



Assignment 8: Build an End-to-End IoT System

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System Functionality

Databiz to MongoDB

When active Dataniz sends information about its devices to MongoDB and MongoDB stores it in its database

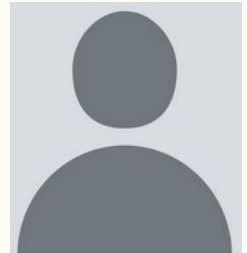
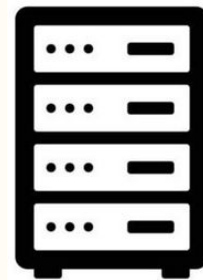
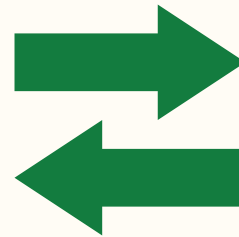
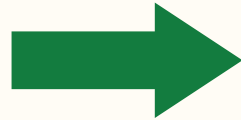
User to server

We connect to our TCP server and client using python. We then tell the server which query we want.

Server to MongoDB

After receiving the query from the user, the server requests and receives the data from mongodb. It then calculates the needed data and displays it to the user.

DATANIZ



Metadata Utilization

We didn't use metadata much for Dataniz. For the server to gather the information the program goes through all the data packets once for the needed ones based on the name of the needed device. Metadata was not used mostly because we didn't know how to integrate it with what already worked.

Challenges Encountered

- The small things (a cog in the machine) & not knowing
- Knowing how much data (min, max) → desired works, then checking if it works [It does not], then rinse and repeat
- Having to clear data, then make more. Specifically the one in the 'past 3 HRS'

Dataniz feedback

Dataniz is a complex platform that needs visual tutorials on how to use the website on certain parts. EX: playing with min, max, desired values and seeing what works.

Also Metadata

Things need to have more detailed explanation on usage.



DATANIZ