MINI PROJECT (2020-2021)

CURRENCY CONVERTER (PYTHON LIBRARY)

MID TERM REPORT

Department of Computer Engineering and Applications

INSTITUTE OF ENGINEERING AND TECHNOLOGY



SUBMITTED TO:

Mandeep Singh

SUBMITTED BY:

Saurabh Pratap Singh

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>>>>>CERTIFICATE

This is to certify that Saurabh pratap Singh(181500639) student of B.tech (CSE) 3rd year has successfully completed the mini project 2 name currency converter using python 3 under the guidence of Mr. Mandeep Singh during 2020-2021.

Signature: Mandeep Singh (Mentor)

<u>ACKNOWLEDGEMENT</u>

I have taken efforts in this project, however it would not been possible without the kind support and help of many teachers. I would like to extend my sincere thanks to all of them.

I am highly indebted to Mrs Mandeep Singh for his guidance and constant supervision as well as for providing neccessary information regarding my project and for providing neccessary information regarding my project and also for his support in completing the project.

I would like to express my gratitude towards our parents and members of GLA University towards for their kind co-operation and encouragement which helps us in completion of this project.

Abstract

Currency converter (or currency exchange) is a mini project coded in python programming language. This simple application provides a web-based interface for exchanging/converting money from one currency (say \$) to another currency (say €).

Different countries use different currency, and there is daily variation in these currencies relative to one another. Those who transfer money from one country to another (one currency to another) must be updated with the latest currency exchange rates in the market.

Currency converter mini project is built keeping this thing in mind. It is simply a calculator-like app developed using Ajax, Java servlets web features. In this application, there is regular update about currency of every country by which it displays present currency market value and conversion rate.

Such application can be used by any user, but it is mainly useful for business, shares, and finance related areas where money transfer and currency exchange takes place on a daily basis.

In this currency converter program, users are provided with an option to select the type of conversion, i.e. from "this" currency to "that" currency. This simple feature

allows users to enter amount which to be converted (say currency in Dollars), and display the converted amount (say currency in Euro).

So we will import our library our tkinter library with the help of this library we will make an GUI which helps to makes our project better.

Unlike some other famous libraries ,tkinter doesn't have any third-party dependencies.tkinter is a light -weight python library with a rich set of features for taking the data and makes creative GUIs.this is a open source project and very easy to use but has a lot of bugs and very hard implementation process.Towards the end of this article , I will be providing some code snippets to rectify some of the errors that might occur while we use the library and hope these errors get fixed by the next release.

Using the python package ,this task is very simple-efficient-safe with few bunch codes.

Tkinterand .in thiss project we wll use tkinter library sour projects will run in an appropriate manner.	so that
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FOR THE PROJECT

1.INTRODUCTION

- 1.1. General Introduction to the topic
- 1.2 Project Prerequisites
- 1.3 Hardware and Software Requirements
- 2.Problem definition
- 3. Objectives
- 4.Implementation Details
- 5. Motivation
- 6. Working of the project

1.INTRODUCTION

In this awesome project we will do some different and do some experiments and also play and enjoy python. As we all know that from last years we have observe that python is very popular and growth of this python programming language is very high, due to many advance features its make our part simple and functions gives the way to do programming in easy way ,so in this project we will make currency converter by implementing tkinter library implementing part is very irritating in python I have seen so after importing tkinter library we will make an gui which will correctly show us the data of country and with the help of program we will Run our program.

- **1.2:Project Prerequisites**:To implement this project we use basic concept of python, google colab, python library.
 - **Tkinter** is a standard GUI library and it is one of the easiest ways to build a GUI application.
 - 1.3:Hardware and Software Requirements:Processor used-Intel pentinum or above,Operating System-Window 7 or above;Pycharm,Tkinter,Google colaboratory,Visual studio code,Programming language-Python 3+

2. Problem definition:

Python is a high-level general-purpose programming language which is used for various applications. Using python you can make a web application, desktop application, Games, etc. In this python project, we will discuss how to convert currency to another currency so that we will familiar with the country's economy growth etc.using python and also we will create a nice GUI using the Python library.

