A dictionary for the observables, dependencies and agents in the shopping construal

Explicitly assigned observables

randomIndex	*A seed for random number selection that can be used to ensure repeatability*
price[1-6]	*The prices of the six items for sale*
width* (in comments)	*The diameters of the 8 coins - **width20** is the width of a 20p piece etc*
ix[1-8]	*The indices of the eight coins in the purse in the list of all coins [1,2,5,10,20,50,100,200]*
coinsselected	*An array of 8 boolean values to record which of the coins in the purse have been selected*
itemsselected	*An array of 6 integer values to record how many instances of each of the items have been selected*
imagelocation	*The web address at which the images being retrieved are stored*
scaleWidth	*The scaling factor that is used in specifying the screen layout*

Observables defined by dependency

item[1-6]	*The six items that are for sale, each recorded as a pair comprising a name and price*
forsale	*The complete list of items that are for sale, recorded as [item1, item2, ... , item6]*
basket	*The six items that are for sale, each recorded as a pair comprising a name and price*
bill	*The total cost of the items that have been selected for purchase*
coinlist	*The list of coins, in which each denomination is recorded as an integer number of pence*
purse	*The coins that are in the customer's purse*
spendingmoney	*The total amount of money that the customer has to spend*
haveenoughmoney	*Whether or not the cost of the currently selected items exceeds the total amount of money the customer has to spend*
shortfall	*How far the cost of the currently selected items exceeds the total amount of money the customer has to spend or zero if the customer has enough money*
tendered	*The total amount of money the customer is offering for the items selected*
change	*The amount of change the customer would be entitled to, or zero if the customer hasn't offered enough money*
items	*The complete list of items that are for sale, recorded as [item1, item2, ... , item6]*
coin[1-8]pic	*The images used to depict the eight denominations of coin that ca appear on the display*

item[1-6]pic	*The images used to depict each of the six items selected (where appropriate) on the display*
item[1-6]pic0	*The images used to depict each of the six items for sale on the display*
coin[1-8]text	*The text used to display the denominations of the coins belonging to the customer*
item[1-6]numtext	*The text used to display the number of instances of each item selected by the customer*
item[1-6]text	*The text used to display the price of each item for sale*
PurseContentText	*The text used to designate the content of the purse on the display*
CoinsInHandText	*The text used to designate the coins tendered on the display*
BasketContentText	*The text used to designate the content of the basket on the display*
ItemsForSaleText	*The text used to designate the items for sale on the display*
picture	*The built-in observable used to specify the list of drawable components on the display*
optpic[1-6]	*The optional drawable components used to display the items that have been selected by the customer*

The following user-defined functions are used to express dependency relationships:

listitems	*Making a list of the selected items*
costitems	*Calculating the cost of the selected items*
moneyinhand	*Calculating the amount of money tendered*
coindisplay	*Determining which image to display given an index of a coin in the list of coins*
listcoins	*Making a list of the tendered coins*
itemdisplay	*Determining which image to display given an index of an item in the list of items for sale*
denomdisplay	*Determining what text to display given an index of a coin in the list of coins*
displaycurrency	*Determining how to display a given quantity of money that is expressed in pounds*
pricedisplay	*Determining what price to display given an index of an item in the list of items for sale*
mkstr	*Displaying a non-zero integer as a string whilst displaying zero by the empty string*

The following agents are used to perform actions:

coin[1-8]picMove	*The mouse click actions for selecting/deselecting coins*
item[1-6]picMove	*The mouse click actions for returning selected items*
item[1-6]pic0Move	*The mouse click actions for selecting items*