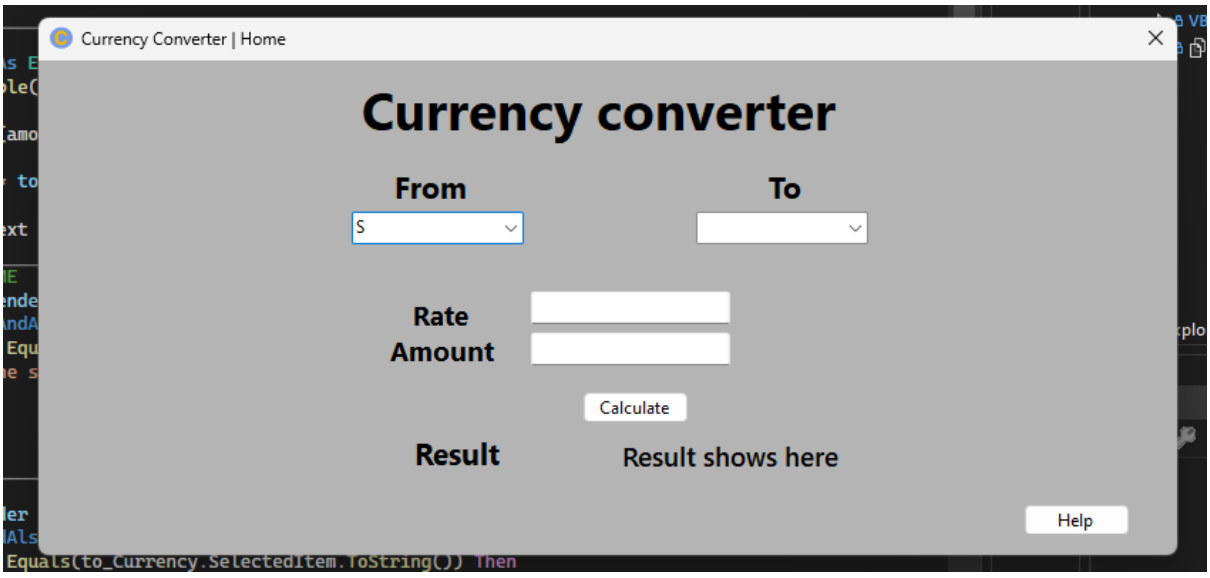
Unit 12 Software Development

Assignment 4 Template

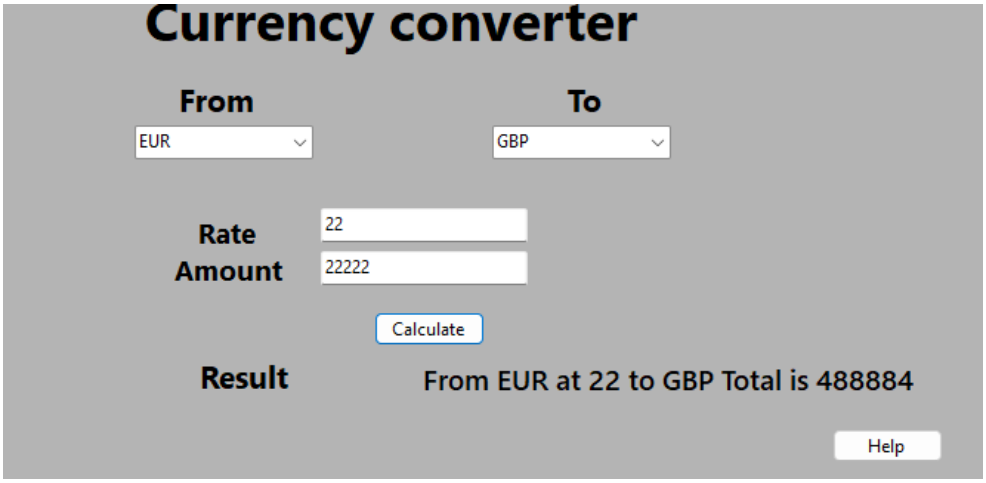
P6 Explain how the final software program is suitable for the original requirements and purposes.