2.Objectives:

With this project in python, we have successfully developed the curruncy converter project using python. We used the popular Tkinter library that used for rendering graphics. Python libraries make the programming task easier which allows you to access the program which is already implemented to save lots of time. It is a collection of functions and methods which allows you to code fast. tkinter is a very useful dependency-free library used to take data from internet from the web.

The best way to install the library is by using pip. PIP refers to Preferred Installer Program which is used to install additional libraries and packages easily using the command line. PIP comes pre-installed with Python 3.4 or greater versions.PIP is a recursive acronym for "Preferred Installer Program" or "PIP Installs Packages".It is a command -line utility that installs,reinstalls,reinstalls PyPI packages with one simple command: pip. You may be familiar with the term package manager if you have used otherr languages like Ruby uses Gem, Javasccriptuses npm for package management,and .NET used NuGet. Pip has become the stanadard package manager for python.

The python installer installs pip automatically, so it is ready for you to use, unless you have installed an older version of python.

4. Implementation Details:

There can be some changes occur in code in different ide so we have to make changes in the code.

5. Motivation:

In current scenario, student do not get exposure to the real life and many times unable to get the information regarding placement drives in Campus due to lack of resources.

They just make themselves so busy in study books,

scoring high CPI and many other activities like this. In order to scoring high CPI, they just focus on the learning part and

forgot the application of the concept in the real life.

Now-a-days, Students mainly are placement oriented but they do not get the right

guidelines regarding the placement drives,

companies which are coming in campus, for which technology the company is asking for, need of the companies, the criteria to appear in drive test, what salary packages they are offering and technologies which are in trend.

So, we come up with this idea of making a webpage for helping such student where they can find all the needed information at one place also they get the references for the subjects to study from and will be able to give a quiz of several subjects in which the asked question will help them to prepare for placement interview.

5. Working of the project:

First of all we have to install tkinter library in our visual studio code after installing tkinter library with pip command then we will import tkinter library as ttk Note: ttk is an advance version of tk
This Currency Converter App is in Python. Talking about the features of this system, this python application is designed to convert entered numbers from one system/unit to other system/unit and it is also capable of handling all types of exceptions.

Module Used – Tkinter()-It is a standard Python interface to the Tk GUI toolkit shipped with Python.

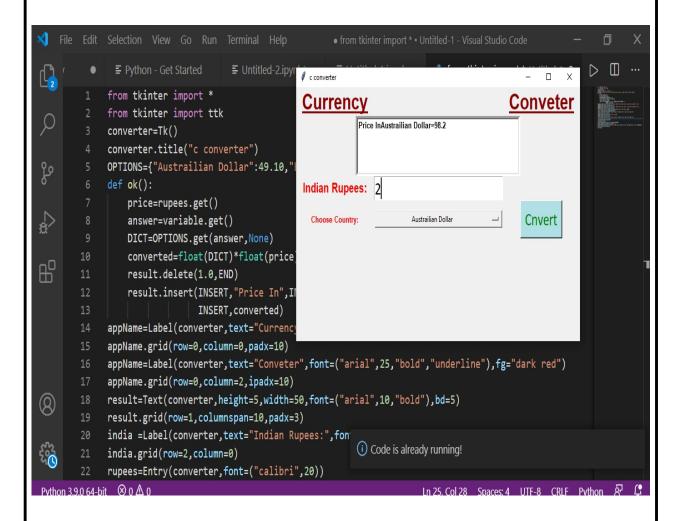
Python with tkinter outputs the fastest and easiest way to create the GUI applications. Also, the design of this system is pretty simple so that the user won't get any difficulties while working on it.

