

Assignment 3

Part 1

Case 1

This case violates semantic transparency.

This is because the meaning of the images and the textual description is different. We can look at the first part, it describes a factory but a visual description is a dog (unless the dog is a breeding factory).

The same can be said about the cat.

Case 2

In this case it also violates semantic transparency.

This is because we see a stop sign and our cognitive comprehension combines this usually with darker meanings. Green indicates usually a good meaning, so the opposite effect of what it describes. A good representation would have been red.

Case 3

In this case we violate semiotic clarity and semantic transparency.

First we have many different objects that describe the same image. What I mean by this is that the cog wheel has many different textual representations, which creates ambiguity.

Next, cog wheels do not show a good representation of what a machine nor a factory should be. A cog wheel could mean many things so this is not intuitive.

Case 4

In this we look closer to manageable complexity.

While the representation is not that complex, it is rather too simple. It does indicate whether the relationship of connection goes from machine one to machine two or the other way around.

Case 5

Here we again can talk a bit more about semantic transparency or maybe say semiotic clarity.

While the models or diagrams do all have different colors, it is not easily distinguishable by meaning. For instance if we have 30 different objects, they all would have different colors, what these colors mean are not directly correlated to the object itself.

We can say that it violates semiotic clarity because it makes use of the same type of notation for each object, the only difference they have is a slight color.

Case 6

First observation we can have is dual coding. What does every object mean or what does every node mean? We do not have any information to go on except that they are blue balls with some connections between them.

A second observation we can make is that cognitive integration is not that easy. The model is rather complex and hard to read.

Case 7

Again here we can say perceptual discriminability in the sense of the meaning between objects can't be distinguished by how it looks. When we look at a higher level, it is easily distinguishable because then we look at it as just a class diagram, and class diagrams here are noted well.

So based on this we can say that it does not conform to cognitive fit. You need some understanding about it before we can understand what it means.

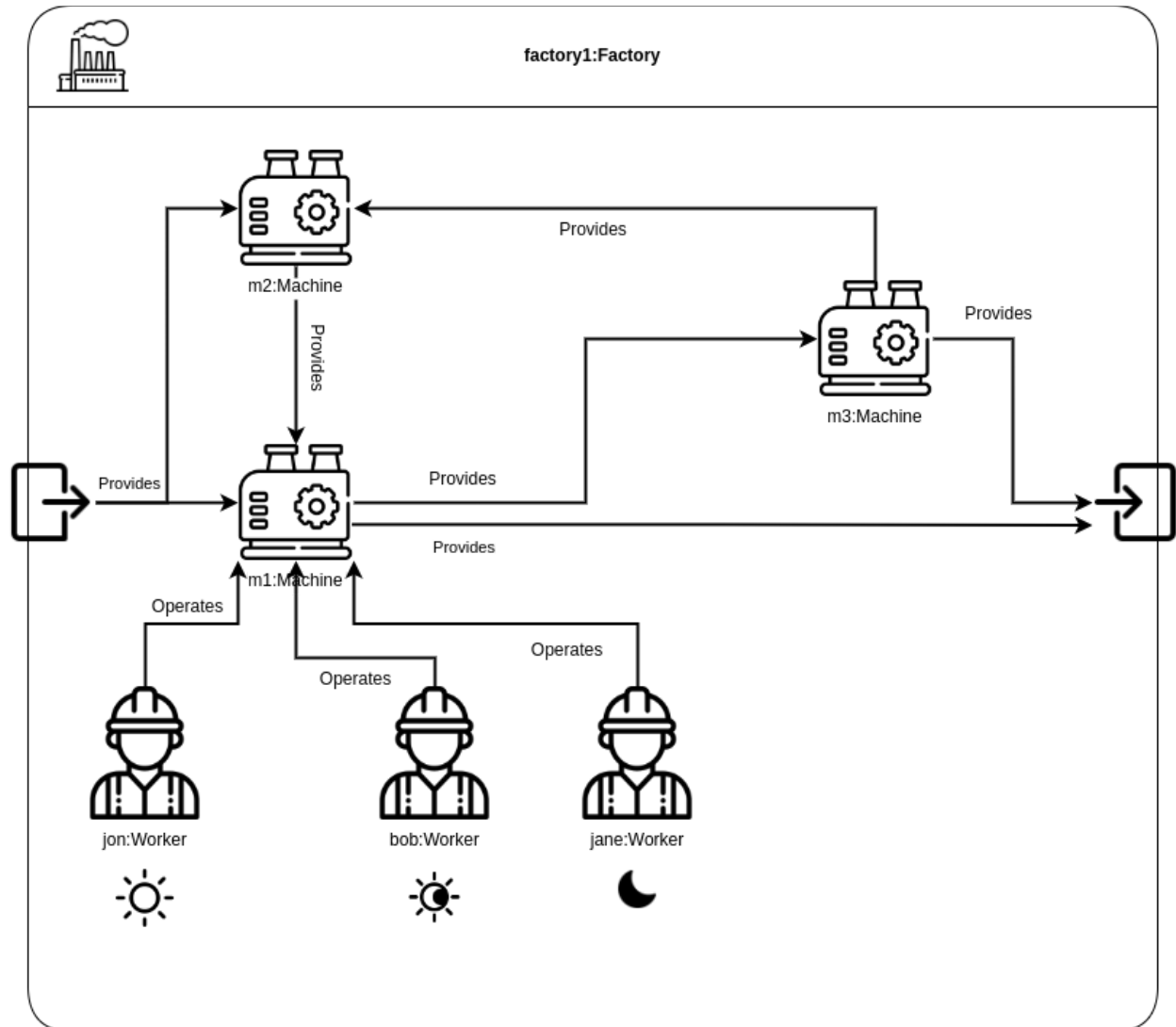
Case 8

This part is just a mess. It violates many different aspects. The first one we can say is dual coding, what does every object mean? The symbols are not intuitive, because there is no context behind it.

We can also say it violates the graphical economy. There are so many symbols that it is hard for me to understand.

Part 2

The resulted diagram looks as follows:



We make use of a box to indicate what is inside the factory. Inside the factory the relationships are shown based on the arrows.

The workers have their shift assigned beneath their icon.