



JINVANI BHARTI PUBLIC SCHOOL

**project synopsis
on currency
converter**

in Python

academic year: 2021-22

ROLL NO: .

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SUBJECT: **COMPUTER SCIENCE**

SUB CODE: **083**





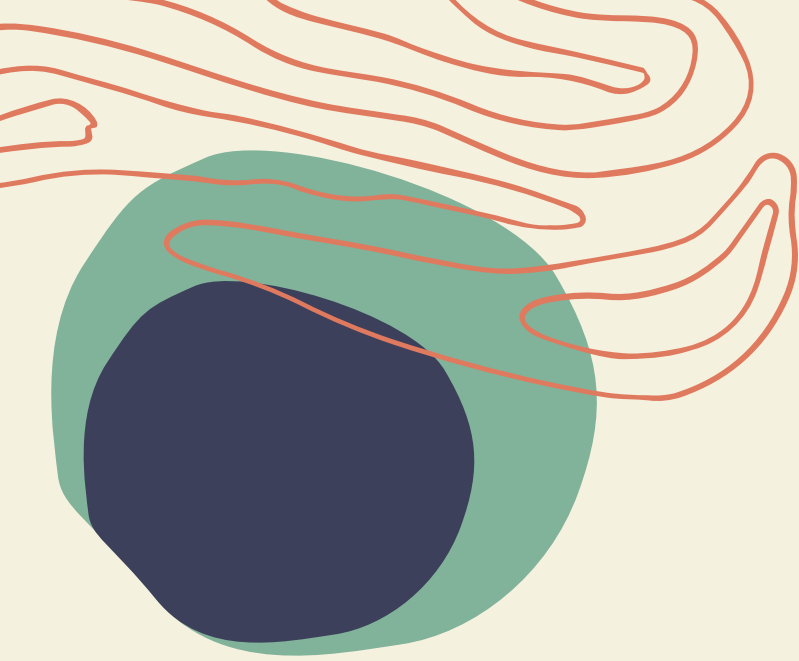
CERTIFICATE



This is to certify that the project entitled '**Currency Converter Application**' is a bona fide work presented by **Sujal Jain** of class XI — A, session 2021-22 in the partial fulfilment of CBSE AISSCE Examination, 2022 and has been carried out under my direct supervision and guidance.

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Ms. Shalini



Acknowledgement

I am thankful to our computer teacher Ms. Shalini who guided me with this project or this project wouldn't have been initiated. I would also like to thank computer department of our school who gave me time for the completion of the project.

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INTRODUCTION TO THE PROGRAM



A universal currency converter is a software application or website that provides for the easy conversion of currency values based on present-day exchange rates.

Currency conversion is of practical use to tourists who travel abroad, to businesses who do business overseas or are involved in imports and exports, and to FX traders.

A universal currency converter is "universal" in the sense that you can not only convert your home currency into any other, but also any foreign currency for any other as well.



minimum system requirements


- **Operating Systems:** Windows 7 or higher, macOSX 10.11 or higher, Linux Ubuntu or RHEL 6/7 64bit arch.
- **Processor:** x86 64-bit CPU (Intel / AMD architecture)
- **Disk Space:** 5GB free disk space
- **RAM:** 2GB RAM
- **Python:** v3.6+

recommended system requirements

- **Operating Systems:** Windows 10 or higher, macOSX 10.15 or higher, Linux Ubuntu or RHEL 6/7 64bit arch.
- **Processor:** x86 64-bit CPU (Intel / AMD architecture)
- **Disk Space:** 5GB free disk space
- **RAM:** 8GB RAM
- **Python:** v3.9+



Objective of the program


- ✦ Shows frequent travellers the rate of exchange.
 - ✦ Converter will do a live currency conversion with the current exchange rates.
 - ✦ Helps international import and export businesses by determining the selling and buying profits of different products.
 - ✦ Accuracy and speed are very crucial in forex market and a converter is speedy.
- 



Working environment

About Python

Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems.



About The Program

INPUT

It can process any currency across the list of 30+ currently circulating currencies and any amount up to 'n' digits.

`input()`

OUTPUT

The output is printed once both the inputs from the user are accessed in the converter package.

`print()`



PROCESS

Input is stored in a variable and then accessed from the forex module through the converter package.

`cr.convert`

MODULE

The program is made possible with forex-python API module.

`forex-python`

Forex module is imported and defined. An empty dictionary is made and a new txt file is made containing the required data.

Data is read from the txt file and any white spaces and new line characters are stripped. The dictionary is assigned the keys and values and is printed.

The convert function is used from forex module to print the result and decision to the user. The loop continues until user quits using if else conditions.

A while loop initiates the inputs and breaks if user quits. The inputs are uppercased and format() is used to add variables in strings.



made by - Sujal

```

1  from forex_python.converter import CurrencyRates  # import the forex module
2  cr = CurrencyRates()  # define the module
3
4  print("Type the currency code from the following available currencies:")
5
6  cdict = {}  # create an empty dictionary
7  with open('curr_name.txt') as cn:
8      nline = cn.readlines()  # read the currency code and names from txt file
9  for nlin in nline:
10     stripd = nlin.strip()  # strip the new line characters and spaces (if any)
11     parsed = stripd.split(",")  # split the codes and names into a list
12     # assign the keys and values to the empty dictionary above
13     cdict[parsed[0]] = parsed[1]
14
15  for key, value in cdict.items():
16     # print the keys and values on new line each
17     print(key, "for", "({})".format(value))
18
19  # input and uppercase the from currency
20  while True:
21     c1 = input("I want to convert from: ").upper()
22  # enter the currency to convert to
23     if c1 == 'q' or c1 == 'Q':
24         break
25     else:
26         c2 = input("from {} to: ".format(c1)).upper()
27         c3 = float(input("and...what's the amount?: "))  # enter the amount to convert
28         print("\n")  # add a new line before the result
29         print("You want to convert {}{} to {}".format(c3, c1, c2))  # reveal the decision to user
30         print(c3, c1, "equals", cr.convert(c1, c2, c3), c2, "\n")  # print the result

```

Coding & Development

download code files

1. https://class.sujal.cf/cs11/curr_name.txt
2. https://class.sujal.cf/cs11/curr_py.html



code editor used:  Visual Studio Code

PRESENTED BY:

Sujal Jain

Type the currency code from the following available currencies:

USD for (United States dollar)

EUR for (Euro)

JPY for (Japanese yen)

BGN for (Bulgarian lev)

CZK for (Czech koruna)

DKK for (Danish krone)

GBP for (British pound)

HUF for (Hungarian forint)

PLN for (Polish zloty)

RON for (Romanian leu)

SEK for (Swedish krona)

CHF for (Swiss franc)

ISK for (Icelandic króna)

NOK for (Norwegian krone)

HRK for (Croatian kuna)

RUB for (Russian ruble)

TRY for (Turkish lira)

AUD for (Australian dollar)

BRL for (Brazilian real)

program in action (output)



CONCLUSION

Use of an online currency converter is vital for forex traders to achieve speed and accuracy in trades. Universal Currency Converters are useful for forex traders as they offer real-time tracking of changes in valuations.



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