Implementation of the code:

```
File Edit Selection View Go Run Terminal Help
                                                        • from tkinter import * • Untitled-1 - Visual Studio Code
                                                                             🛊 from tkinter import * Untitled-1 🌘
           ■ Python - Get Started
                                   ■ Untitled-2.ipynb*
                                                         ■ Untitled-1.ipynb
         from tkinter import *
     2 from tkinter import ttk
         converter=Tk()
     4 converter.title("c converter")
         OPTIONS={"Austrailian Dollar":49.10, "Brazalian Real":17.30, "British pound":90.92}
         def ok():
             price=rupees.get()
              answer=variable.get()
             DICT=OPTIONS.get(answer,None)
             converted=float(DICT)*float(price)
              result.delete(1.0,END)
              result.insert(INSERT, "Price In", INSERT, answer, INSERT, "=",
                            INSERT, converted)
         appName=Label(converter,text="Currency",font=("arial",25,"bold","underline"),fg="dark red")
         appName.grid(row=0,column=0,padx=10)
         appName=Label(converter,text="Conveter",font=("arial",25,"bold","underline"),fg="dark red")
         appName.grid(row=0,column=2,ipadx=10)
         result=Text(converter, height=5, width=50, font=("arial", 10, "bold"), bd=5)
         result.grid(row=1,columnspan=10,padx=3)
         india =Label(converter,text="Indian Rupees:",font=("arial",15,"bold"),fg="red")
         india.grid(row=2,column=0)
         rupees=Entry(converter, font=("calibri", 20))
```

```
File Edit Selection View Go Run Terminal Help
                                                            • from tkinter import * • Untitled-1 - Visual Studio Code
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               ■ Python - Get Started
                                       ■ Untitled-2.ipynb*
                                                             ■ Untitled-1.ipynb
                 resurc.uerece(1.0,LND)
                 result.insert(INSERT, "Price In", INSERT, answer, INSERT, "=",
                                INSERT, converted)
             appName=Label(converter,text="Currency",font=("arial",25,"bold","underline"),fg="dark red")
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             india.grid(row=2,column=0)
        22 rupees=Entry(converter,font=("calibri",20))
             rupees.grid(row=2,column=1)
             choice=Label(converter,text="Choose Country:",font=("arial",10,"bold"),fg="red")
             choice.grid(row=3,column=0)
        26  variable=StringVar(converter)
             variable.set(None)
             option=OptionMenu(converter, variable, *OPTIONS)
             option.grid(row=3,column=1,sticky="ew")
             button=Button(converter,text="Cnvert",fg="green",font=("calibri",20),bg="powder blue",command=ok)
             button.grid(row=3,column=2)
             mainloop()
        32
                                                                               Ln 32, Col 6 Spaces: 4 UTF-8 CRLF Python 🔊 🕻
Python 3.9.0 64-bit ⊗ 0 △ 0
```

Output of the code:



More correction in code and runs on another plateform:

```
from tkinter import *
from tkinter import ttk
from crncy import OPTIONS
converter=Tk()
converter.title("c converter")
def ok():
    price=rupees.get()
    answer=variable.get()
    DICT=OPTIONS.get(answer,None)
    converted=float(DICT)*float(price)
    result.delete(1.0,END)
    result.insert(INSERT,"Price In
",INSERT,answer,INSERT,"=",
                      INSERT, converted)
appName=Label(converter,text="Currency",font=("arial",
25, "bold", "underline"), fg="dark blue")
appName.grid(row=0,column=0,padx=10)
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25, "bold", "underline"), fg="dark blue")
appName.grid(row=0,column=2,ipadx=10)
```

