Summary

Write a simple JavaScript application that given a number of pennies will calculate the minimum number of Sterling coins needed to make that amount.

Eg. 123p = 1 x £1, 1 x 20p, 1 x 2p, 1 x 1p

You should be prepared to spend at least two hours on it.

Requirements

- Account for only the common £2, £1, 50p, 20p, 2p and 1p coins. Ignore £5 coins.
- You MUST use JavaScript, CSS and HTML to do this. No server-side code is allowed.
- The user interface should consist of a input field that accepts an 'amount' string (Eg. 92p, £2.12) and displays the denominations needed when the user hits 'enter'.
- The application must work in the latest version of Chrome.
- All the files required to run the app should be added to Github (or equivalent).
- Please supply a url to your repo when you are finished.

What we are looking for

- High quality and maintainable code.
- Use of best practice JavaScript techniques
- “Atomic” commits with good commit messages
- Accessible, semantic, valid HTML.
- Test cases for your code (Eg, qunit, jasmine).
- Well documented and commented code where necessary.
- Follow coding standards.
- Extensible user input parsing and validation.
- To sensibly separate functionality (Eg, input, models, utils, views) following OO paradigms.
- Clean visual design.

Test Data

In the first column is a string of user input, and in the second the desired integer expressed as pence.

input	pence (canonical)	description
4	4	single digit
85	85	double digit
197p	197	pence symbol
2p	2	pence symbol single digit
1.87	187	pounds decimal
£1.23	123	pound symbol
£2	200	single digit pound symbol
£10	1000	double digit pound symbol
£1.87p	187	pound and pence symbol
£1p	100	missing pence
£1.p	100	missing pence but present decimal point
001.41p	141	buffered zeros
4.235p	424	rounding three decimal places to two
£1.257422457p	126	rounding with symbols

Likewise, the application should not accept the following inputs,

input	pence (canonical)	description
	0	empty string
1x	0	non-numeric character
£1x.0p	0	non-numeric character
£p	0	missing digits

Help

If you have any issues with this assessment or require some clarification then please email me:

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