Developer candidate coding test – Dafna Yosef

Nots:

1. I extend the display grid to 300X300 (plus small edges) instead of 100X100 since it was too small
2. As the sizes did not define at the instruction, I set the entity sizes to:

Small = 6

Medium = 12

Large = 18

1. I allow the JSON file to have more than 10 entities, but I display only 10 entities.
2. The CSV file will be created after the user click the stop button (each click on stop will override the file ("test.csv")
3. There is a case that all x,y location around the current location has already been visited

For example:

1(0,0) 🡪 2(5,0) 🡪3(10,0)

8(0,5) 🡪 9(5,5) 4(10,5)

7(0,10) 🡨 6(5,10)🡨 5(10,10)

From location 9 we should move randomly to location 2/8/4/6 but those location already been visited so the current location (9) is lock.

And because we use random direction we can't determine when it will cause,

The option is to check that all the location around the current position are in the list and we can't move from the current x,y.

In this case my solution was to stop moving this entity.

In case all entities are is locked state I will popup a message.

Open Questions:

1. I will get the last x,y location for each moving entity from the List I created at EntityData. Dimension

I will fetch the last location from the list and will go back till ((size of list)-n)

Between the fetching I will draw a line using drawLine(x1, y1, x2, y2);

1. The display will reflect this as a pushbutton in the grid