



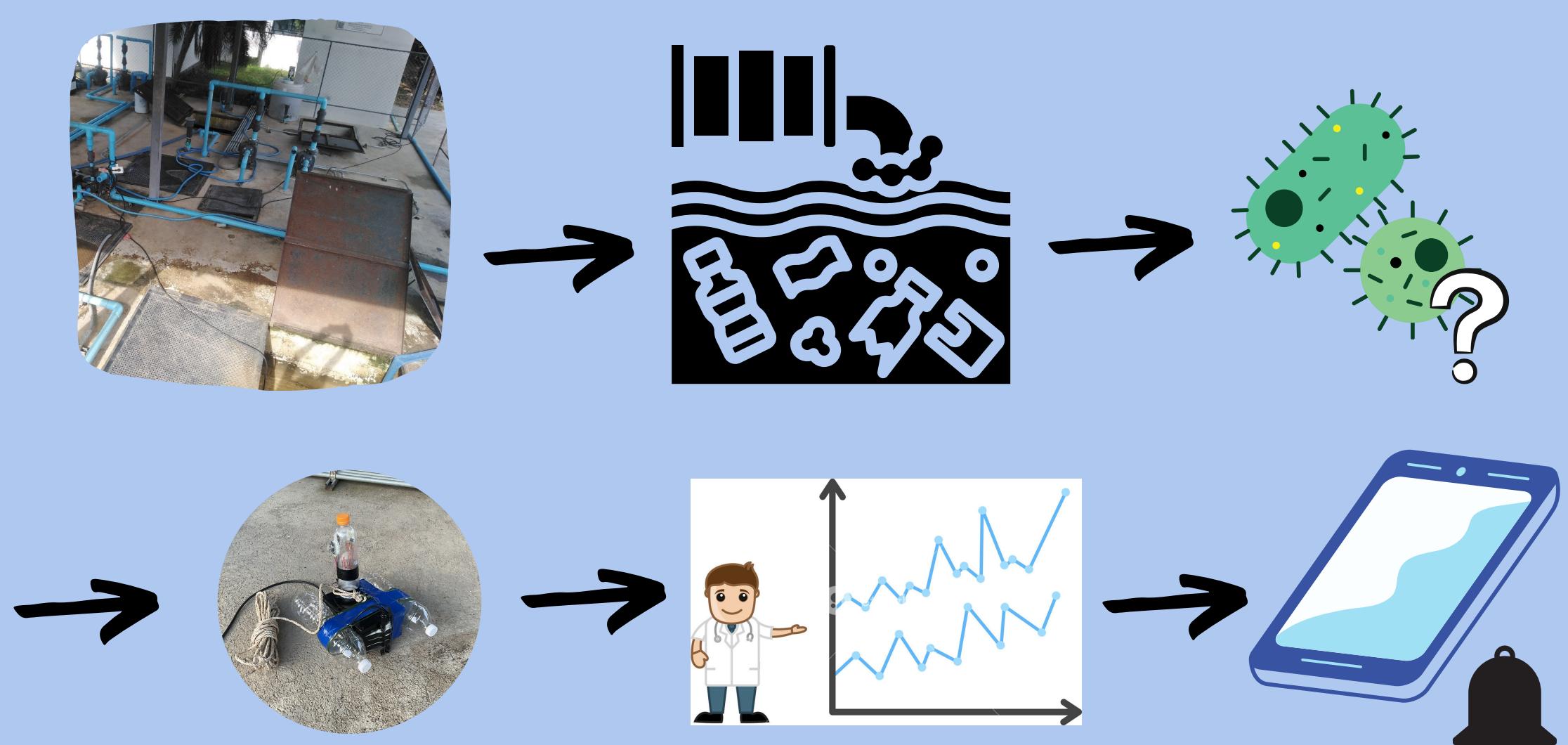
Water Quality Monitoring and Notification Machine for Increase Efficiency of Water Treatment using Artificial Intelligence