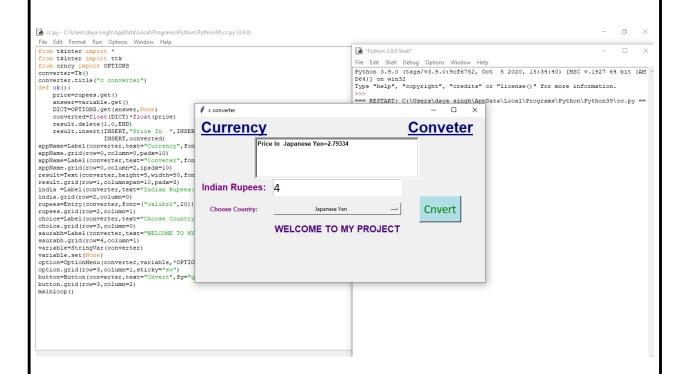
```
result=Text(converter,height=5,width=50,font=("arial",1
0,"bold"),bd=5)
result.grid(row=1,columnspan=10,padx=3)
india =Label(converter,text="Indian
Rupees:",font=("arial",15,"bold"),fg="purple")
india.grid(row=2,column=0)
rupees=Entry(converter,font=("calibri",20))
rupees.grid(row=2,column=1)
choice=Label(converter,text="Choose
Country:",font=("arial",10,"bold"),fg="purple")
choice.grid(row=3,column=0)
saurabh=Label(converter,text="WELCOME TO MY
PROJECT",font=("arial",15,"bold"),fg="indigo")
saurabh.grid(row=4,column=1)
variable=StringVar(converter)
variable.set(None)
option=OptionMenu(converter, variable, *OPTIONS)
option.grid(row=3,column=1,sticky="ew")
button=Button(converter,text="Cnvert",fg="green",font
=("calibri",20),bg="powder blue",command=ok)
button.grid(row=3,column=2)
mainloop()
```

```
- 🗇 X
cc.py - C:\Users\daya singh\AppData\Local\Programs\Python\Python39\cc.py (3.9.0)
File Edit Format Run Options Window Help
from tkinter import *
from tkinter import ttk
from crncy import OPTIONS
converter=Tk()
converter.title("c converter")
def ok():
  price=rupees.get()
   answer=variable.get()
   DICT=OPTIONS.get(answer, None)
   converted=float(DICT)*float(price)
   result.delete(1.0,END)
   result.insert(INSERT, "Price In ", INSERT, answer, INSERT, "=",
                 INSERT, converted)
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appName.grid(row=0,column=0,padx=10)
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button=Button(converter,text="Cnvert",fg="green",font=("calibri",20),bg="powder blue",command=ok)
button.grid(row=3,column=2)
mainloop()
```

Ln: 12 Col: 3

🖟 crncy.py - C:/Users/daya singh/AppData/Local/Programs/Python/Python39/crncy.py (3.9.0) - 🗇 X File Edit Format Run Options Window Help OPTIONS=("Austrailian Dollar":49.10, "Brazalian Real":17.30, "British pound":90.92, "US Dollar":75.370470, "Euro":90.680824, "British Pound":104.991906, "Australian Dollar":58.160783, "Canadian Dollar":59.780172, "Singapore Dollar":56.714071, "Swiss Franc":82.288017, "Malaysian Ringgit":18.301860, "Japanese Yen":0.698335, "Chinese Yuan Renminbi":11.594813} Department of Computer Science & Engineering Page 22

OUTPUT:



So it was all about implementation how we use the code and run the code with a perfect GUI

More about the project <u>CURRENCY CONVERTER USING</u> PYTHON:

Different countries use different currency, and there is daily variation in these currencies relative to one another. Those who transfer money from one country to another (one currency to another) must be updated with the latest currency exchange rates in the market.

Currency Converter (or currency exchange) is a small scale project coded in python programming language. This basic application gives an electronic interface to trading/changing over cash from one money (state \$) to another cash (say €).

The Complete source code of cash trade application can be downloaded from the connection underneath. As this is only a smaller than expected project, project report and documentation are not accessible. we can experience the depiction beneath for project unique. Currency converter mini project is built keeping this thing in mind. It is simply a calculator-like app developed using Ajax, Java servlets web features. In this application, there is regular update about currency of every country by which it displays present currency market value and conversion rate.

Such application can be used by any user, but it is mainly useful for business, shares, and finance related areas where money transfer and currency exchange takes place on a daily basis.

In this currency converter app, users are provided with an option to select the type of conversion, i.e. from "this" currency to "that" currency. This simple feature allows users to enter amount to be converted (say currency in Dollars), and display the converted amount (say currency in Euro).

Conclusion

The project involves a good knowledge of java programming language. The developer will be able to implement it easily as it doesn't require any

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template form of java and its programming. A web-based program, it will update automatica	
project will require a good knowledge over the	
people who are in business, shares or finance.	
free. This project is very affordable and useful	
database and the source code is also available	; 101

References for the

projects: Geeksforgeeks, youtube

https://pypi.org/project/tkinter

Features of the projects:

- Support for Both Progressive & DASH Streams
- Command-line Interfaced Included
- Caption Track Support
- Outputs Caption Tracks to .srt format (SubRip Subtitle)
- Extensively Documented Source Code
- No Third-Party Dependencies

For the sir: Thank you very much sir you help me alot during making my project whose implementation part was very mind disturbing. And thanks you for give me your precious time to read this project I think without your help I unable to complete this project (Currency converter).	as to
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