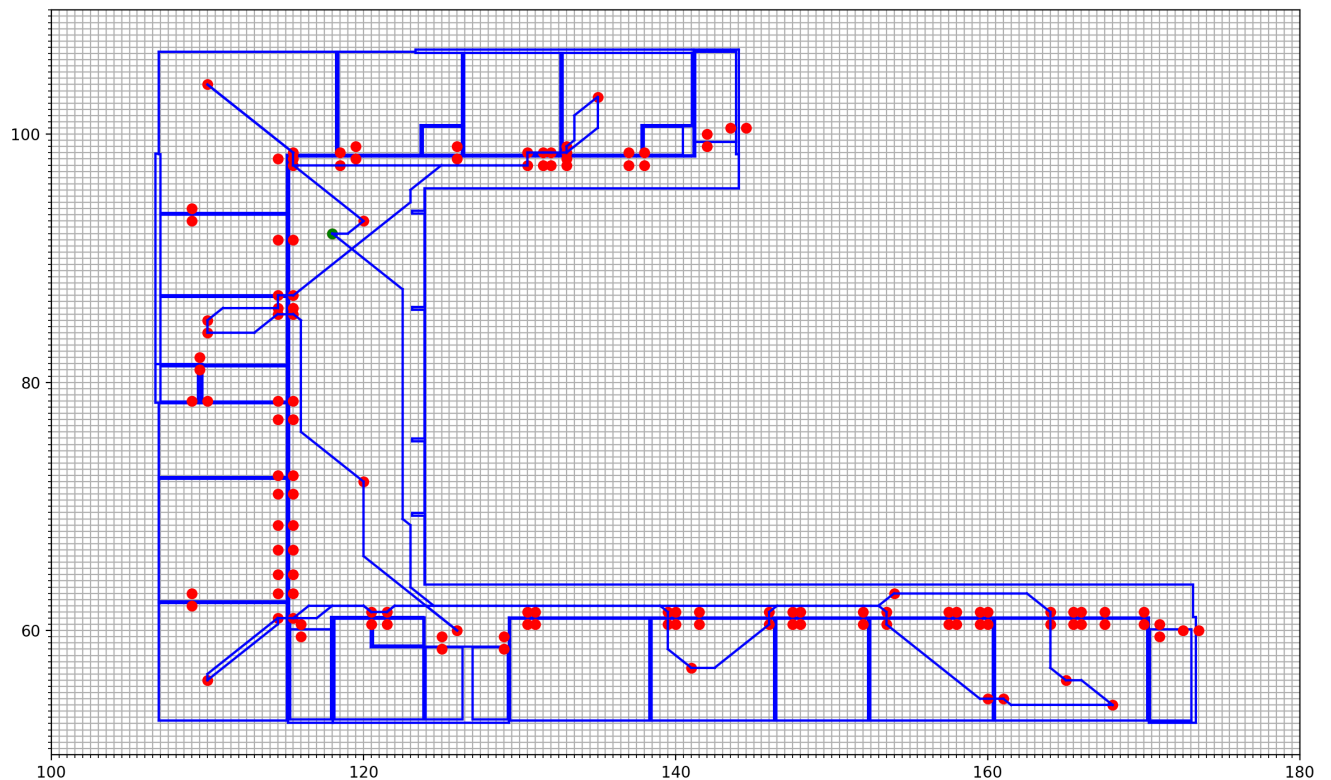


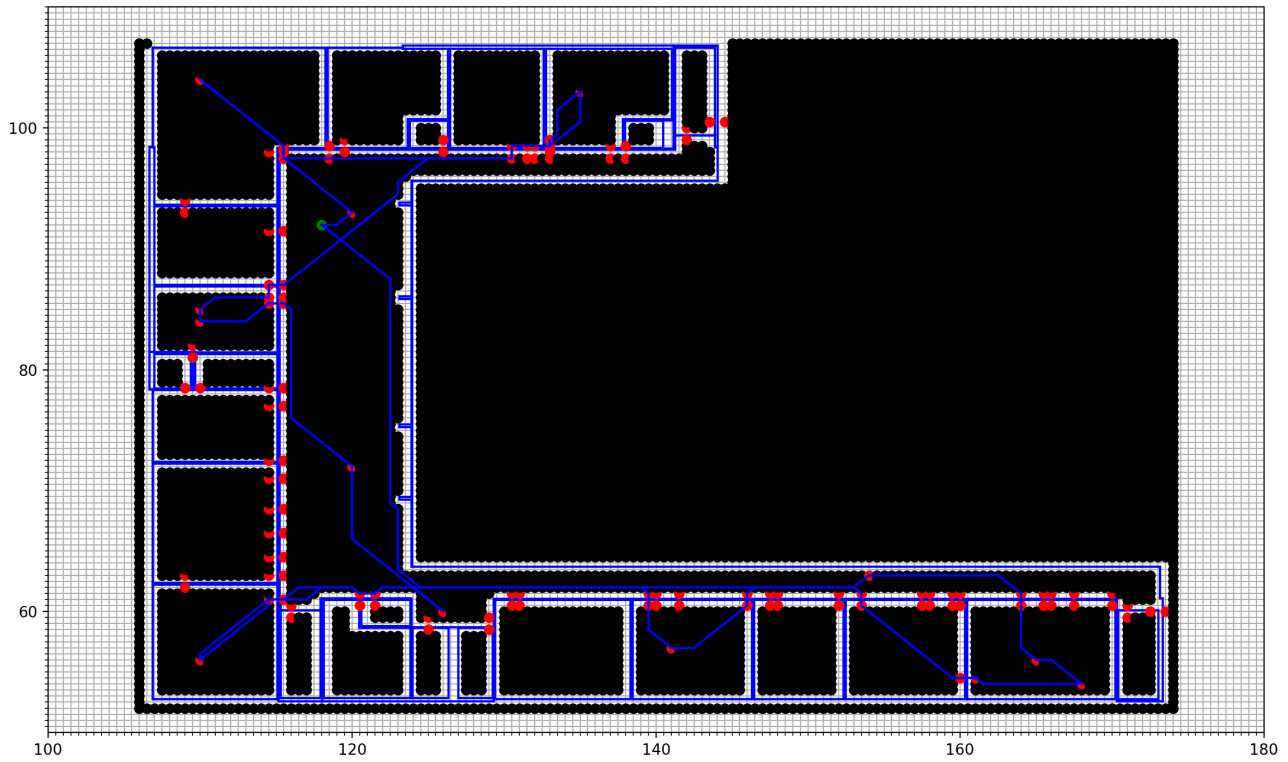
What did I do the past few weeks?

- I got the wall spatial data-structure to work. I used the R-tree datastructure.
- I got the distance field approach to work (with a few errors).

Below the TSP solution with the distance field approach implemented is shown on a map where the red nodes are door and room nodes.