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Introduction

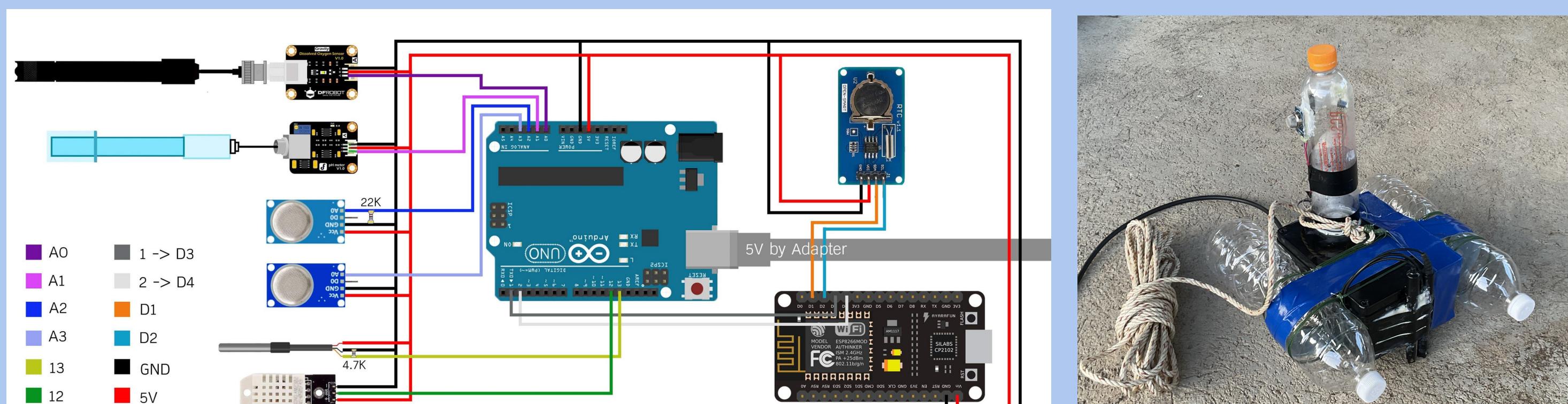


Objectives

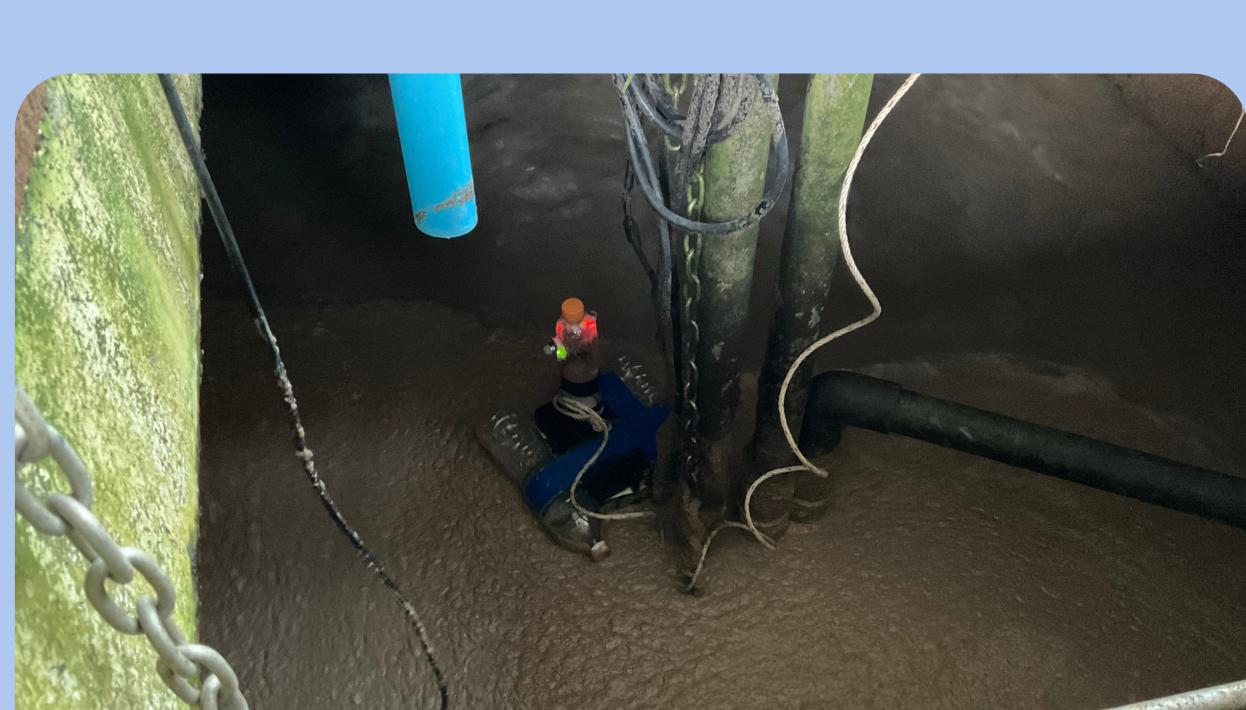
1. To create a water quality monitoring and notification machine.
 - > test the efficiency of the machine.
 - > test the efficiency of the program to analyze and predict water quality.
 - > test the efficiency of notifying to the supervisor.

