

On Your Own Exercise 1

Your task is to build a webpage that converts money from and to US Dollars. Your web page layout should look like this:

Convert: From USD
 To USD

Filter (optional):

Other currency: Please select a currency type!

Amount to convert: USD Please enter an amount of money!

The amount is:

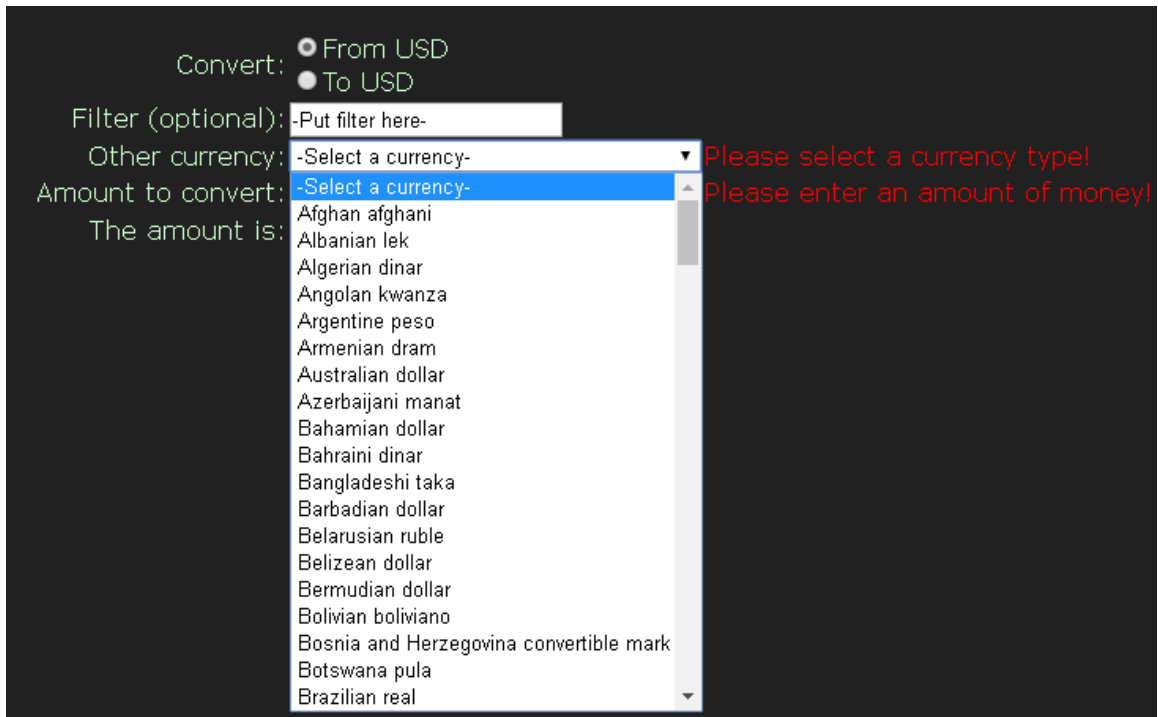
By default, "From USD" should be selected.

Use the CSS style "Chocolate" available from the W3C at "<https://www.w3.org/StyleSheets/Core/Chocolate.>"