1. **Description of the user interface with input and output**

Input: The user will select from the dropdown the currency they want to convert from and to, the exchange rate they want to use and the desired amount they wish to convert, this program has combo boxes, text boxes, buttons and labels



Output: once the fields have their inputs, the program does a check of the fields to see if they are empty and then does the calculation. When done then it's displayed as part of a label



2. Screenshot of the commented code with annotations (with arrows to the following):

2.1. Declaring Variables

```
' the conversion is calculated and output
Private Sub calculate_Click(sender As Object, e As EventArgs) Handles calculate.Click
    Dim conversionRate As Double = Convert.ToDouble(Conversion.Text)

    Dim totalAmount As Double = Convert.ToDouble(amount.Text)

    Dim convertTotal As Double = conversionRate * totalAmount

    showResult.Text = " From " & from_Currency.Text & " at " & conversionRate & " to " & to_Currency.Text & " Total is " & convertTotal
End Sub
```

2.2. Sequence and /or Selection

```
Private Sub From_currency_SelectedIndexChanged(sender As Object, e As EventArgs) Handles from_Currency.SelectedIndexChanged
    If from_Currency.SelectedItem IsNot Nothing AndAlso to_Currency.SelectedItem IsNot Nothing Then
        If from_Currency.SelectedItem.ToString().Equals(to_Currency.SelectedItem.ToString()) Then
            MessageBox.Show("You cannot select the same item as in ComboBox 1 ")
            from_Currency.SelectedIndex = -1
        End If
    End If
End Sub

Private Sub to_Currency_SelectedIndexChanged(sender As Object, e As EventArgs) Handles to_Currency.SelectedIndexChanged
    If to_Currency.SelectedItem IsNot Nothing AndAlso to_Currency.SelectedItem IsNot Nothing Then
        If from_Currency.SelectedItem.ToString().Equals(to_Currency.SelectedItem.ToString()) Then
            MessageBox.Show("You cannot select the same item as in ComboBox 2 ")
            from_Currency.SelectedIndex = -1
        End If
    End If
End Sub
```

2.3. Assignments

```
Dim USD_rate = 1.2
```

M5 Review the extent to which the software program meets the original requirements considering feedback from others.

1. **Describe original requirements (from the assignment scenario).**
   - **Allow the user to input an amount in pounds.**
   - **To be able to calculate the equivalent amount in a foreign currency e.g. EURO.**
   - **Provide functionality for the users to input the amount of money they want to convert and calculate the amount in pounds.**
   - **Allow the user to edit the exchange rate.**
   - **Display the amount to the screen in the currency that they have chosen e.g. EURO.**

2. **Feedback from Tutor (Observation form and Action plan) NEXT PAGE**

OBSERVATION RECORD

Learner name:	**Rish Saddiq**		
Qualification:	**T Level Foundation -Group 1**		
Unit number & title:	**Unit 12 Software Development**		
Description of activity undertaken			
Reviewing a software program created by the student as part of the assessment for Unit 12 Software development. The Assignment tile is Assignment 3 Create a Software Program			
Assessment criteria			
P4, P5, M3, M4, D3			
How the activity meets the requirements of the assessment criteria			
1) Usability: The program has 2 screens. Screen 1 is the home screen and screen 2 is the help screen. Screen 2 can be accessed with the help button on screen 1. 2) Efficiency: Program seemed to work perfectly, and the navigation was smooth with the different controls built into the interface. The program allows the user to amend the exchange rate. 3) Reliability: The program seemed to be reliable as the calculation was done in real time and was accurate. 4) Robustness: data validation allows only numerical values to be inputted. An error message appears on screen to warn the user that they have entered the wrong values. Good quality program. Well done			
Action Plan			
Action Plan 1) The font size of the labels on the interface could have been made bigger and in bold to increase the usability of the interface .			
Learner name:	**Rish Saddiq**		
Learner signature:		**Date:**	**02/02/2024**
Assessor name:	**Alya Ghulam**		
Assessor signature:	*Alya Ghulam*	**Date:**	**02/02/2024**

3. **Feedback from two different users (Feedback forms) describe the feedback given from your users.**

Name:
Group:

Unit 12 Software Development Assignment 4

Review: Currency converter feedback

People | Questions

Respondent 2 — Abdullah Kothdiwala

00:50
Time to complete

1. What do you think of the program *

Score / 0 pts

simple.

2. What can be improved *

Score / 0 pts

maybe a background

3. What improvements could be made here

Score / 0 pts

none apart from a background

4. Other comments

Score / 0 pts

DECENT.

Review: Currency converter feedback

People Questions

Respondent 1 Pramod Thotahewage 03:53 Time to complete

1. What do you think of the program * Score / 0 pts

Program is very good.

