Internet of Things Technology (Summer 2022)

Report on LAB 4

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• Date: 27/07/2022

1. Task Statement

Using the already built restaurant environment:

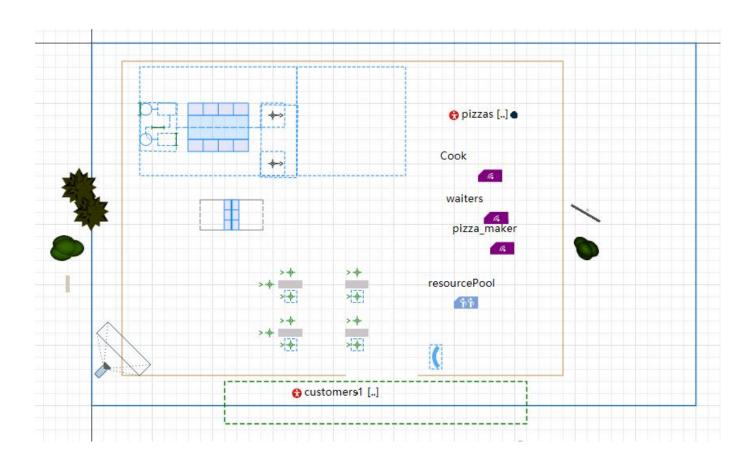
Create the kitchen with at least two cooks.

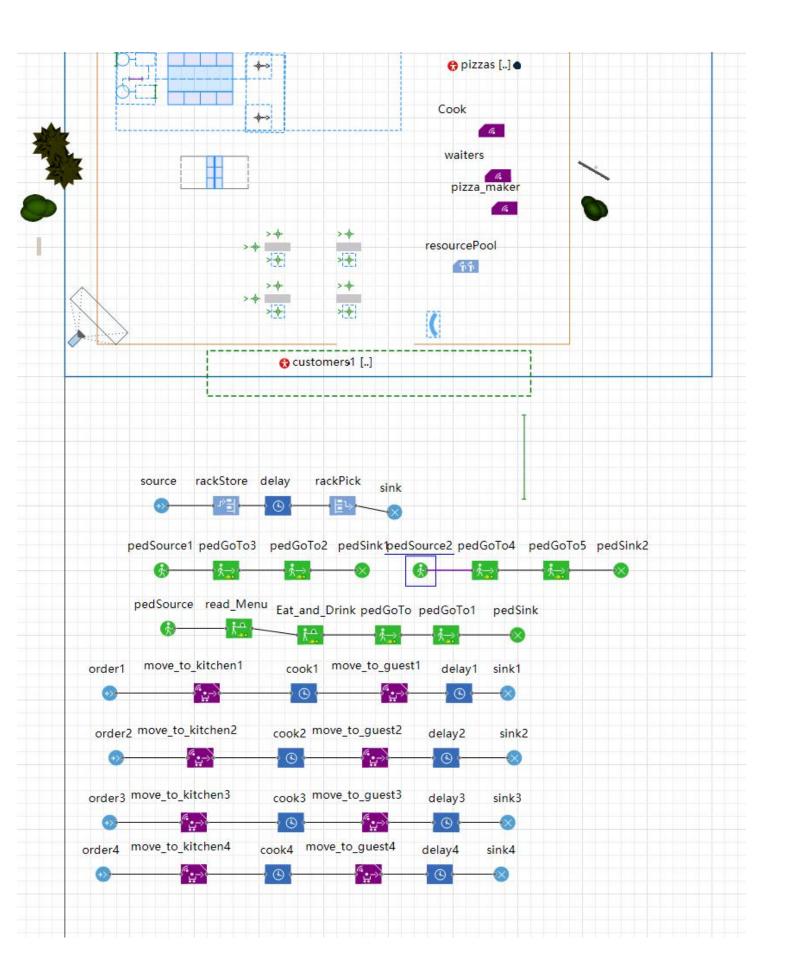
Model the restaurant and find the maximum productivity and customers delight.

