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Computing 1
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Currency Converter

For my final project I am going to create a software program that will convert currencies between different countries. For this project I am planning to use four countries and convert between them. The title of this program will be “Currency Converter”. My directed audience for this program will be anyone who wants to travels to different countries and in the future I was thinking to make it web accessible and also add more countries when I have more time.
This program will consist of database, arrays, Tk, message box, different colors, geometry, and datetime. I will run this program in Tk and the data need to be persistent and every label and button need to correspond to the right command. The data need to be persistent and I believe that will have to use loops for a lot of functions. The data for this program will need to be aggregated in to a larger structure in many places, and it needs to be organized so if there are any future problems it can be solved easily in the program. The structure of the program is described in the picture below using case analysis method.

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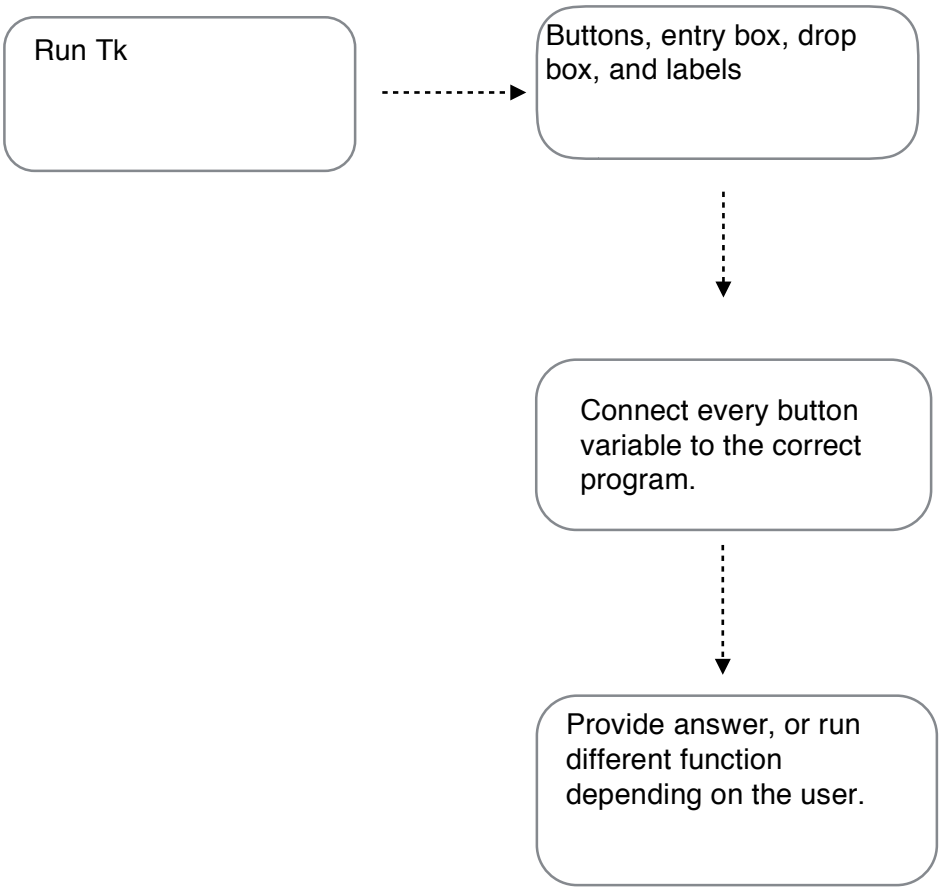
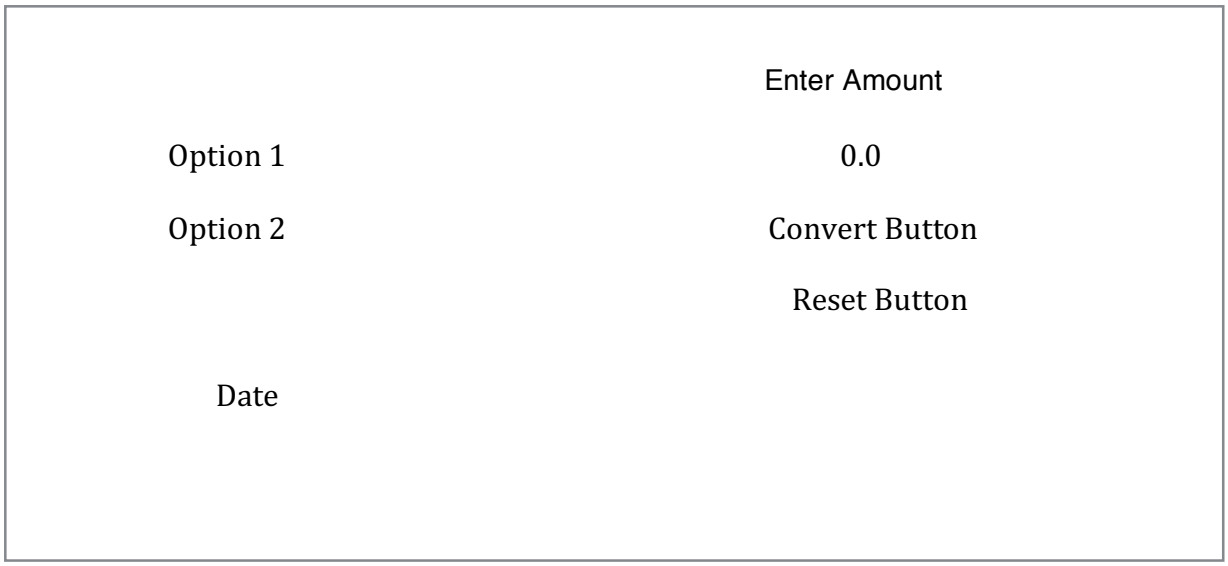


The UI design for this project is simple, it will have the heading on the top and then the options to select the desired country and it will also have buttons to convert, reset, and also exit. I'm going to give answers in the message box. There will be a exit button also which will ask you if we want to close after the user clicks he button. A visual representation is shown below.



The algorithm for this program:

1. size of the Gui
2. title of the Gui
3. Assigning string variable

Exit Button

4. creating a combobox
5. creating a list for countries for the initial option and also later use
6. creating an Int variable for the entry
7. Label telling where to write the amount
8. creating an entry space so user can type in the amount
9. creating an if statement so if the user picks this option then the program will run
10. if the user pick this option then run country's conversion rate
11. conversion rate formula
12. creating a message box for answer
13. Follow steps 9-12 for every country
14. create a convert button

15. create a message box with the asking if they are sure the want to quit the program
16. if yes then proceed to close the program
17. close the program
18. return loop
19. create an exit button
20. create a string variable for date
21. setting up the date and showing date, month and then the year
22. creating a label for date
23. setting the variable to nothing
24. setting the convert option to nothing
25. setting the currency option to nothing
26. creating a reset button
27. Main loop