COLLEGE OF ENGINERING AND COMPUTER STUDIES

**PERFORMANCE TASK 2**

**[Conversion App using functions]**

Subject Code / Description

CPFL –

Computer Programming Fundamentals Lab

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Course & Section

BSCS 1-1

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1. **INTRODUCTION**
2. **Problem Description**

**Debugging codes**

1. **Objectives**

**To improve the usage of void functions and functions with parameters.**

1. **CONCEPTUAL FRAMEWORK**

|  |  |  |
| --- | --- | --- |
| INPUT | PROCESS | OUTPUT |
| **ch** | cin >> ch; | **ch** |
| **dollar** | cin >> dollarsIn; | **dollar** |
| **peso** | cin >> pesoIn; | **peso** |
| **promtAndwait();** | void promptAndWait()  {      cin.ignore(100, '\n');      cout << "\nPress Enter to continue...";      cin.get();  } | **promtAndwait();** |
| **dollarsTopeso** | void dollarsToPeso(float rate, unsigned dollar)  {      //Format      cout.setf(ios::fixed);      cout.precision(2);      //Print the results.      cout.imbue(locale(cout.getloc(), new group\_facet));      cout << "\n$" << dollar << " US = "<< "P" << (rate \* dollar) << " Pesos. \n";  } | **dollarsTopeso** |
| **pesoTodollars** | void pesoTodollars(float Prate, unsigned int peso){      //Format      //cout.setf(ios::fixed);      //cout.precision(1);      //Print the results.      cout.imbue(locale(cout.getloc(), new group\_facet));      cout << "\nP" << peso << " PHP = "<< "$" << (Prate \* peso) << " Dollars. \n";  } | **pesoTodollars** |

1. **I/O SCREEN SHOTS**

**Input:**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Output:**

**Text

Description automatically generated**

1. **PROGRAM SOURCE CODE (Main Logic Only)**

**SWITCH STATEMENT LOGIC**

 switch(ch){

            case 1:

            {

                cout << "\n<< Convert Dollar to PHP >>" << endl;

                dollarsToPeso(conversionRate, dollarsIn); // Show the exchange rate by calling the function.

                // Prompt the user and take US dollars input.

                cout << "Enter a US dollar amount (without the dollar sign, commas or a decimal) : ";

                cin >> dollarsIn;

                dollarsToPeso(conversionRate, dollarsIn); // Show the conversion by calling the function.

                promptAndWait(); // Call the promptAndWait() function.

                break;

            }

            case 2:

            {

                cout << "\n<< Convert Peso to Dollar >>" << endl;

                pesoTodollars(conversionPRate, pesoIn);//exchange rate func

                // Prompt the user and take Philippine Peso input.

                cout << "Enter a PHP amount (without the peso sign, commas or a decimal : ";

                cin >> pesoIn;

                pesoTodollars(conversionPRate, pesoIn);

                promptAndWait();//Promt function

                break;

            }

            case 0:

            {   cout << "Conversion App Terminated \nThank you for using the app!";

                promptAndWait();

                return 0;

            }

            default:

            {

                cout << "Invalid Input!";

                promptAndWait();

                break;

            }

        }

**FUNCTION LOGIC**

void promptAndWait()

{

    cin.ignore(100, '\n');

    cout << "\nPress Enter to continue...";

    cin.get();

}

// Define the dollarsToPeso function.

void dollarsToPeso(float rate, unsigned dollar)

{

    //Format

    cout.setf(ios::fixed);

    cout.precision(2);

    //Print the results.

    cout.imbue(locale(cout.getloc(), new group\_facet));

    cout << "\n$" << dollar << " US = "<< "P" << (rate \* dollar) << " Pesos. \n";

}

void pesoTodollars(float Prate, unsigned int peso){

    //Format

    //cout.setf(ios::fixed);

    //cout.precision(1);

    //Print the results.

    cout.imbue(locale(cout.getloc(), new group\_facet));

    cout << "\nP" << peso << " PHP = "<< "$" << (Prate \* peso) << " Dollars. \n";

}

1. **GitHub ACTIVITY LINK**

[**https://github.com/MikeVillegas00/Activities/blob/master/cpfl\_PT2.cpp**](https://github.com/MikeVillegas00/Activities/blob/master/cpfl_PT2.cpp)

1. **LEARNING OUTCOMES**

**With the help of OE 5 I understand the usage of void functions**

1. **REFERENCES**

**-**

1. What are the functions that converts currency and display the exchange rate?

Void dollarsToPeso(float rate, unsigned dollar)

Void pesoTodollars (float Prate, unsigned peso)

1. Enumerate all the formal parameters in all your defined functions?

float Prate, unsigned int peso

float rate, unsigned dollar

dollarsTopeso(conversionRate, dollarsIn)

pesoTodollars(conversionPrate,pesoIn)

1. What is the main purpose of the promptAndAwait() function? Explain.

Purpose of promtAndwait is to pause the program after using one of the exchange functions.

1. What were the line of codes and function that formats currency to a proper output monetary unit?

Struct group\_facet: public numpunct<char>{

protected:

string do grouping() const {return “\003”;}

};

1. What is the purpose of the do-while loop?

For the program to be looped.

1. How do you find this debugging Performance Task activity?

For me this is more effective in learning the implementations of the code discussed.