**CS 21 Final Project – Kamiku Branch**

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**Branch Application Name**: Currency Exchanger **(decided by Kamiku Xue [NetID: yxue])**

**Note - I use the ‘\t’ for format the output.**

**Project Introduction**

**Purpose:**

I design this application to help users convert their currency to the target currency which can efficiently know the price in different countries or buy the goods form foreign shopping sites. Also, it can return the real-time currency rate.

**Instructions**

**Dependencies**

1. **Requests**

I use the requests which you need to install this module : pip3 install requests

1. **Json**

I also use the Json to convert the json to the python dict: pip3 install json

In application I import the tow modules into the python:

API url: **https://api.shenjian.io/exchange/currency/?appid=<apikey>**

Param:

|  |  |  |  |
| --- | --- | --- | --- |
| **para** | **type** | **required** | **function** |
| form | string | yes | Source currency code |
| to | string | yes | Target currency code |

Method: **Get/Post** | Return format: **Json**

Example: **https://api.shenjian.io/exchange/currency?appid=<apikey>&amp;form=USD&amp;to=CNY**

**import requests**

**import json**

**Usage**

1. After choosing the application, it will first catch the list of available currency form API site, this is a Chinese site and it’s free. As a result, I just give the basic intro about API:
2. If success, user can enter the menu to choose the language:

>>>Welcome to use the currency exchange system!

>>>Please choose the Language(请选择语言)[English --> 0 | 简体中文 --> 1]: **0 OR 1**

1. Next, I just show the English mode (enter 0). Then it will display the list of English ver. and show the input to let user enter the code of currency

>>>Please enter the source currency(Code): **usd OR USD**

>>>Please enter the target currency you want to convert(Code): **cny OR CNY**

1. Then the function of request will request the rate of currency. If success, the program will continue to let user input the amount of currency to exchange.

>>>Please enter the number you want to convert: **10 OR 10.000**

1. Finally, the result will display and ask user if run again the program.

>>>Exchange again？(y/n): **y OR Y**

**[User will return to the Global Tool Menu if choose ‘n’]**

**References**

Ronquillo, A.(2019). Python’s Requests Library (Guide). Retrieved from https://realpython.com/python-requests/

Safranski, K.(2109). Common Currency Codes in JSON. Retrieved from <https://gist.github.com/Fluidbyte/2973986>