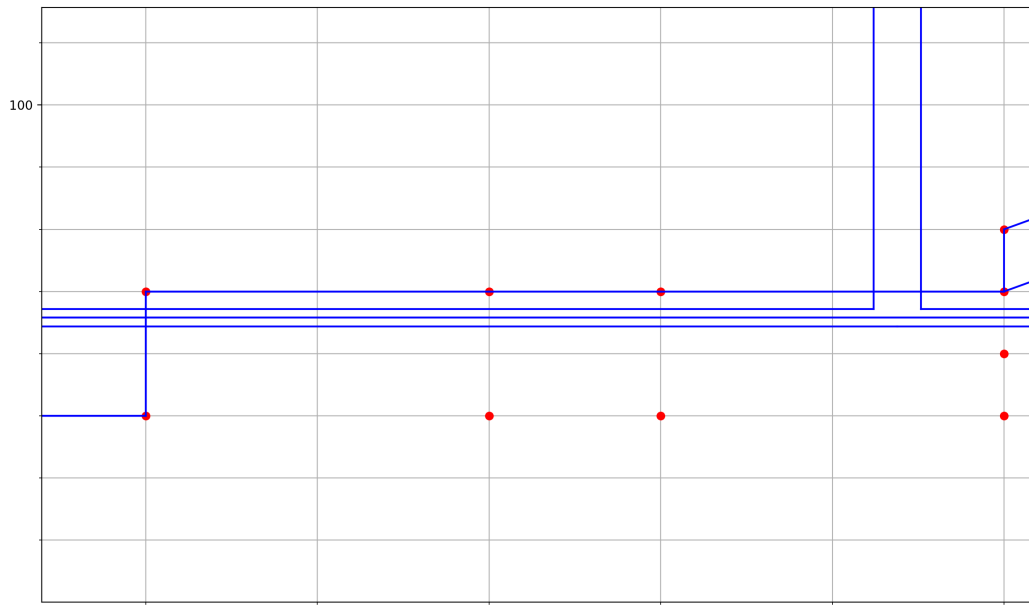


Below the same path is shown but where all the nodes that are too close within a wall are removed and all the nodes that are shown are black. This is to show that the TSP solution now takes into consideration the dimensions of the robot.

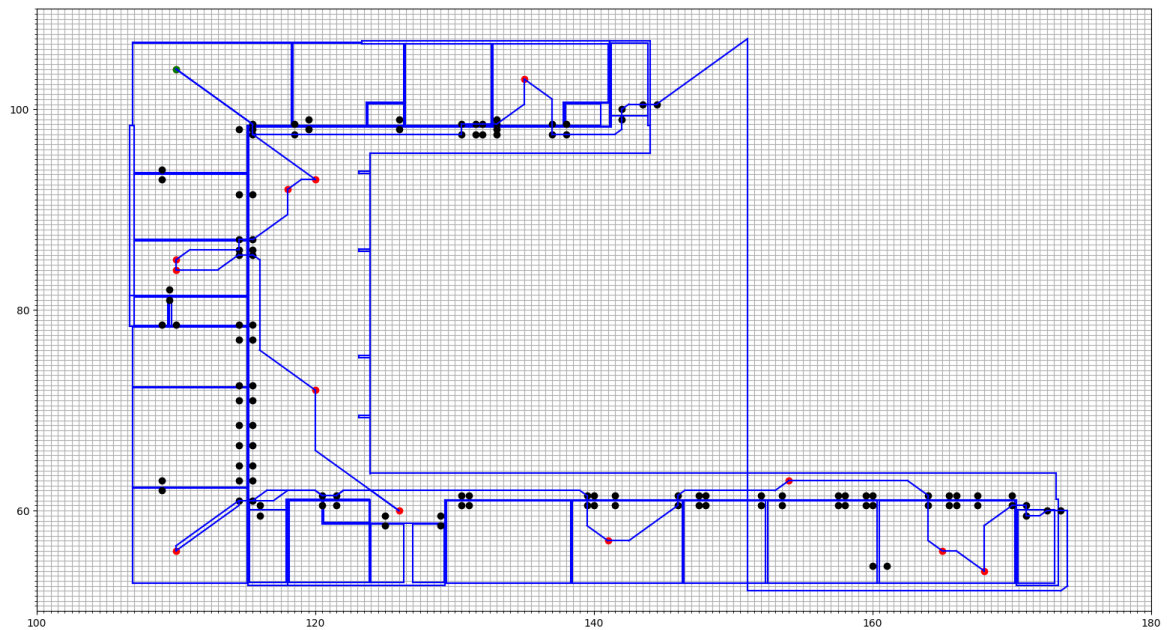


Challenges this week:

In the program I say that all doors that are within 1 meter of each other should be connected. This is meant to allow for traversal through walls from one door to the other but in this case it also allows for traversal of doors that are next to each other.



Another challenge is shown below where the path goes outside the building, and for some reason defies all the rules about shortest path and traversing through walls.



What should I do for next week?

I should work on fixing the doors.

I should work on fixing the outside traversal.

I should afterwards clean up my code, right now most of my code is uncommented.

I should then work on finding the optimal node placements.