HW 0: Introductions👋

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Interpreting homework documentations

This is a document format I previously used for Dr. Bardoe's CS570: Autonomous Robotics course. For every homework/project, a file like this will accompany the program. These documentations will detail & explain every step used in the process and also cite any resource used.**Below is an example from CS570 of a documentation file that accompanied a "name-greeter" homework:**

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Creating the `main.py`

Implementing the main.py was rather easy, as all the function printOut() needed was a print() statement with the arguments as follows:

```python
print("Hello, Dr. Bardoe")
```

Results for this code

```
Hello, Dr. Bardoe
```

This was used to implement both the main branch for "Hello, World" and the dev branch for "Hello, Dr. Bardoe"

Building "feature1" and "feature1dev"

I started the extension portion of this project by branching off of "dev" to create "feature1". I decided that I want to implement a revised greeting method to have more variety and take in the user's name. Therefore, I initialized two empty functions in "feature1" titled "nameGetter()" and

"printOutRandom(name)" with the random printer taking a string(name) as the argument. I also modified the main method to call printOutRandom() with the return of nameGetter(), or the user's name as the argument.

```python
def nameGetter():
    pass
```

```python
def printOutRandom(name):
    pass
```

```python
printOutRandom(nameGetter())
```

I pushed this to "feature1" and then branched off to make "feature1dev" to implement these two functions.

Building nameGetter()

The nameGetter() function was really easy to implement. I used python's input function to gather the input from the user terminal and then returned that value.

```python
def nameGetter():
    print("What is your name")
    return input()
```

Building printOutRandom()

The printOutRandom() function was implemented by using python's "random" module. I imported it as rd for easier typing, and because random.Random() can be very confusing to look at.

```python
import random as rd
```

I then wrote a simple and short dataset for different sentence starters for greetings, such as "How's it going? " or "Hey, ". This was stored into a list, so if we want to add more later down the line via user preferences, we can.

```python
greeting_dataset = ["Hiya, ", "How is it going, ", "What's good? ", "What's up? ", "Hey, ", "How is the day looking like? "]
```

Now that we have "random" imported, we can use it's randInt(start, end) function to generate an integer between the 0th index of the list and the length of the list - 1(AKA the last index of the list)

```python
randex = rd.randint(0,len(greeting_dataset) - 1)
```

I called it "randex" because it is the compound word for "random index". Using the random int, we can now just print out the random element in our greeting list accessed by the random index.

```python
print(f"{greeting_dataset[randex]}{name}")
```

When executed from the terminal using the Anaconda install of Python 3.10 I have, the program now does this:

What is your name
Eric
How is it going, Eric

Final touches
Now that we confirmed that the program works correctly we can push to the "feature1dev" branch and make a pull request to merge with "feature1". After review, I merged the request.
On my honour, I have neither given or received unauthorized aid - Eric Yang

External sources consulted:

Google search for: "10 ways to start a greeting"
Python Random - Geeksforgeeks
https://www.geeksforgeeks.org/python-random-function/

Implementation of nameGetter() and printOutRandom() #1

Merged Ericxiyinyang merged 1 commit into `feature1` from `feature1dev` 27 minutes ago

Conversation 1 | Commits 1 | Checks 0 | Files changed 1

Ericxiyinyang commented 29 minutes ago ···

I implemented two functions that gets the user's name and generates a random greeting based on the small data list I wrote.

Implemented nameGetter and printOutRandom functions to get the user's… ···   c1d9571

Ericxiyinyang commented 28 minutes ago   Author ···

Pull looks good after checking files changed, merging.

Ericxiyinyang merged commit **6bc04c2** into `feature1` 27 minutes ago   Revert

Pull request successfully merged and closed   Delete branch
You're all set—the `feature1dev` branch can be safely deleted.