

Worksheet 1 on the Shopping construal

Open up the webpage <http://jseden.dcs.warwick.ac.uk/scifest/> and choose 'Shopping' from the Project List that appears.

You should have a 'Canvas 2D' window and another called 'JSPE Slides'. Read the Scene 1 that appears in the 'JSPE Slides' window and try and organise the two main windows as described there. You may find the windows seem to move about in surprising ways ... try and be patient with this!

The tasks (or parts of tasks) marked with * are harder. If you wish to make sure you cover all the tasks, omit these harder parts at the first attempt and come back to them.

Task 1 : Read the whole of Scene 1, do as it says. Be sure you understand the way observable `basket` reflects the items selected. Now do the same with the observable `offered` and the coins moved in the Canvas. The way this observable reflects the coins chosen is slightly different from the way `basket` and fruits chosen reflect each other. What is the difference? What is the difference in the kind of value in `basket` and the value in `offered`?
*Go back to `basket` and fruits chosen. What about the reflection the other way - can you change the value of `basket` in the observables and see how the canvas reflects your change?

Task 2: Read the first part of Scene 2. Why is the definition of a 'green' observable (a dependency) so different from what is given in the observable list? **Ask a tutor if in doubt!** This is vital. Read the second part of Scene 2 and do as it says. Can you make `haveenoughmoney` go false? If not, **ask a tutor**, they may help you reduce your `spendingmoney`!

Task 3: Still in Scene 2, and the second part. What is the correct re-definition to allow for having exactly the right money? Can you submit that new definition of `haveenoughmoney` and inspect it to check your re-definition?
*Can you *test* your re-definition of `haveenoughmoney`? This may be easier after Task 4.

Task 4: Read Scene 4 about functions. The observable `totalcost` makes use of the function `costitems()` and the observable `forsale`. Look at the definition of `forsale` and change the price of some fruits (through the observables `item1`, or `price1`, etc). Check you understand how the change in a price changes the advertised price on the canvas.

Task 5: See that you understand Scene 5 and how the movement you observed in Scene 1 is achieved. It's a combination of observables `itemsselected`, `picture` and the function `HTMLImage` that are involved. Move the position of Offered money and items in the Basket closer together.