Methods

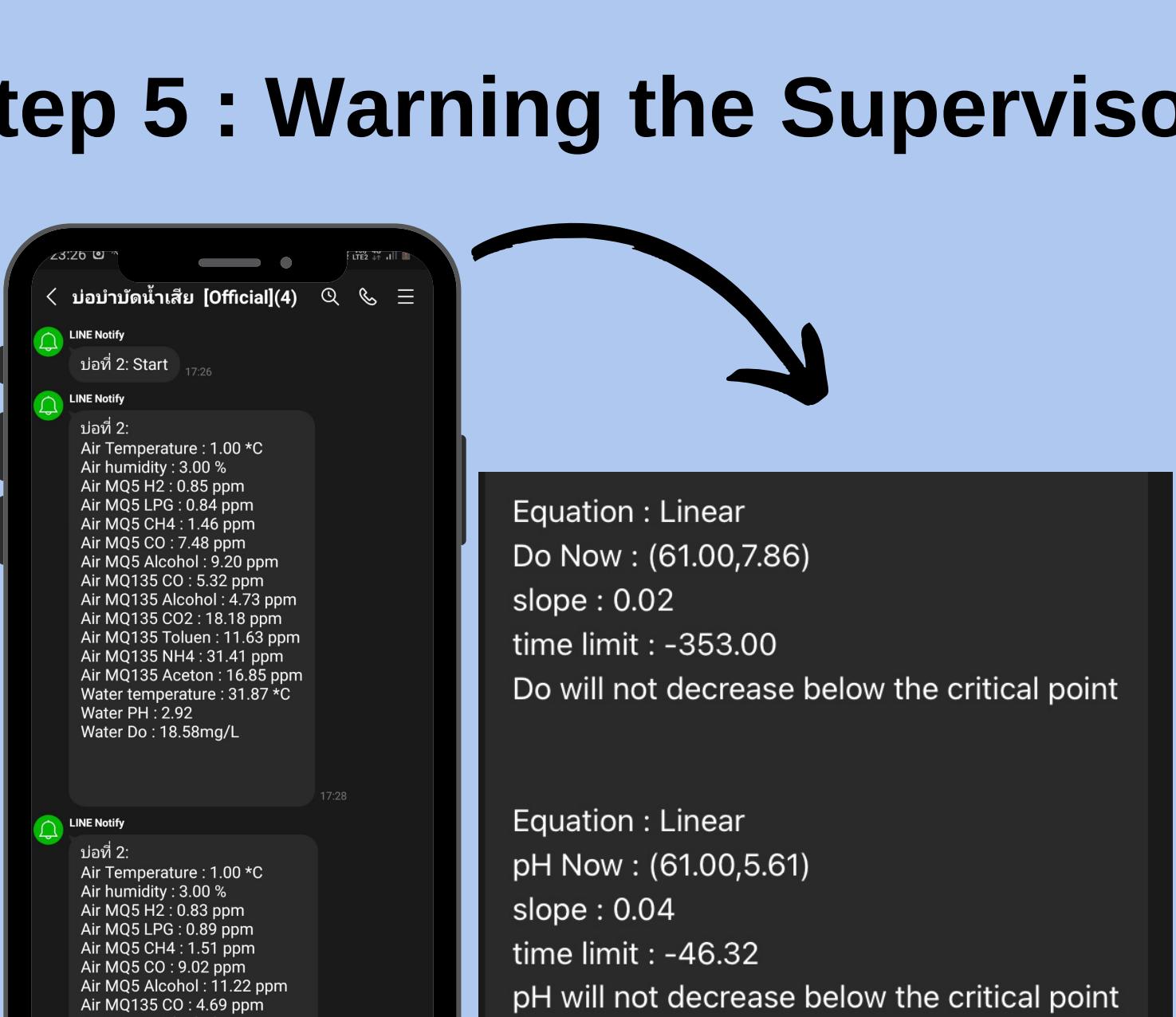
Step 1 : Designing and creating JAPS



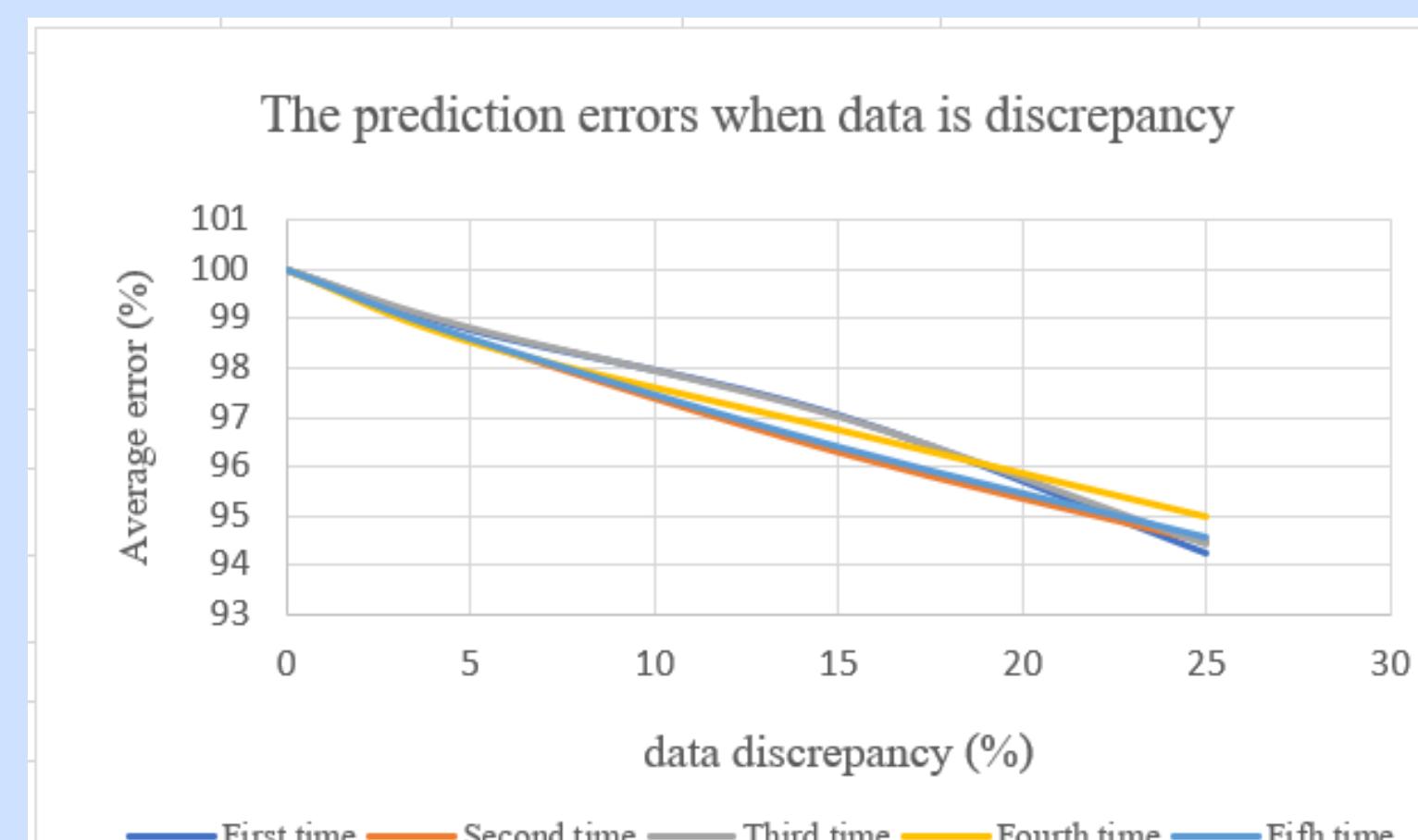
Step 2 : Programming



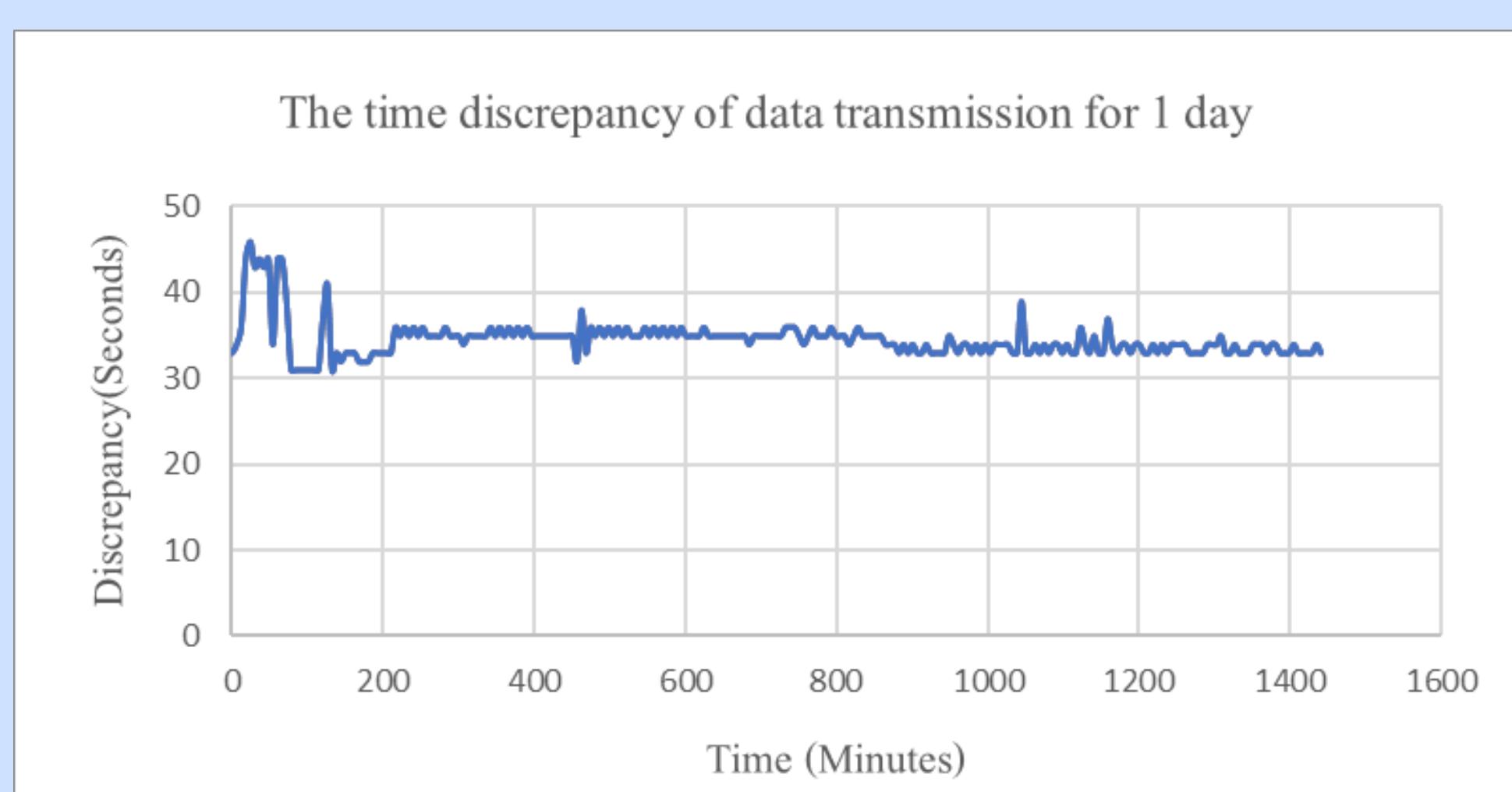
Step 4 : Analyzing and Forecasting



Results



Graph 1 and table 1 show accuracy of program when data was discrepancy



Graph 2 show the time discrepancy of data transmission for 1 day

Discussion

From creating the water quality monitoring and notification. The machine was usable. The program had an accuracy in various data ranges as follows 98.66 % of accuracy when the error of data was $\pm 5\%$ and 96.69% when the error of data was $\pm 15\%$ and 94.53% when the error of data was $\pm 25\%$ and 98.21% when it was actually used. Moreover, it could keep data in Google Sheet and notify using line accurately with a average time discrepancy had 34.61 second which depend on steadiness of internet.

Conclusions

The water quality monitoring and notification machine can be put into practical use. By observing no problems were found with the machine when actually used and prediction accuracy 98.21% when it was actually used and average time discrepancy had 34.61 second in 1 day. However, the machine needs to adjust material to make it stronger and make it more resistant to the environment in the water treatment system and adjusting the steadiness of the internet connection.

References

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