

CMPE230 Project 3 Report

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Our task was developing a QT program which displays the conversion rate information about crypto-currencies. The list of crypto-currencies that will be displayed should be read from a file. In order to display the table properly, we used QTableWidgetItem class.

How it Works

In this Project, firstly, we were expected to read a global variable named **MYCRYPTOCONVERT** and its value contains where the input file resides. An example of the value can be C:\file.txt.

After that, we were expected to read the file.txt line by line and every line is either the **symbol** of a crypto coin or **name** of it. For example, for **0.5X Long Balancer Token** crypto coin, the line input will be either **0.5X Long Balancer Token** or symbol of that coin which is **balhalf**.

After reading the line, we search in the following website with using given name or symbol to get the equivalent id of that crypto coin
<https://api.coingecko.com/api/v3/coins/list> .

After getting the equivalent id of that crypto coin, we add it into our **QStringList idOfcoinName**, and add the name of crypto coin into QStringList coinName. If the input file is read successfully, we have all the necessary information. Now, we know the id of that currency to get its corresponding USD,EUR,GBP values from idOfCoinName and we also know name of currency from coinName.

Then, we do a recursive call for every element in coinId when there is no element left, the function terminates. What recursive call does is that it creates a new row with a proper coin name and its corresponding values. How we get the corresponding USD,EUR,GBP values is as follows

[https://api.coingecko.com/api/v3/simple/price?ids="+idOfcoinName+"&vs_currencies=usd,eur,gbp](https://api.coingecko.com/api/v3/simple/price?ids=)

We fetch the equivalent values of that crypto currency in USD,EUR and GBP by sending a request to above website in that pattern.