase a baked good, take ingredients from the storage, refill ingredients from the storage, get the supply status, and exit the program. From the purchase option, the user has the option to pick what baked goods they would like to order. Depending on the baked goods, it subtracts a specific amount from the ingredients in storage, adds money to the money counter, and adds to the baked goods counter. From the take option, the user can take any amount of the ingredients as long as they are in storage. From the refill option, the user can refill any amount of the ingredients. From the supply option, the user can get a visual report on the quantity of each ingredient left, how much money is made, and how many baked goods are made. Finally, there is an option to exit the program.
- Instructions on how to run the program
  - To run the program, the user can follow the instructions shown by the program itself which should guide the user towards options on what they would like to do.