2. What can be improved * Score / 0 pts

Color's of the Buttons and Labels

3. What improvements could be made here Score / 0 pts

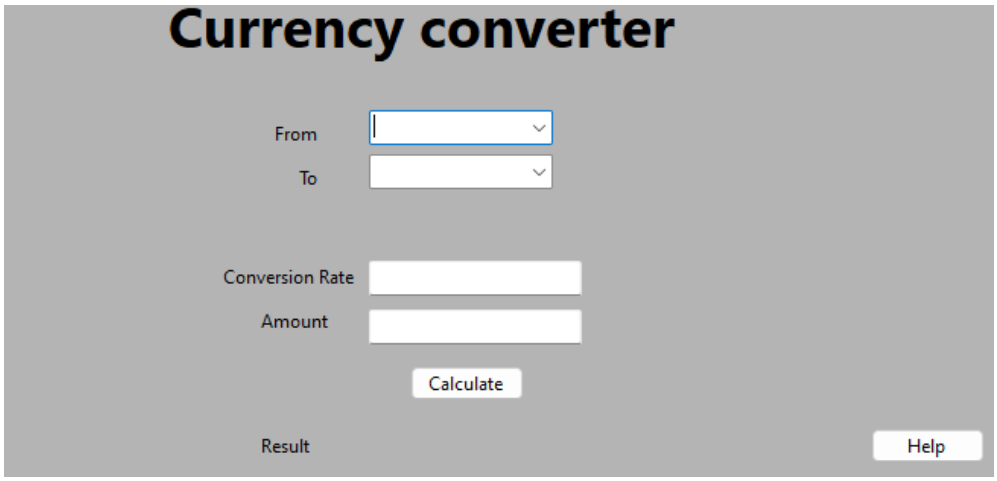
No answer provided.

4. Other comments Score / 0 pts

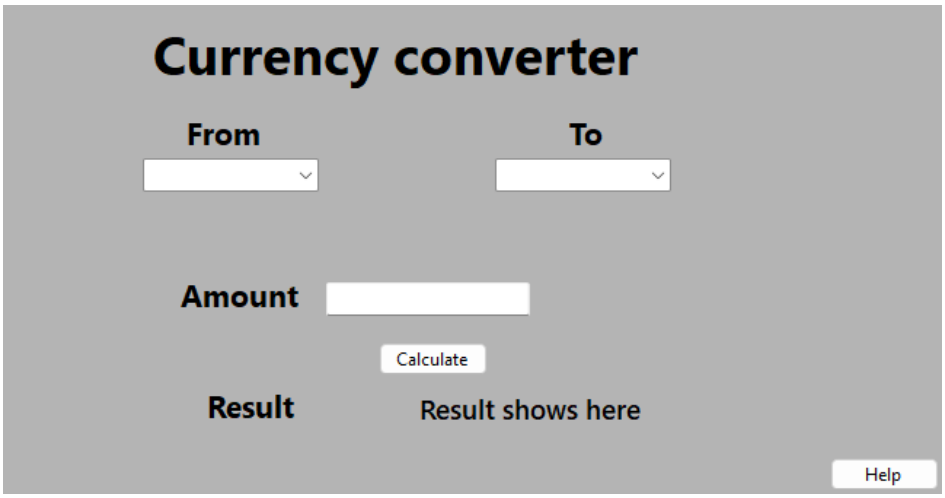
-

4. **Describe with screenshots what changes you have made based on the tutor feedback and user feedback.**

