Exercise: Modeling Uncertainty

(6/6 points)

- We have a probabilistic model coded in Python as the following dictionary:

```
{1: 0.4, 2: 0.3, 'cat': 0.3}
```

What is the sample space? (Express your answer as a Python set. For example, the set {spam, eggs} is expressed in Python as `{'spam', 'eggs'}`.)

{1,2,'cat'} ✔

- Does the following Python dictionary encode a valid probabilistic model?

```
{'hearts': 0, 'clubs': 0.4, 'diamonds': 0.7, 'spades': 0.2}
```

- ( ) Yes
- (•) No ✔

- Does the following Python dictionary encode a valid probabilistic model?

```
{'apple': 0.5, 'orange': 0.4, 'pear': 0.2, 'banana': -0.1}
```

- Yes
- No ✔

- Recall that for each key in a Python dictionary, there is an associated value. A Python dictionary stores a valid probability distribution when the values are each at least 0 ✔ and at most 1 ✔ ; moreover, when we add up the values for all the keys, the sum is equal to 1 ✔ .

You have used 1 of 5 submissions

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