Weekly report 17
Kia Kafaei 5/3-2021

What did I do this week:
- Managed to undiscretize the doors like we talked about last time
- Set up the structure of the report

Challenges:
This week I managed to undiscretize the doors and as you can see in the second figure, the door is inside the room. I thought this would solve the issue of visiting the room node. It didn't. I realised that this must be because all the neighbour nodes of the door node (on the inside of the room) are too close to the walls and are therefore removed.
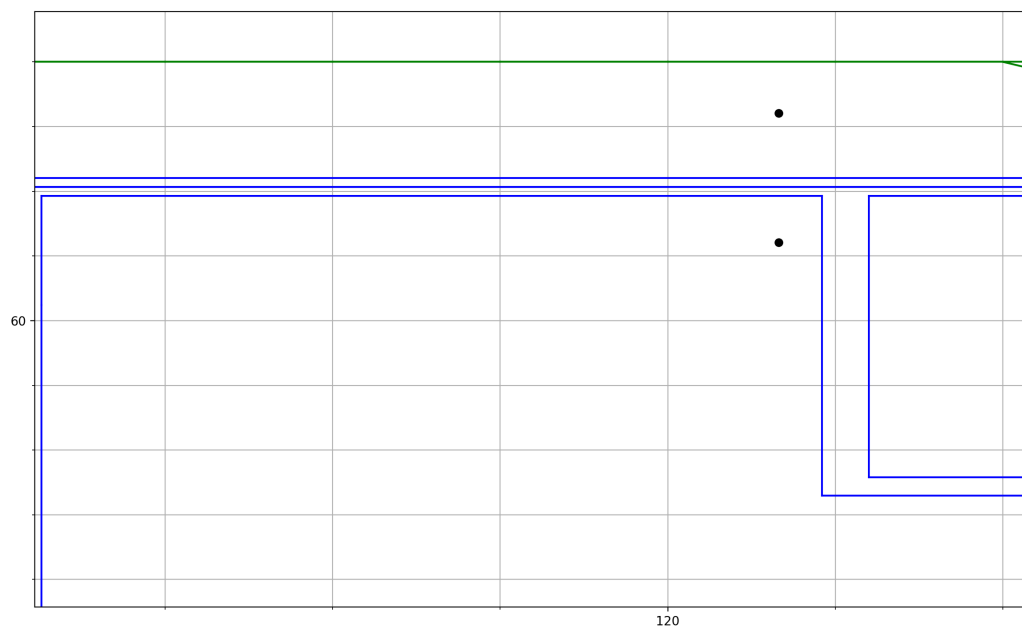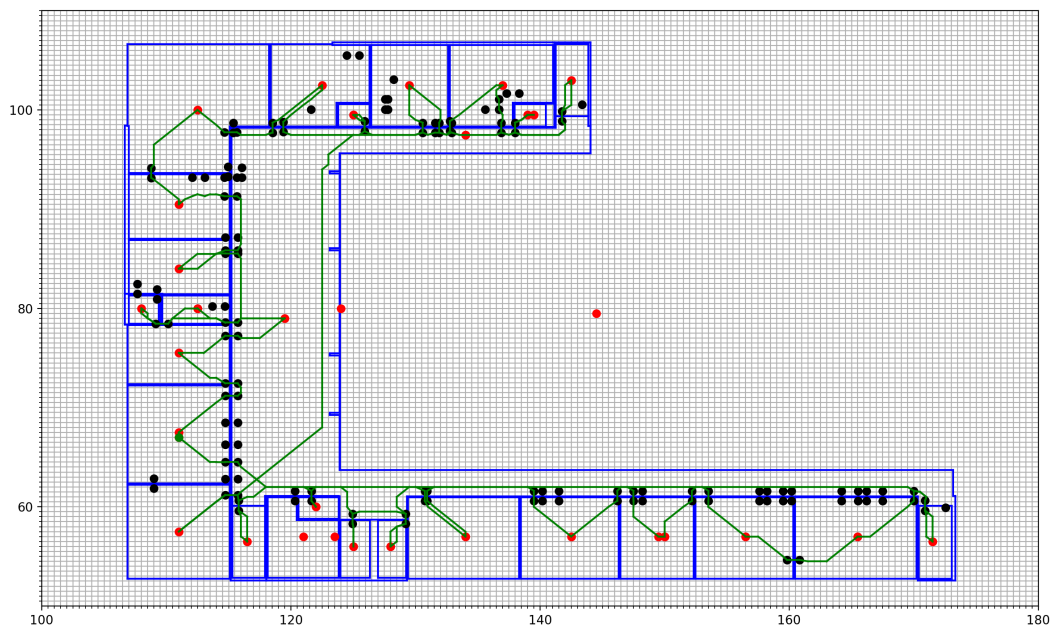
Possible solutions
1. I can change the minimum distance such that nodes can be closer to the walls.
2. For each door I can try to connect them to more nodes so they have more neighbours.
3. I can try to connect each door to their respective room node.

Ad. 1
This is not a good solution since the minimum distance is there for a reason namely that it should take into account the dimensions of the robot.

Ad. 2
This might be a fine solution.

Ad. 3
The issue with this solution is that the path will in this case not take into account the dimensions of the robot. You can have scenarios where the robot will be walking adjacent to the wall.

What I should work on for next week:
- I will fix the issue concerning the door and its neighbours.
- I want to start testing on other floor-plans.
- I will slowly start writing the report.