Before changes



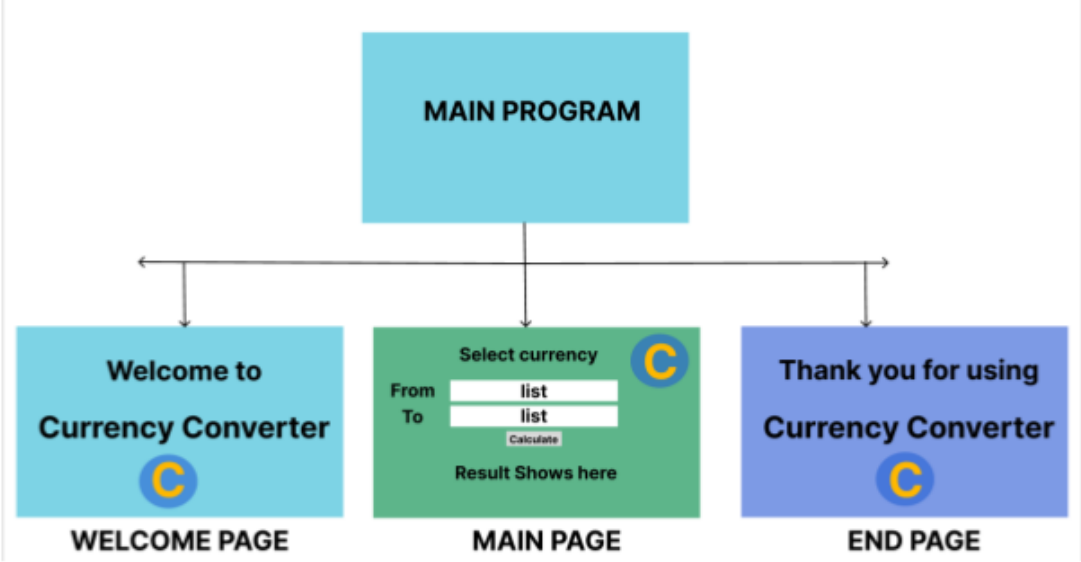
After changes



Complied with the feedback given to me by the teacher which included making the text bigger and bolder. I also took the opportunity to make some more changes such as reformatting / moving things around to make it look nice

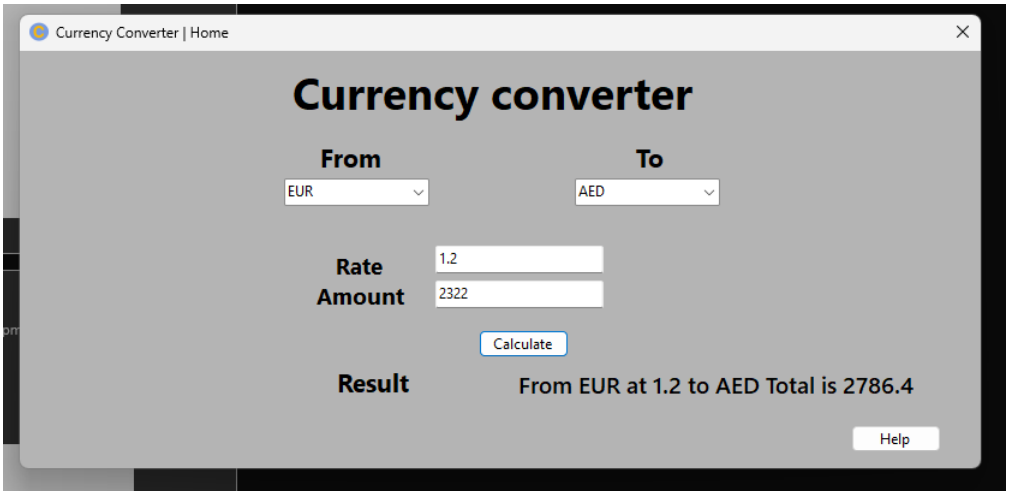
D4 Evaluate the final software program against the initial designs and the quality of the code and justify any changes made.

1. **Description and screen shots of initial design (produced in assignment 2)**
   This is the initial design which includes 4 screens which really make the program stand out Aswell as practical. Unfortunately, some elements didn't make it to the final program.



2. **Description and screen shots of final program interface (produced in assignment 3)**

   The final application is a currency converter which can be used to convert between specific currencies, although more could be added, it all works as intended. The currency converter comes with a function to manually enter the exchange rate which lets the user make manual adjustments to the rate they input. The amount of money they want to convert can be added and a result will show.



3. **Justification of the changes made to your program (differences between the initial design and the final design and why you have made those changes)**

The changes made to my initial program is that I chose not to have the Beginning and end splash screen as it will take loads of time to do. The UI is very simple in the final design and not very colourful due to my change in colour choice and not liking the colours I used before. I have added functionality in the final program for the user to pick an exchange rate to convert between. This makes the person , in this case the client more likely to use the program rather than going into the code and changing the exchange rate

To summarise:

1. **This Interface is user friendly and doesn't require any training before using the program.**
2. **The program has customisable parameter's such as the choice to input their own exchange rate and being able to choose any amount to convert.**
3. **It is Accessible to anyone, for someone that know little to nothing, this program includes a help page for those who need guidance.**

Name:
Group:

Unit 12 Software Development Assignment 4