2. Environment:

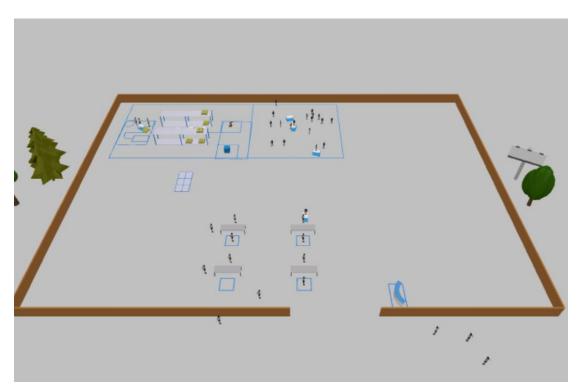
Win10, AnyLogic(Personal Learning Edition)

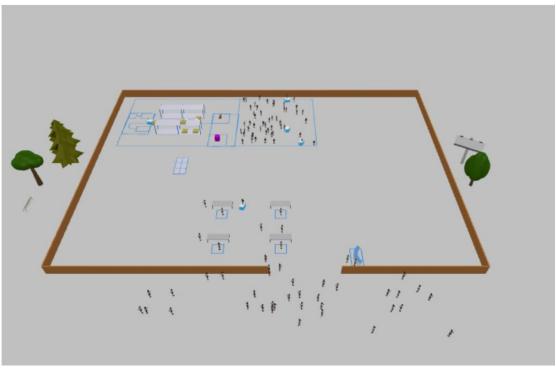
3. Screenshot for lab4:

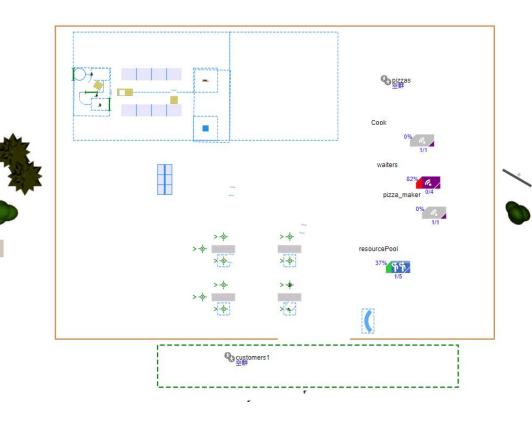


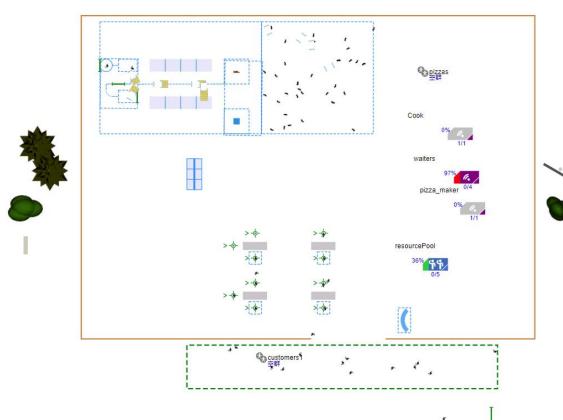


4. Screenshot for lab4:

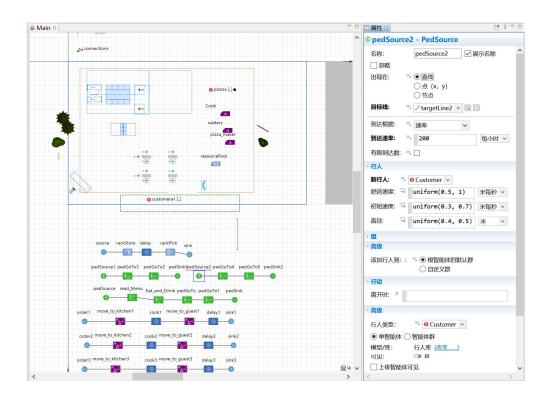








5. Detail of Configures:



6. Description and Conclusion

As the picture given, in the top left area, which is called "Back kitchen", I arrange two robotic cooks, one prepares the base and toppings, and another loads and uploads pizzas from the oven.

Moreover, at the position near the door, I arrange a "Reception Desk" where customers will pay their cash before go out.

About maximum productivity and customers delight, through

experiments, 60-70 people/hour maybe the maximum productivity. If the restaurant covers an area of 100m², maybe about 15 tables with about 20 "fuwuyuan"(servers) will be a good number for the customer delight.

7. Summary

Through this lab, I know how to build a model using AnyLogic and have a consciousness of how restaurant works and how to manage a restaurant better using internet of thins technology.

After that, I will use this software to simulate covid-19 infection model, which may help me understand how why covid-19 spreads so fast and how to do epidemic prevention.