Alice Buys a Scooter

Who will sell you the cheapest scooter? Click a vendor to approach them. Click a scooter to buy it.

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Percentages Challenge

Overview:

• You should be writing code in the world percentagesChallengeVersion.a2w.

• You must complete the function `world.isCheaper` to check whether the scooter chosen (i.e. the scooter clicked on by the player) is in fact the cheaper scooter.

• To do this, you will have to write code to calculate the new prices that take into account the discounts.
Run the World

• Follow the instructions the guide gives (when you start the world, you’ll have to wait a few seconds before he says anything; this is because prices and discounts are being randomly generated).

• Notice that:
  – You aren’t able to buy a scooter before checking both vendors’ prices.
  – At the moment, for both scooters you are told that it isn’t the cheapest scooter. That’s because you need to finish the code in the function that calculates the discounted prices and determines which scooter is cheaper.
Make sure ‘world’ is selected in the object tree, click on the ‘function’ tab, and click on the ‘edit’ button next to the `isCheaper(scoot)` function (scoot is a parameter of the function).
Some things you should know

- There is some code already there for you – the variables `price1`, `discount1`, `price2`, and `discount2` have already been set to the correct values.
Things you should know cont.

• This function takes an object ‘scoot’ as a parameter. This is because when you click on a scooter to buy it, this function needs to determine whether the scooter you clicked on is cheaper or more expensive than the scooter you didn’t click on.

scoot is a parameter
How the function works

• This is an example of a **Boolean function** (it returns either true or false).

• If the scooter you clicked on is **cheaper**, the `isCheaper` function will return **TRUE**.

• If the scooter you clicked on is **more expensive**, the `isCheaper` function will return **FALSE**.

• Notice there are comments to help show you what you need to do.
Step 1

• First you need to calculate the **discount** for each scooter in dollars (relative to the overall price of the scooter).
Step 2

• Now you need to calculate the new, discounted price (subtract discount from original price).
Step 3

• Finally, determine whether the scooter the player clicked on was correct.

• This requires two if/else statements, because there are two ways the player could be correct:
  – 1. They clicked on scooter AND the discounted price of scooter was less than that of scooter2
  – 2. They clicked on scooter2 AND the discounted price of scooter2 was less than that of scooter.

• So for those two situations, your function should return TRUE. In all other situations it should return FALSE.
Congratulations!

- Alice got her scooter – you’re done!