

Harrisburg University of Science & Technology

CISC 504 Principles of Programming Languages

Assignment 8: Software Development

Instructions:

- Use as many code cells as you need to implement the tasks in below.
- Submit a Jupyter Notebook (iPython) doc including a 5 minutes walk-through recording (a YouTube recordings is highly recommended.)
- **DO NOT JUST SUBMIT THE NOTEBOOK**

(1) Debugging Sample Python Code for an Application

We want to create a picnic basket for yourself depending on how you are feeling, healthy/not healthy, hungry/not hungry.

The code that you have is working correctly for two scenarios, but for the third it is breaking. See the following output:

Healthy?	Hungry?	Initial Basket	Output
True	False	-	['orange', 'apple', 'strawberry']
False	True	['tea']	['tea', 'jam', 'sandwich']
True	True	-	['orange', 'apple', 'strawberry', 'strawberry', 'sandwich']

The print statements at the end of the gist can be used to help you debug your code. The outputs should be as follows:

```
print("First basket:", create_picnic_basket(True, False)) # ['orange', 'apple', 'strawberry']
print("Second basket:", create_picnic_basket(False, True, ['tea'])) #['tea', 'jam', 'sandwich']
print("Third basket:", create_picnic_basket(True, True)) #['orange', 'apple', 'strawberry', 'sandwich']
```

You need to fix the code from the gist provided below:

Clone the following Gist: <https://gist.github.com/30b9d4ec4a8f41b10ba8ca71c06d7827.git> .

Use `git clone https://gist.github.com/30b9d4ec4a8f41b10ba8ca71c06d7827.git` from your command line if possible.

Debug the code and find the error. Commit your changes and push your commits to a remote server.

This assignment will require you to create a [GitHub account](#) (free and highly recommended for all aspiring software engineers), and use the git terminal, downloadable [here](#)

```
In [1]: DEFAULT_INITIAL_BASKET = ["orange", "apple"]

def create_picnic_basket(healthy, hungry, initial_basket=DEFAULT_INITIAL_BASKET):
    basket = initial_basket
    if healthy:
        basket.append("strawberry")
    else:
        basket.append("jam")

    if hungry:
        basket.append("sandwich")
    return basket

# Reproducer
print("First basket:", create_picnic_basket(True, False))
print("Second basket:", create_picnic_basket(False, True, ["tea"]))
print("Third basket:", create_picnic_basket(True, True))
```

```
First basket: ['orange', 'apple', 'strawberry']
Second basket: ['tea', 'jam', 'sandwich']
Third basket: ['orange', 'apple', 'strawberry', 'strawberry', 'sandwich']
```

In []: