Currency Converter as a Form

Design phase

Think of what a webpage should look like, and what should happen when you press certain things. Do not think about html at this point.

We want to be able to enter a number value, select a "from" currency, and select a "to" currency, and then press a "convert" button.

Input types

We already know that the "convert" or whatever we call it, will be an input of type "submit".

Note that whenever an input type is unsupported by a browser, it will choose text instead.

Number

In HTML 5 there is a new input type called "number" which allows you to place certain restrictions like minimum and maximum values. There's a "step" parameter which by default is set to 1, restricting to integer values. You can specify step="any" to allow any number value.

Note that as old browsers will revert to input type of text, you can't assume at server side that the values you get are always valid.

Select

For the currencies, an input type of select will make sense.

It is recommended in the current standard to put your select inputs outside the form, and then define which form they point to.

These are defined with the <select> tag, and contain <option> tags, and related options can be grouped with <optgroup> tags:

```
<form ... id = "carform">...</form>
<select name="carlist" form="carform">
      <optgroup label="Swedish Cars">
      <option value="volvo">Volvo</option>
      </optgroup>
      ...
</select>
```

Multiple

You can also specify a multiple attribute to allow selection of multiple inputs from a <select> drop-down:

```
<select name="carlist" ... multiple></select>
```

However, there's still only one variable name specified, so the same parameter will be assigned each value in turn, which makes no sense.

Array parameters

We can instead specify an array input by using name="carlist[]". The [] section is code for appending the value to the array carlist. Equivalent to "carlist += [variable]" in Python.

Select vs. Radio

Generally radio is for only around 5 or fewer choices. If you need more you usually use a select.

Checkbox

This input type gives an on/off checkbox. If it's on, the variable is set to the value, if not then the variable isn't set. If you don't specify a value, then the value is set to "on", depending on browser possibly.