

CMPE230 Systems Programming Homework 3

Currency Converter

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This Project is about coding a program that also have an interface. QT Creator is the tool to build an interface. C++ is to code the rest. The objective of the program is getting data, which is rate of TL and another currency, from a specific url and then reads that .json file with RegEx and then prints the rate with the amount of converted currency.

For solution we set up a simple algorithm. The algorithm executes the following:

- Sets the connection between buttons on GUI and code segment.
- Takes the TL values as an input from a lineEdit on GUI.
- Gets the TL/currency rate from the specific url for every specific currency.
- Calculates the amount of specific currency by multiplying the rate and the value coming from input.
- Sends the proper calculated values to the proper labels.

Methods and Their Functionality

- pushPressed()
 - It finds the button which is pressed and makes calculations according to that.
- replyFinishedUSD()
 - It gets the change rate of TL/USD value from given url, reads it with regex and makes the necessary calculations.
- replyFinishedEUR()
 - It gets the change rate of TL/EUR value from given url, reads it with regex and makes the necessary calculations.
- replyFinishedGBP()
 - It gets the change rate of TL/GBP value from given url, reads it with regex and makes the necessary calculations.
- replyFinishedCNY()
 - It gets the change rate of TL/CNY value from given url, reads it with regex and makes the necessary calculations.

Notes: If a number with more than 24 digits is entered, the result can be irrelevant. We couldn't find a solution for this problem.