**Testing ability to draw while following given rules**

When we first tested this, we quickly figured the AI was not considering the rules when drawing and adding more elements because when we told him that a mouse(cercle shape) should always be on the left side of a cat (triangle shape) and then to add two mouses after drawing two cats, it gave us this result:

A black and white drawing of a group of triangles

Description automatically generated

So in the function def interpretation\_on\_canvas(user\_prompt, user\_notation, mapShape), we added in the prompt the list of the description of rules that will keep on updating as the user adds on more rules. And then we got to testing again.

Once again, I first defined a triangle as a cat and then added a cercle at the bottom right of the triangle, and defined it as a mouse like this:

A black and white drawing of a triangle and a dot

Description automatically generated

And then I added a rule saying “a mouse should always be on the right side of a cat” and then told him to add a cat and it did add a cat on the right side, and then I told him to add it again and I got this:

A black and white drawing of a triangle and a dot

Description automatically generatedA black and white drawing of triangles and dots

Description automatically generated



We can assume it’s respecting the given rule, and then I asked him to add a cat to test if it takes in consideration the rule defined for a mouse’ position relative to a cat and got this:

A black and white drawing of triangles and dots

Description automatically generated

It doesn’t take in consideration the rule for the mouse’s position which is not exactly a bad thing but something we can note.

And then I asked once again to add a mouse to see if it still respects the rule given and it does:

A black and white drawing of triangles and circles

Description automatically generated

**Evaluate whether it can recognize more complex rules defined by user and whether it can distinguish multiples rules in one prompt**

We first defined two “rules” in one prompt with this “a cat should always be on the right of a mouse and a dog should be on the left side of a mouse”, and it gave us this output:

A black text on a white background

Description automatically generated

Then tried to define two rules again with this prompt: “a mouse should always be on the right side of a cat and a dog should be on the left side of a tiger” and got this :

A black text on a white background

Description automatically generated

It’s not extracting even one rule so after some modifications in the code to interpret multiples rules in one prompt we got this result with the same prompt as the last one:

A white background with black text

Description automatically generated

It can now distinguish one than one rule at a time correctly. We have to now see if the AI can continue to draw while respecting these rules like it did before!