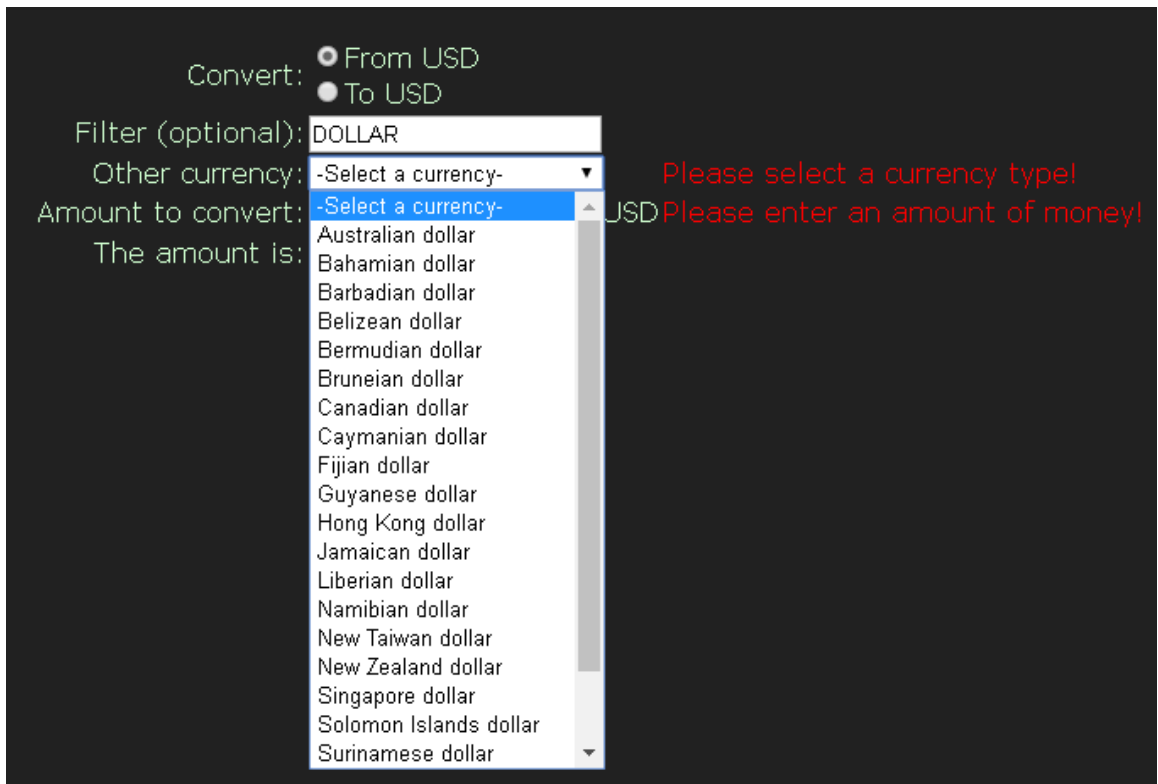
You will need the exchange rate table `exchrates.sql` found on Canvas. Note these are not accurate exchange rates. They are 2014 data crawled from Wikipedia.

You are allowed to retrieve the data from the table once. **You are not allowed to submit back to the database to refine your query. You will lose 0.5 marks for every submit your form is capable of!** The form should be doing calculations and there is no design reason to bother the database more than once.

By default, every currency should be displayed in alphabetical order by currency name.



However, you should be able to dynamically filter the list in a case insensitive way. Note the existence of the JavaScript function `search()` which might prove useful here https://www.w3schools.com/jsref/jsref_search.asp.



Putting a filter on the pulldown should not change the pulldown value unless that option is not on the pulldown. For example, if I select Belarusian rubles:

Convert: From USD
 To USD
Filter (optional):
Other currency:
Amount to convert: USD Please enter an amount of money!
The amount is:

If I then set my filter as ruble, the Belarusian ruble should still be the selected currency.

Convert: From USD
 To USD
Filter (optional):
Other currency:
Amount to convert: USD Please enter an amount of money!
The amount is:

If, however, I set my filter to dollars, the other currency should turn to -Select a currency-

Convert: From USD
 To USD
Filter (optional):
Other currency:
Amount to convert: USD Please enter an amount of money!
The amount is:

Once enough information to do the calculation is present, the form should perform the calculation. From USD, the calculation is the amount the user keyed in x againstusd (from the database). To USD, the calculation is the amount the user keyed in divided by againstusd.

Convert: From USD
 To USD
Filter (optional):
Other currency:
Amount to convert: USD
The amount is: AUD 1205.90

Convert: From USD
 To USD

Filter (optional):

Other currency:

Amount to convert: AUD

The amount is: USD 829.26

Notice how the currency units dynamically change. Also notice how the error messages disappear as the information is keyed in.

Marking (out of 10):

There are no unanticipated consequences- system crashes unexpectedly, weird error messages emerge, etc. (2 marks)

Is base layout correct? (1 mark)

Do error messages appear and disappear correctly and dynamically? (1 mark)

Is W3C Chocolate the style used? (1 mark)

Does the filter work? (1 mark)

Does the filter NOT change the selected value of the currency pulldown unless it has to? (1 mark)

Does it do the conversion correctly? (1 mark)

Does it do the conversion once sufficient information is available? (1 mark)

If information is taken away, does the system respond correctly? (1 mark)